USE OF CONDOMS AS HIV/AIDS PREVENTIVE BEHAVIOR AMONG SRI LANKAN ADULT MALE VISITORS IN THAILAND

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ABSTRACT

A cross-sectional descriptive study was conducted concerning preventive behavior against HIV/AIDS among Sri Lankan adult male visitors to Thailand, with the aim of identifying socio-demographic factors as well as knowledge and perception about HIV/AIDS, the rate of participation in casual sex and the use of condoms. This study was conducted in the Bangkok metropolitan area in January and February, 2008. One hundred and five visitors were accidentally selected.

The results revealed the following specific characteristics of the visitors: the mean age was 37.5 years; they possessed a comparatively high educational level; 65.71 were married; and the majority (86.67%) were employed. Their main reason for visiting was to participate in educational or training programmes. Majority visited for first time, traveled alone and stayed less than two weeks.

This study showed that just above a half (56.19%) of the Sri Lankan visitors to Thailand had engaged in paid or unpaid sex with one or multiple partners. The knowledge about HIV/AIDS could be considered to be at a moderate level. Just above the half of respondents had a moderate level of perception about susceptibility and severity of HIV infection and had considered both the benefits and barriers to the use of condoms as a preventive measure. The prevalence of use of condoms was high as only one person had not used them and all the respondents who had paid sex had used condoms.

There were significant associations between the practice of casual sex and the educational level, occupation, number of visits, traveling companions and duration of stay. There were no significant associations between the use of condoms as preventive behavior and any of the socio-demographic characteristics, knowledge or perception of HIV/AIDS.

KEY WORDS: SRI LANKAN/ADULT/MALE/VISITORS
HIV/AIDS PREVENTIVE BEHAVIOR
CONDOM

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LIST OF ABBREVIATIONS

AIDS	: Acquired Immune Deficiency Syndrome
BOT	: Board of Tourist
CDC	: Centre for Disease Control and Prevention
CSWs	: Commercial Sex Workers
FDA	: Food and Drug Administration
GDP	: Gross Domestic Product
HBV	: Hepatitis B virus
HIV	: Human Immunodeficiency Virus
Max	: Maximum
Min	: Minimum
NACO	: National AIDS Control Organization
NFHS	: National Family Health Survey
NGO	: None Governmental Organizations
NSACP	: National STD and AIDS Control Program
Q1	: First Quartile
Q3	: Third Quartile
QD	: Quartile Deviation
STDs	: Sexually Transmitted Diseases
SD	: Standard Deviation
TAT	: Tourism Authority of Thailand
TB	: Tuberculosis
UNAIDS	: United Nations Joint Programme on AIDS
WHO	: World Health Organization
WTO	: World Tourism Organization
WTTC	: World Travel and Tourist Council

CHAPTER 1
INTRODUCTION

1.1 The Problem statement

The international travelling is older than the terminology. Good olden days it was for exploration of new lands but with the civilization of human societies the reason for travelling has been changing for thousand of years. Newer days international travelling is mainly replaced by mass tourism as the main fraction of it.

International travel is undertaken by large, and ever increasing, numbers of people for professional, social, recreational and humanitarian purposes. More people travel greater distances and at greater speed than ever before, and this upward trend looks set to continue. Travelers are thus exposed to a variety of health risks in unfamiliar environments. Most such risks, however, can be minimized by suitable precautions taken before, during and after travel (1).

The number of people travelling internationally is increasing every year. According to statistics of the World Tourism Organization, international tourist arrivals in the year 2005 exceeded 800 million. In 2005, the majority (402 million) of international tourist arrivals were for the purposes of leisure, recreation and holiday (50%). Business travel accounted for some 16% (125 million) and 26% (212 million) consisted of travel for other reasons such as visiting friends and relatives, religious purposes/pilgrimages and health treatment. For the remaining 8% of arrivals, the purpose of visit was not specified (1).

Sex is a natural part of the life. If people participate in sexual activities at home, then certainly one must expect them to participate in sex when they travel. The purpose of travelling is either purely leisure or not their curiosities to view exciting natural scenery and visiting manifestations of exotic cultures, the travelers' urge to

experience novelty quite naturally includes seeking out romantic and sexual opportunities that may not be available to them at home are almost similar (2).

In fact, travelling simply provides another setting for sexual activities by several aspects of travel such as opportunity, isolation, and the desire for unique experiences all enhance the likelihood of casual sexual experiences while abroad. The situational loss of inhibition of travel can be markedly enhanced by alcohol and drugs (3). But, there is also a dark side of travelling related sexual activities which can be exploitative and damaging. The travelling literature on sex has focused disproportionately on tourism and commercial sex tourism especially in Southeast Asia (2).

There is little research available regarding the relationship between AIDS and travelers and most conclusions are based on speculation and anecdotal evidence. The studies that have been done in different parts of the world have led to a number of common conclusions (4).
These include:

- Sexual activity of unaccompanied travelers with fellow tourists and the local population is particularly frequent on holiday.
- Condom use in sexual contacts with fellow tourists and the local population is far from consistent.
- Many young people make new friends on holiday and build up relationships that include sexual contacts, which are to a considerable degree unsafe.
- Alcohol consumption has an important impact on the sexual behavior of tourists.

Travel decisions based on a number of factors, including:

- The traveler's income
- The perceived desirability of the tourist destination (which is affected by the natural beauty of the destination, hospitality of the people, etc.)
- The cost of travel (which is affected in part by the existing exchange rate)
- The perceived safety of the destination.

It is conceivable that an increased prevalence of HIV/AIDS could affect the perceived safety of the country as a travel destination.

The facts show the preferable environment has made for travelers to engage in casual sexual activities at the travel destination. Transmission of HIV through sexual contact has been the most frequent means of the spread of the disease. Because of the link between multiple partners and increased risk of AISD established among the homosexual and hetero-sexual population. There is much concern about the role that commercial sex workers may play in the spread of HIV/AIDS. But the question is, do the travelers aware about the eminent threats of HIV/AIDS and do they use condoms as a safety precautions.

1.2 Rationale and Justification of the Problem

1.2.1 Tourism as the major part of travelling in Thailand

Many developing countries perceive tourism as a fast track to economic growth. Thailand has long ascribed to this point of view; and it has devised a tourism marketing approach which encourages low-, medium-, and high-cost mass tourism to nearly all regions of the country. With the ubiquitous "**Land of Smiles**" advertising slogan promoted around the world (5).

Tourism is one of the industries that are generating considerable income for the country during the past few years (5). It plays a significant role to Thai economy by appealing foreign revenues of about four billion baht a year (6). According to BOT and TAT data, during 2000 to 2004, the tourism industry held the proportion to GDP around 7.7 percent at the current price, which comprised of the value contributed from tourism activity and non-tourism activity about 4.9 and 2.8 percent respectively. For employment, tourism industry has created employment directly and indirectly around 3.3 million jobs, 8.4 percent of the country employment during 2000 to 2004 (6). World Travel & Tourism Council (WTTC) projects the tourism related employment of Thailand will grow by 9.5 percent in 2014 which increases from 8.4 percent in 2005.

Sri Lankans who travel to Thailand as tourist and non-tourists has been increased during last few years of this millennium. According to tourism authority of Thailand, It is shown as follows:

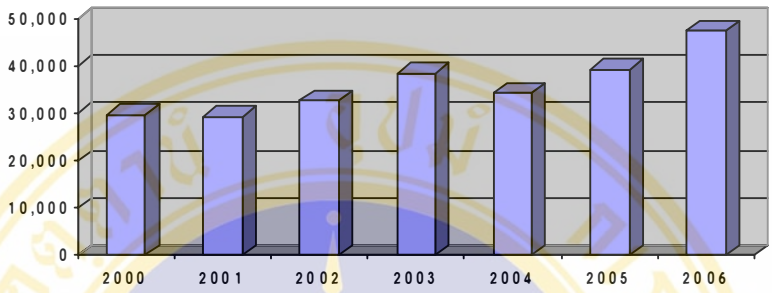


Figure 1 Number of Sri Lankans travel to Thailand

1.2.2 Travelers and Sex in Thailand

Many projects have recently been developed at a national level, such as 'Bangkok Fashion City', 'Kitchen to the World', 'Health Hub of Asia' and the famous tourism campaign, 'Amazing Thailand'. These initiatives were based on the results of the 'Branding Thailand' study of Thailand's competitive position that explored the perceptions of consumers all over the world towards Thailand, ranging from delight to resentment and tangible to intangible attributes of Thailand's image. While Thailand can benefit a great deal from positive perceptions, such as the hospitality of the Thai people, it also suffers from negative stereotypes, such as sex tourism (7).

By 1986, Thailand had made more money from travelling related industries than from any other commercial activity, including its main export, rice. However, by October 1987, a strong drop on visitors alarmed tourist officials. The cause would be arising of HIV/AIDS that is always linked to prostitution (8).

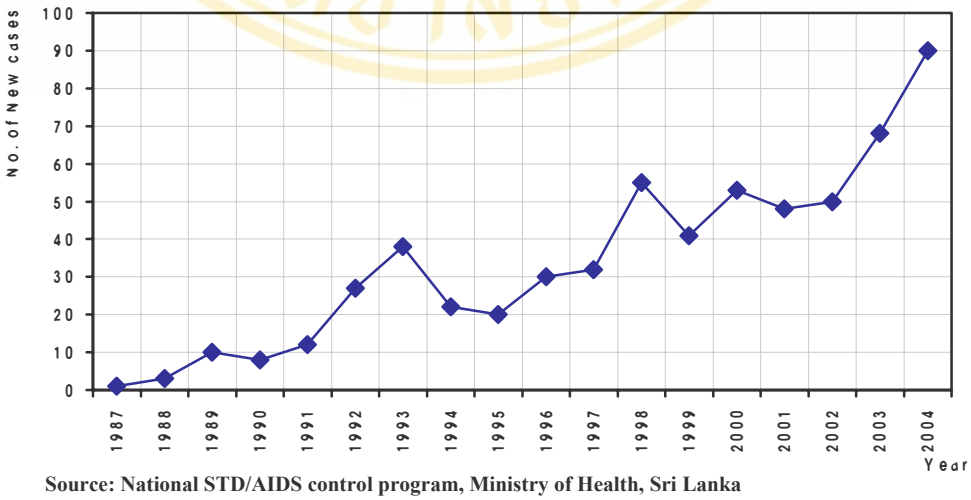
While questioning where those thousands of prostitutes came from and what would make them sell their bodies and pride for something so unethical. This industry is not only based on masculine sexual desires, which could not sustain a full-fledged prostitution industry on its own. It feeds on rural poverty, male entrepreneurship,

urban commercialized demand, police protection, and overlapping governmental and economic interests to ensure its success (9).

Another critical factor in sustaining this industry are men from other nationalities who dream of Asian women and imagine them as being more liberal and available than the ones of their own country. Finally, it needs a government that needs foreign currency and the local and immigrant businessmen who invest in the industry (9).

1.2.3 HIV/AIDS in Sri Lanka

The first case of HIV infection in Sri Lanka was reported in 1986 and the cumulative total reported at the end of 2004 was 614. Of these 363 were male and 251 were female. The reported number of deaths due to AIDS was 131 as of end 2004. The estimated HIV prevalence between 15 - 49 year olds in 2003 was less than 0.1%. It is estimated that 3,500 persons are living with HIV in Sri Lanka at the end of 2003. The current ratio of HIV-positive men to women in Sri Lanka is reportedly 1.4 to 1, although in reality, there are probably far more men infected then women as in most early phase HIV epidemics (10).



Source: National STD/AIDS control program, Ministry of Health, Sri Lanka

Figure 2 Number of HIV incidence in Sri Lanka by year

In 86% of HIV cases, transmission was through heterosexual contact. Other modes of transmission include homosexual/ bisexual contact, through infected blood

and blood products and transmission from an infected mother to child. 11% of the reported HIV infections were due to homosexual/bisexual transmission. Since homosexual behavior is illegal, interventions targeted at this group are limited. The male to female ratio of HIV infection is 1.4: 1 as of the end 2004. However, the proportion of females infected is increasing over the years.

Behavioral factors that facilitate the spread of infection are prevalent in the country, such as the presence of large number of sexually active youth (there were 35 cases of HIV among young people between the ages 15-24 years by 2004 end, according to NSACP), an increasing number of sex workers, and overseas migration. Women employed in factories in the free trade zones, persons seeking foreign employment, workers in the plantation sector and the fishing communities have been identified as other vulnerable groups. In 2001, 48% of HIV cases were among women who sought employment (housemaids) abroad (10).

The percentage of injected drug users in Sri Lanka is estimated to be less than 1% of all drug users. The only case of HIV transmission attributed to injecting drugs was reported in 2004. Sri Lanka began screening of donor blood for HIV in 1987. Apart from the Central Blood Bank which is located in Colombo, there are 56 regional blood banks in the country that screen donated blood. To date there are only 3 cases reported through blood transfusion.

There have been 14 cases of mother-to-child transmission up to 2004. The government policy is to provide anti-retroviral therapy free of charge to pregnant women infected with HIV to prevent transmission to the baby. The indicators, HIV Prevalence among pregnant women in the age group of 15-24 are often used as a proxy for new or incident cases of HIV infection. One woman in this age group has been found to be HIV positive.

Despite an estimated low prevalence rate, there is a significant presence of risk factors and vulnerability to HIV in Sri Lanka. The factors mainly are:

- **Low Condom Use**:

Although research on sexual behaviors has been limited, a few studies conducted in the urban areas of Sri Lanka suggest low condom use among men. For example, in 1997, only 4.7% of men between the ages of 15 and 49 in the rural area of Matale and 9.6% of men in the capital of Colombo reported ever using condoms, although about two thirds of them had heard about them. Among men who stated that they have had sex with casual partners during the last year, only 26.3 percent in Matale and 44.4% in Colombo reported using a condom (10).

- **Commercial Sex:**

It is estimated that about 30,000 women and girls and 15,000 boys work in the commercial sex industry in Sri Lanka. The risk of HIV/AIDS spreading among sex workers is heightened by low condom use and high prevalence of sexually transmitted infections (STIs), which make a person more susceptible to contracting HIV/AIDS. In one study, 45 percent of female sex workers had experienced multiple STIs, and 70 percent of male patients at STI clinics had reported frequenting sex workers. A significant number of sex workers are located near military camps. Apart from this, there are “beach boys” and women who are involved in sex trade with tourists (10).

- **High Mobility**:

Migration within Sri Lanka and emigration to the Middle East and neighboring countries, namely India where HIV prevalence is higher, is necessary for the economic survival of many households in both rural and urban areas. Thousands of women and men live away from their families as migrants abroad and as workers in Sri Lankan Free Trade Zones. Women constitute 80% of the workers in the Free Trade Zone at Kandy. The vulnerability of these women is indicated by the high rate of unwanted pregnancies and high prevalence of sexually transmitted diseases (STDs) amongst them. An estimated 1.2 million Sri Lankans work in the Middle East and 79.1% of unskilled migrants are women. International female migrants account for more than 40% of reported HIV infections among females.

- **Low Levels of Awareness among Poor People:**

HIV/AIDS awareness and knowledge levels in underserved communities remain drastically low. Only 40 percent of women working in rural tea estates, for example, have even heard of HIV/AIDS, as compared to 90 percent of women in other rural and urban areas2

Table 1 Prevalence of HIV cases among Sri Lankan population

Figures	Approximate Value	Estimated Year
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]

Source: UNAIDS Global AIDS Report 2006

1.2.4 Condoms against HIV/AIDS prevalence

Promoting condoms is effective. Promotion can increase use of condoms and help to lower infection rates (11).

Thailand's 100 Percent Condom Program has been one of the world's most successful condom promotion campaigns (11). The program goal was to make condom use universal among CSWs. If a client refused to use a condom, the CSW was supposed to refuse sex and to return the money. The government closed brothels that did not abide by the program (12, 13).

A strong mass-media campaign and free condom distribution have slowed the AIDS epidemic. Says a UNAIDS official, "Thailand is a good example that if you do something right, you can actually make a significant impact on the way the AIDS epidemic unfolds" (11).

The methodological strength of the studies on condoms to reduce the risk of HIV/AIDS transmission far exceeds that for other STDs. There is demonstrated exposure to HIV/AIDS through sexual intercourse with a regular partner (with an absence of other HIV/AIDS risk factors). Longitudinal studies of HIV- sexual partners of HIV+ infected cases allow for the estimation of HIV/AIDS incidence

among condom users and condom non-users. From the two incidence estimates, consistent condom use decreased the risk of HIV/AIDS transmission by approximately 85%. These data provide strong evidence for the effectiveness of condoms for reducing sexually transmitted HIV (12).

According to the study conducted about sexual behavior among men travelers aged 20-33 years old who stay at Thanon Khaosan, Bangkok, Thailand, about knowledge and attitudes on practice toward condom use during Thailand and their own countries. Among 305 subjects interviewed 19.0% came from Americas, 67.0% Europe (Benelux, 18.3% British Isles 20.3% Northern Europe, 12.4% Southern Europe, 11.8% Scandinavia), 12.4% Pacific (Australia and New Zealand) and 1.6% Middle East (Israel). 87.3% were single. 55.6% were university/college graduates. 39.6% were students or unemployment. 70.3% traveled to Thailand first time. 68.0% stayed with 14 days. Fifteen percent (47/305 cases) of those who traveled had sex during their travel either with a local person, another tourist or with prostitutes. Seventy percent (32/47 cases) of those who had sex with a casual partner reported they use condoms at all time during sexual intercourse. There was statistical association between age, region (nationality), purpose of visit, length of stay and companion. But the finding of the study showed that young travelers are at greater risk less than young who stay at home. Compared with the finding of at home country of young tourist, 73.5% of who traveled was more likely to engage in high risk behaviors in home country. Hence it is concluded that the high rates of higher risk sexual activity and the low rates of condom use among travelers indicate a high potential risk for STI infection including HIV among travelers in their country (13).

1.3 Research Question

- What is the situation of using condoms as HIV/AIDS preventive behavior among Sri Lankan adult male visitors in Thailand?

1.4 Research Objectives

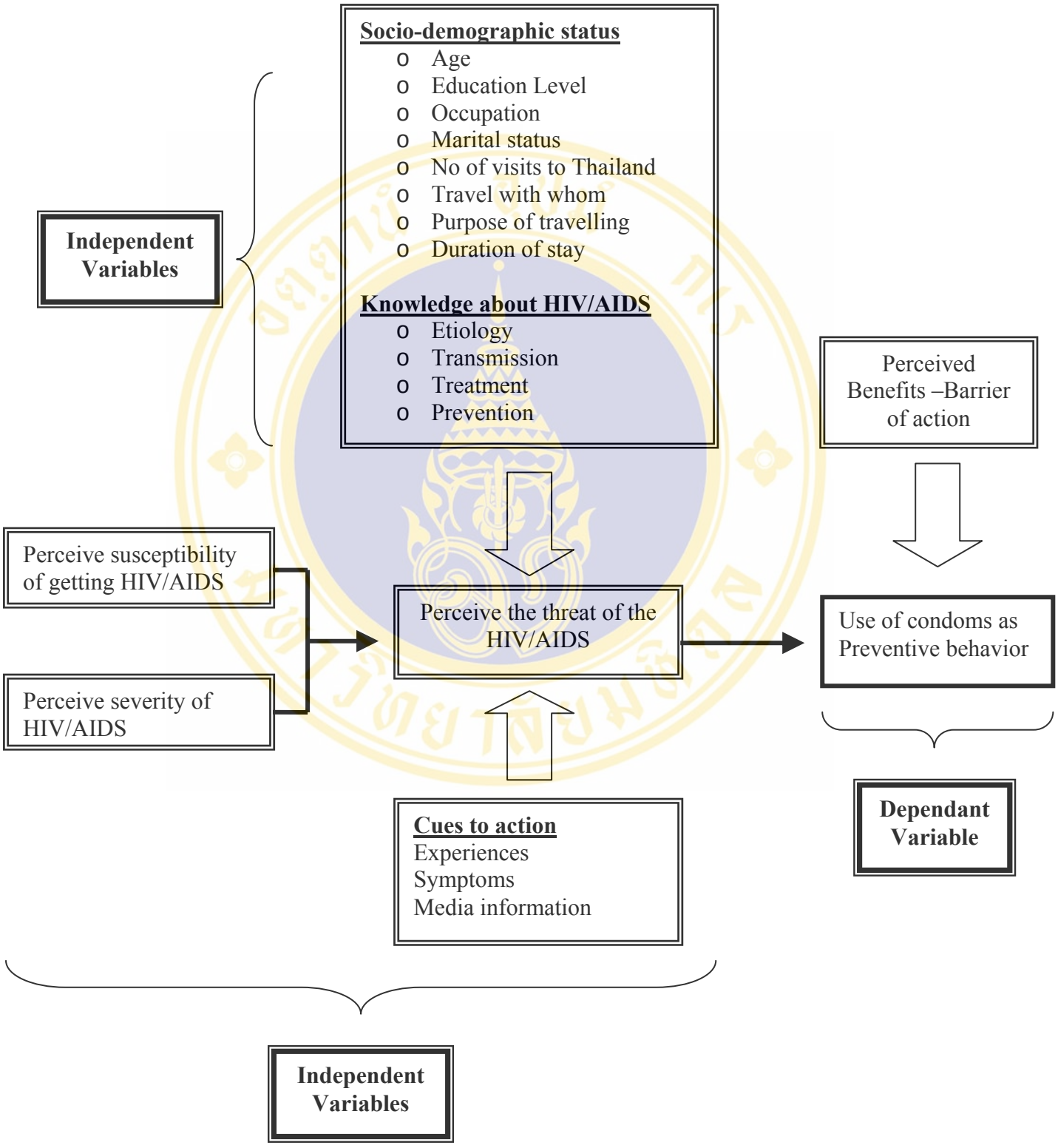
1.4.1 General Objectives

- Asses the use of condoms during sexual encounter, among Sri Lankan adult male visitors in Thailand.

1.4.2 Specific Objective

- Describe socio-demographic characteristics of Sri Lankan adult males who stay in Thailand, in context of practicing sex.
- Describe the level of knowledge about HIV/AIDS among Sri Lankan adult males visit to Thailand.
- Investigate the perception of susceptibility, severity and treat of HIV/AIDS infection among Sri Lankan adult males who visit to Thailand.
- Investigate the perception of benefits minus barriers of using condoms during sexual intercourse among Sri Lankan adult males who visit to Thailand and who participate in sex during their stay.
- Describe the pattern of sexual encounter in context of paid and unpaid sex among those who involved in sexual activity.
- Describe prevalence of condom use among Sri Lankan adult male visitors who practice sex during their stay in Thailand as HIV/AIDS preventive measure.

1.5 Conceptual framework



- **Cues to action were not evaluated**

1.6 Operational Definitions

Use of condoms as HIV/AIDS Preventive/Protective Behavior:

Refer to the use of condoms while having sex, by the Sri Lankan adult male travelers in order to prevent contact of genital secretions with sexual partner/s during the any kind of inter-course. The use of condoms was classified into three groups; always used, used sometimes only and never used.

Age

Age of the respondents, has to be 18 years completed, if below 18 years, excluded at the point of data collection.

Education Level

The level of highest educational achievement of the visitor which can be measured by the number of years attending to school or the highest level of attainment such as primary, secondary, vocational/college and university or others by the traveler.

Occupation

Refer to either profession the kind of job by which means the visitors earn money in prior travel to Thailand.

Marital status

Indicate whether the visitor has been ever married or not, living separately, divorced or widowed at present.

Number of visits to Thailand

Number of times that respondent has visited to Thailand including current visit either as tourist or other purposes.

Travel with whom

On current visit a traveler, traveling with any other person in relation of family, friends, Educational/cultural study group or other.

Travel for

Visitor's main reason for current visit to Thailand either as a tourist, businessman, to participate in an educational or professional program or any other private matter.

Knowledge about HIV/AIDS

Visitor's Correct understanding of etiology, transmission, treatment options and preventive measure about HIV/AIDS.

Perception of susceptibility to HIV/AIDS

Visitor's opinion of chances of getting an HIV/AIDS

Perception of severity of HIV/AIDS

Visitor's opinion of how serious an HIV/AIDS and its consequences are.

Perception of barrier to action

Visitor's belief in the efficacy of the using of condoms to reduce risk or seriousness of the impact.

Perception of benefits of action

Visitor's opinion of the tangible and psychological costs of the use of condoms

1.7 Limitations and Scope of the Study

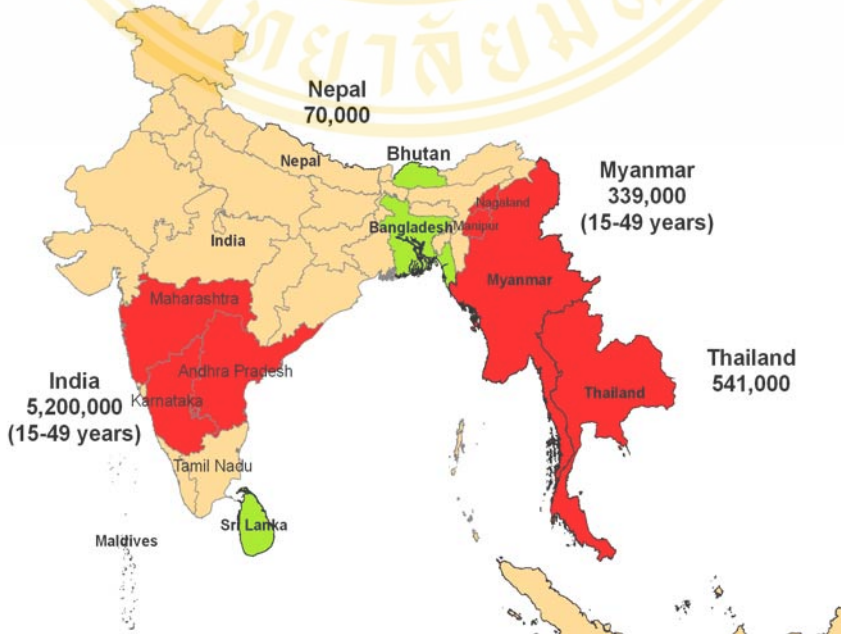
This study aims to elaborate the HIV/AIDS preventive behaviors (perceived susceptibility to HIV infection, perceived severity of HIV infection, perceived benefits minus barriers of HIV preventive behavior), knowledge about HIV/AIDS. Subjects are the Sri Lankan adult male visitors in Thailand, who stay in Bangkok metropolitan area during study period. The study therefore is mainly descriptive and quantitative as a whole by using interviewed questionnaire. The data collection method may not provide in-depth information as this is sensitive issue and because of social and cultural norms the respondents may not reveille the true situation.

Although a number of factors related to preventive behavior should be appropriated in this study due to its broadness, the determinants of visitors on HIV preventive behavior are complex and vary in different social cultural and educational context. Therefore this research is concerned only preventive behavior, socio-demographic characteristics and knowledge and perception about HIV/AIDS. In this study the Health Belief Model is applied.

CHAPTER 2
LITERATURE REVIEW

2.1 HIV/AIDS Epidemic in South and South-East Asia

In Asia, national HIV prevalence is highest in South-East Asia, with wide variation in epidemic trends between different countries. While the epidemics in Cambodia, Myanmar and Thailand all show declines in HIV prevalence, those in Indonesia (especially in the Papua province) and Viet Nam are growing. Although the proportion of people living with HIV in India is lower than previously estimated, its epidemic continues to affect large numbers of people. Overall in Asia, an estimated 4.9 million [3.7 million–6.7 million] people were living with HIV in 2007, including the 440 000 [210 000–1.0 million] people who became newly infected in the past year. Approximately 300 000 [250 000–470 000] died from AIDS-related illnesses in 2007 (14).



Source: Epidemiological fact sheet 2007, UNAISD

Figure 3 Prevalence of HIV/AIDS in South and South -East Asia

New, more accurate estimates of HIV indicate that approximately 2.5 million (2 million– 3.1 million) people in **India** were living with HIV in 2006, with national adult HIV prevalence of 0.36%. Although the proportion of people living with HIV is lower than previously estimated, India's epidemic continues to affect large numbers of people. The revised estimates are based on an expanded and improved surveillance system, and the use of more robust and enhanced methodology. The inclusion of the results of the recent national household survey (the National Family Health Survey 3, conducted in 2005–2006) in the estimation process contributed significantly to the revised estimates. Over 100 000 people were tested for HIV in the survey which was the first national population based survey to include a component on HIV (NFHS-3, 2007). In addition, India has expanded its HIV sentinel surveillance system in recent years and the number of surveillance sites increased from 155 in 1998 to 1120 in 2006. Data from pregnant women attending antenatal clinics, people attending sexually transmitted infections clinics and population groups that are at a higher risk of exposure to HIV are included in the surveillance (14).

Prevalence trends in India vary greatly between states and regions. Even in the four southern states (Andhra Pradesh, Karnataka, Maharashtra and Tamil Nadu) where the large majority of people living with HIV are residing, HIV prevalence varies and the epidemic tends to be concentrated in certain districts (NACO, 2005a; World Bank, 2005). Reported adult HIV prevalence in six states included in the recent national population-based survey (NFHS-3, 2007) varied from 0.07% in Uttar Pradesh, to 0.34% in Tamil Nadu, 0.62% in Maharashtra, 0.69% in Karnataka, 0.97% in Andhra Pradesh, and 1.13% in Manipur. Prevalence in all other states together was 0.13%. An earlier analysis of sentinel surveillance data also showed that HIV prevalence in southern states overall was about five times higher than in northern states in 2000–2004 (Kumar R et al., 2006). However, pockets of high HIV prevalence (mainly among population groups at high risk of exposure to HIV) have also been identified in states where overall prevalence is generally low, warning against complacency. Data from the expanded 2006 sentinel surveillance show stable or declining prevalence among pregnant women in Tamil Nadu, Maharashtra, Karnataka, and Andhra Pradesh, but high HIV prevalence among sex workers, and

rising HIV prevalence among injecting drug users and men who have sex with men in a few states. Outside of the north-east of the country, where the use of contaminated drug injecting equipment is a key risk factor, HIV appears to be spreading mainly as a result of unprotected sex between sex workers and their clients, and their respective other sex partners (Kumar et al., 2005). Prevention programmes focusing on sex workers show some success and HIV prevalence is on the decline among sex workers in areas that have been the focus of targeted prevention efforts, especially in Tamil Nadu and other southern states. However, prevention efforts are often complicated by the varied nature of commercial sex. (Char, Piller & Shirke, 2003) (14).

In **Pakistan**, HIV prevalence is increasing among injecting drug users. One study in Karachi showed an increase in HIV prevalence among injecting drug users from under 1% in early 2004 to 26% in March 2005 (Emmanuel, Archibal & Altaf, 2006), while other studies have found that HIV prevalence among injecting drug users has reached 24% in Quetta (along the border with Afghanistan) (Achakzai, Kassi & Kasi, 2007), 12% in Sargodha, nearly 10% in Faisalabad (Nai Zindagi and Associates, 2006) and 8% in Larkana (Abbasi, 2006). HIV prevalence remains low in other populations at higher risk of infection. Among female sex workers in Karachi, HIV prevalence in 2005 was 2% while it was below 1% in Lahore and Rawalpindi (Ministry of Health Pakistan, 2005; National AIDS Control Program Pakistan, 2005) (14).

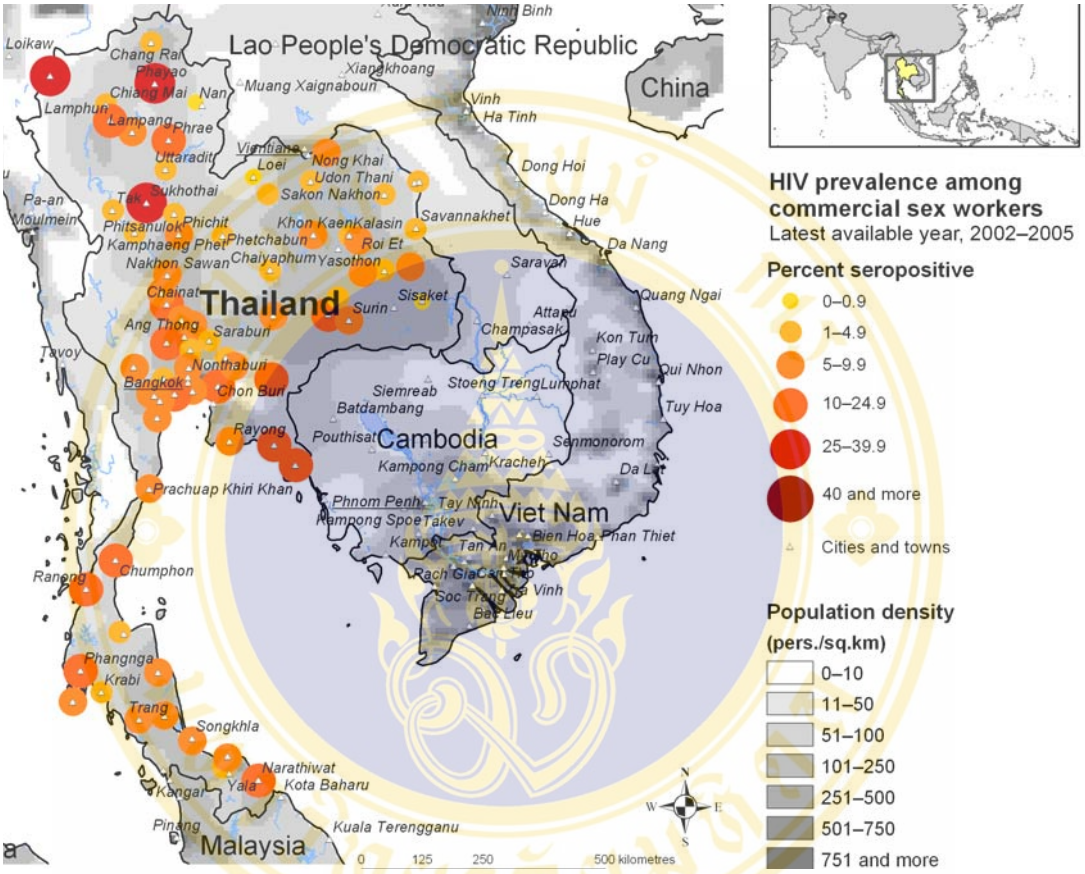
The estimated number of people living with HIV in **Viet Nam** has more than doubled between 2000 and 2005 from 120 000 to 260 000 (Ministry of Health Viet Nam, 2005). The main risk factors associated with HIV infection are the use of contaminated injecting equipment and unprotected sex with non-regular partners or sex workers (Tuang et al., 2007). Among injecting drug users in Viet Nam, prevalence increased from 9% in 1996 to about 34% in 2005 (Ministry of Health Viet Nam, 2006 & 2005). As the epidemic evolves, increasing numbers of women are acquiring HIV from males who were infected during unsafe paid sex and injecting drug use, as seen by the increase over time in the prevalence among pregnant women attending antenatal clinics (see Figure 9). In 2006, an estimated one third of people

living with HIV were women (Viet Nam Commission for Population et al., 2006). However, the majority of HIV infections are still directly or indirectly linked to injecting drug use (14).

The HIV epidemic in **Indonesia** is among the fastest growing in Asia. The majority of HIV infections are estimated to occur through the use of contaminated injecting equipment, unprotected paid sex and, to a lesser extent, unprotected sex between men (Ministry of Health Indonesia & Statistics Indonesia, 2006). When surveyed in 2005, more than 40% of injecting drug users in Jakarta tested HIV-positive (WHO & Ministry of Health Indonesia, 2007), and about 13% in West Java (Ministry of Health Indonesia, 2006). In addition, many injecting drug users also buy or sell sex (Ministry of Health Indonesia & Statistics Indonesia, 2006). In 2005, approximately one quarter of injecting drug users in Bandung, Jakarta and Medan said they had had unprotected paid sex in the previous year (Ministry of Health Indonesia & Statistics Indonesia, 2006). In Papua province (bordering Papua New Guinea) the epidemic is more serious with unprotected sex being the main mode of transmission. In a province-wide population-based survey in Papua in 2006, adult HIV prevalence was estimated at 2.4%, and reached 3.2% in the remote highlands and 2.9% in less-accessible lowland areas. Among 15–24-year-olds, HIV prevalence was 3% (Ministry of Health Indonesia & Statistics Indonesia, 2007) (14).

The number of new annual HIV infections in **Thailand** continues to decline, although the decline in HIV prevalence has been slowing in recent years as more people are receiving antiretroviral therapy. The patterns of HIV transmission in Thailand have changed over time, with the virus spreading increasingly to persons considered to be at lower risk. More than four in 10 (43%) new infections in 2005 were among women, the majority of whom probably acquired HIV from husbands or partners who had been infected either during unsafe paid sex or through injecting drug use (WHO, 2007). Despite the overall achievements in reversing the HIV epidemic in Thailand, prevalence among injecting drug users has remained high over the past 15 years, ranging between 30% and 50% (WHO, 2007). Similarly, recent studies show

increasing HIV prevalence among men who have sex with men (e.g. in Bangkok from 17% in 2003 to 28% in 2005) (van Griensven, 2006) (14).



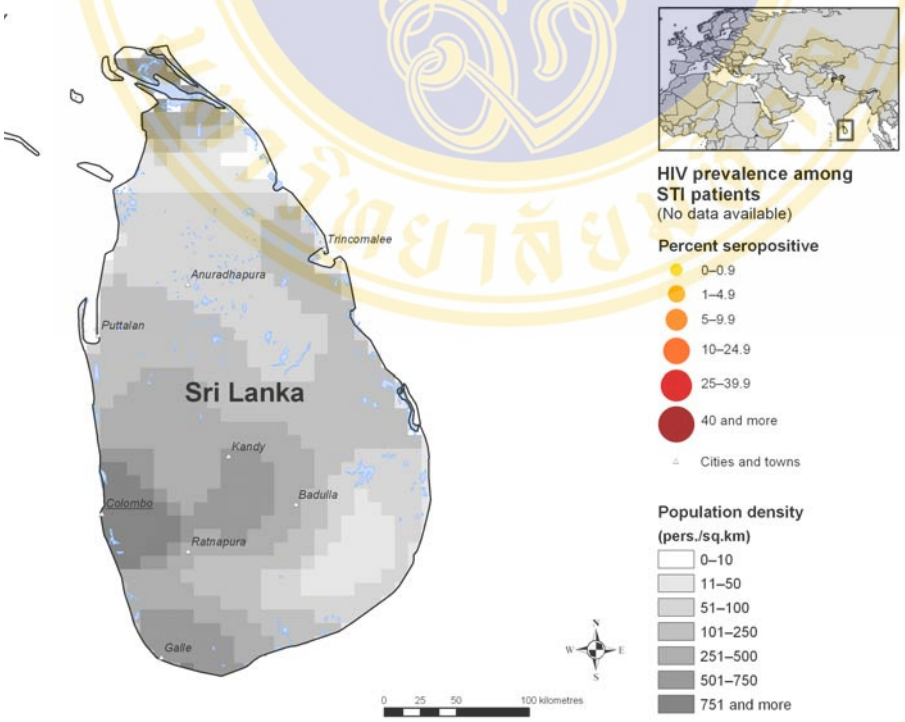
Source: Epidemiological fact sheet 2007, UNAISD

Figure 4 HIV prevalence among CSW in Thailand

In **Cambodia** there is evidence that well-focused and sustained prevention efforts can help reverse an HIV epidemic. Nationally, HIV prevalence has fallen to an estimated 0.9% among the adult (15–49 years) population in 2006, down from a peak of 2% in 1998 (National Center for HIV/AIDS, Dermatology and STIs, 2007) (14).

The epidemic in **Myanmar** is also showing signs of a decline, with HIV prevalence among pregnant women at antenatal clinics having dropped from 2.2% in 2000 to 1.5% in 2006 (National AIDS Programme Myanmar, 2006). Despite the overall decline in prevalence, the elevated prevalence of HIV among key populations at higher risk is of concern (14).

Sri Lanka is classified as a low-level epidemic country with HIV prevalence rates among high-risk population subgroups continuing to remain well below 5%. In the 2005 sentinel surveillance round, HIV prevalence was 0 - 0.8% among STD clinic attendees and 0 - 0.9% among TB patients. No sample was found positive for HIV among 1,136 female sex workers and 354 truck drivers tested. Similarly, among 3200 military personnel tested, no one was found positive. Currently, Sri Lanka is in the initial stages for carrying out the behavioral surveillance to track risk behaviors among vulnerable populations (15). The national prevalence of HIV is estimated to be below 0.1%. The cumulative AIDS cases reported by 2005 end are 207; the male to female ratio of reported AIDS cases is 1.4:1. Most of the infections are acquired by heterosexual route. The cumulative AIDS deaths reported as of 2005 end are 144. The estimated number of People Living with HIV/AIDS in Sri Lanka as of 2005 end is 5000.



Source: Epidemiological fact sheet 2007, UNAISD

Figure 5 HIV prevalence among STI patients

In Asia, more people engage in commercial sex than in any other behavior that carries a high risk of HIV infection (16). The extent to which HIV spreads through commercial sex depends on a number of factors. The biggest single factor is condom use. This varies widely across Asia and within countries. In some countries and regions, reported condom use in commercial sex is consistently high. In Cambodia, Thailand, Vietnam and the Indian state of Tamil Nadu, over 85% of sex workers report using condoms with all recent clients. Many of the first reported HIV cases in Asia were among men who have sex with men. As the heterosexual and injecting epidemics grew, male-male sex was left behind in terms of the number of new infections it generated, and the behavior was largely ignored in prevention programs. This is in part because male sex is so difficult to define in many Asian countries. It includes homosexual relationships between men who identify themselves as gay, anal sex between heterosexual men and transgender sex workers, as well as a large spectrum of other interactions between people with various social and sexual identities. Renewed efforts to understand the risk of exposure to HIV in anal sex between men have yielded some shocking findings. In Bangkok, Thailand, a 2003 study found that 17% of men who have sex with other men were infected with HIV (16).

2.2 Over view of condom campaign against HIV/AIDS in Thailand

The first case of AIDS in Thailand occurred in 1984 (17). For the next few years, gay men, sex workers, injecting drug users and tourists were more commonly affected than other groups (18).

Between 1988 and 1989, the HIV prevalence among injecting drug users rose dramatically, from virtually zero to 40%. The prevalence among sex workers also increased, with studies in Chang Mai, northern Thailand, suggesting that 44% of sex workers were infected with HIV (19). The rising level of infection among sex workers led to subsequent waves of the epidemic among the male clients of sex workers, their wives and partners, and their children. Some members of Thailand's parliament

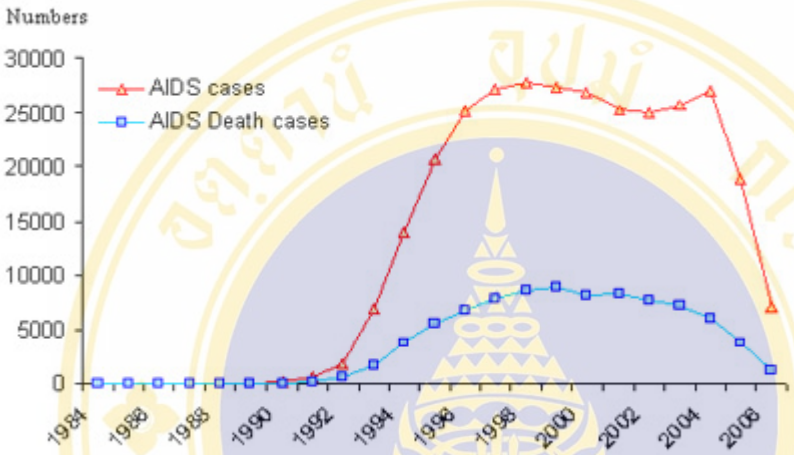
proposed that all foreigners should be required to pass an HIV test before being admitted to the country (20).

A massive public information campaign on AIDS was launched under the leadership of cabinet member **Mechai Viravaidya**, a well-known Thai AIDS activist and politician. Anti-AIDS messages aired every hour on the country's 488 radio stations and six television networks, and every school was required to teach AIDS education classes (21).

The high-profile campaign was initially unpopular with the influential tourism industry, and tourism indeed temporarily declined. However, once AIDS had a prominent place on the national agenda, opposition to the measures gradually faded and support increased **(**22). Most importantly, the '100 percent condom program' was initiated (23). This program aimed to enforce consistent condom use in all commercial sex establishments. Condoms were distributed free to brothels and massage parlous, and sex workers and their clients were required to use them. Brothels that failed to comply could be closed. Without this program, it is estimated that Thailand's national HIV prevalence would be ten times higher than it currently is (22).

The remarkable giant steps in the path of success in the history of Thailand are, Firstly, the AIDS control program was moved from the Ministry of Public Health to the Office of the Prime Minister, increasing its political influence, and the budget was increased almost 20-fold to $44 million in 1993. The second 'National Plan for Prevention and Alleviation of the AIDS Problem', which covered the period from 1997 to 2001, maintained the previous effective programs, whilst adopting a more holistic approach, which included mobilizing the efforts of communities and people living with HIV/AIDS. The third "National Plan for the Prevention and Alleviation of HIV/AIDS in Thailand" (which runs between 2002 and the end of 2006), has worked towards the target of reducing HIV prevalence to less than 1% and providing access to care and support for at least 80% of the people living with HIV and other affected individuals (23).

By the end of 2006 the number of incidence of HIV/AIDS has decline dramatically in respect of all the effort that taken by various sectors including Thailand Royal Government, WHO, and whole bunch of NGOs who dedicated to control and prevention of the disease.



Sources: Bureau of Epidemiology, MOPH, Thailand

Figure 6 Distribution of reported AIDS cases and AIDS death cases by year of diagnosis in Thailand

2.3 Sexually Transmitted Diseases in Travelers

Sexually transmitted diseases (STDs) are responsible for a variety of acute and chronic medical problems. These include lower and upper genital tract infections, their complications in women (pelvic inflammatory disease, infertility, ectopic pregnancy, and chronic pelvic pain), chronic liver diseases and cancer caused by hepatitis B (HBV) and C infection, genital cancer due to several types of papillomavirus, and AIDS, caused by HIV. In addition, the role of several STDs in amplifying the risk of acquisition or transmission of HIV itself is fully recognized (24), making prevention of infection with STDs a mainstay of HIV-AIDS prevention. Travel interferes with human sexual practices by splitting fixed sexual partnerships and removing social taboos that may inhibit sexual freedom. Increased sexual promiscuity and casual sexual relationships are likely to occur during travel because people have the opportunity to escape standardized behaviors commonly regarded as acceptable by their society. Each year, 1 billion passengers travel by air, and over 50

million people from industrialized countries visit the developing world (25). Despite increasing evidence of significant risk among travelers, STD prevention has a low profile among travel clinic practices. This review will focus on the risk of STDs and discuss strategies to minimize them.

- **Sexually transmitted infection risk behavior**

Sexual behaviors (either adopted or intended) of travelers have been the object of several studies. Intended sexual behaviors were studied in a cross-sectional survey of Australians seeking pre-travel medical advice before a trip to Thailand (26). Although the subjects studied were not obviously sex tourists, 66% of the 213 interviewed people reported plans or hopes to have sexual contact during their trip. Many more studies have assessed adopted sexual behaviors after travel (27). A postal questionnaire survey was conducted among randomly selected individuals who had registered at a semirural general medical clinic in Nottingham, United Kingdom. Of the 354 subjects who reported travel abroad in the last year, 5% had a sexual relationship during their last trip, and less than one-third used condoms always (28). Limited and/or inconsistent condom use in travelers appears to be independent of country of origin, travel "style" (e.g. business, back-packer), and country of destination (27). Overall, at least 33% to 50% of travelers do not consistently use condoms. Although many travelers carry condoms, they often "forget" to use them in the heat of the moment (29). Even when condoms are used by travelers, there may be greater risks of failure due to poor quality of locally purchased products (25), improper storage (ie, the bottom of the knapsack for 2 months at 40°C), improper application, or anal sex. Of 757 attendants of the hospital for tropical diseases in London during 1991–1992, 18.6% reported having sex with new partners during their most recent trip, and condoms were used irregularly or never by 64% (29). In questionnaire studies of Swiss tourists who visited tropical countries, 30% (30) and 51% of the subjects reported casual sexual contacts during the vacation period, and 38% of these contacts were unprotected (31). The rate of people who reported having engaged in casual sex with natives while on vacation is higher in studies of STD clinic attendees. Among 243 genitourinary medicine attendants in London, the rate of sexual exposure abroad was 51% among heterosexual men, 36% among homosexual

men, and 20% among women (32). Among STD clinic patients in Bergen, Norway, in 1989, 41% reported casual sexual contacts abroad in the previous 5 years, which mainly occurred in Europe. Most were men who reported having engaged in sex with female sex workers; consistent condom use was low, particularly after alcohol use (33).

Casual sex occurs even more frequently among long-term overseas travelers. Most available observations on this category refer to personnel of voluntary organizations employed in countries of the tropical belt. About 60% of 1080 American Peace Corps volunteers reported sexual relationships with at least 1 new partner during the stay abroad (34). About 40% of them had a local partner, and only one-third of them reported condom use. Expatriate residents who are in southern countries for long periods of time are also likely to be at increased risk of infection with an STD, but data are scarce. More than 50% of Belgian expatriates in central Africa reported having extramarital sex, and one-third reported regular contacts with commercial sex workers (35). Of 1968 Dutch expatriates and their family members who were interviewed by means of questionnaire returning from at least 6 months in sub-Saharan Africa, 7.9% of the men and 2.1% of the women had lived with an African partner. Of the same group, 30.7% of men and 13.1% of women reported heterosexual contacts with other partners, and less than one quarter of both sexes reported regular condom use (36). Finally, high rates of STD exposure are well documented among military personnel stationed abroad (37).

The term “sex tourist” is used to identify travelers who make trips with the intention to visit an area in which sex is for sale. An increased demand for sex by tourists often matches an increased offer of sexual services at destination sites, and prostitution with foreigners represents, in many low-income countries, a way to increase national revenues and to allow individuals to contribute significantly to their family’s survival. Sex tourism has traditionally been concentrated in relatively few places. Thailand has been a sex tourism destination for Japanese, European, American, and Australian travelers (38) because of its large number of sex workers.

Knowledge of the pattern and frequency of infection with STDs in important tourist spots may be helpful in managing STDs that occur in travelers to those destinations.

- **Factors associated with increased exposure**

Objective criteria that can identify high-risk travelers would be helpful to organize preventive interventions. In the Nottingham study, several factors were associated with a higher frequency of casual sexual intercourse abroad, including male sex, single status, age of !20 years, traveling without a partner, having had _2 sexual partners in the previous 2 years, being a casual user of illicit drugs, or being an abuser of alcohol (28). Practicing casual sex in the home country has been independently associated to casual sex abroad. Swiss tourists who reported casual sexual contact during their last travel experience were 11 times more likely to practice casual sex at home and twice as likely to use condoms compared with those who did not have casual sex (31). Those who had visited the same destination more than twice were also more likely to engage in casual sex abroad with locals (8% vs. 4%) (31).

Young age and single marital status were independent risk factors for contacts with female commercial sex workers among Dutch soldiers in Cambodia (32). Regular use of condom among American Peace Corps volunteers was inversely associated with alcohol abuse among male volunteers and inversely associated with the number of new partners among female volunteers (34). Protective measures were adopted by those who mostly needed them, possibly because of a higher level of awareness of the risks of sexual exposure.

- **Sexually transmitted infection risk among travelers**

There is little documented information on STD incidence among travelers. Hawkes et al. (39) reported that 5.7% of returning travelers at the Hospital for Tropical Diseases in London contracted a sexually transmitted infection (STI) during their most recent travel experience. In a genitourinary medicine clinic in London, the incidence of STDs among people with a recent history of travel was similar to that of people who did not travel at all (19% vs. 23%). In that study, the maximum attributable fraction of new STDs that could be the result of a new partnership abroad

was 12% (40). At the individual level, STD risk in travelers is the result of the product of the rate of partner exchange by the prevalence of STD in the contact population in the destination country. The latter factor is influenced by the heterogeneous distribution of STDs in the world. Worldwide estimated incidence rates of curable STDs in 1995 were 150 million and 65 million cases in Southeast Asia and sub-Saharan Africa, respectively, compared with 14 million and 16 million in North America and Europe, respectively (41). In a recently proposed model for the interpretation of phase-specific STI epidemiology based on the dynamic interplay among pathogens, human behaviors, and control efforts (42), resource-poor countries almost invariably lie in the hyper-endemic phase, which implies high rates in the general population. However, specific subpopulations of core transmitters may present much higher STI incidence and prevalence rates. As a result, information on the number of STD cases per 100,000 population in a given country may be of limited value for those who travel. In general terms, travelers who have sexual interactions with core groups of efficient transmitters (such as commercial sex workers) in areas where STDs are hyper-endemic may have exceedingly high risks of acquisition of an STD.

- **Prevention and control**

Travelers are an important target for STD control programs. Classically, primary prevention is based on information, education, and condom promotion, whereas prevention of sequelae and complications (as well as further transmission of the infection) is achieved by means of early recognition of the infection and its effective treatment. Primary prevention represents the only effective option for many viral STDs that are presently incurable (including HIV, HBV, herpes simplex virus, and human papillomavirus infections). Celibacy and sexual monogamy with a known partner are the best preventive options. When these cannot be accepted by the traveler, safer-sex practices must be recommended, including the limitation of the number of new sexual partners and the consistent and proper use of latex condoms during sexual activity. Correct condom use should be explained and, if possible, demonstrated. The female condom, which is less known and less widely available, but which is as effective as the male condom, can be proposed as an alternative.

Spermicides, such as nonoxynol- 9, have shown in vitro activity against *N. gonorrhoeae*, herpes simplex, and HIV, but they do not effectively prevent HIV transmission and in fact may increase the risk of transmission (43). Counseling aims at facilitating modifications of behaviors as a consequence of the new knowledge. In the questionnaire survey reported by Gillies et al. (28), most people who had sexual intercourse abroad with a new partner were carrying condoms, but more than half "forgot" to use them at least once. In the study reported by Gagneux et al. (31), the majority of Swiss travelers stated at the time of departure that they would use condoms during casual sex, but the proportion of subjects who later reported condom use was significantly lower. Counseling should focus on the nature and consequences of STDs, ways to prevent them, and factors that may prevent the adoption of safe behaviors (including alcohol and drug use). The nature of genital symptoms should be illustrated to travelers who are at an increased risk to support correct health behaviors either during travel or on return. STD preventive interventions need to be delivered at appropriate sites. Informative leaflets can be distributed to travelers at the airport; however, there is evidence that leaflets are consulted significantly more frequently by subjects who will thereafter practice casual sex during travel compared with those who will not (31). As an alternative, STD prevention can be integrated into travel medicine clinic services. However, there are no published examples of effective education and counseling interventions for short-termtravelers. Indeed, the capacity and willingness of travel medicine personnel to engage in education and counseling activities for STD risk reduction is questioned and should be the object of further research. Education and counseling should target the subgroup of travelers who are actually likely to engage in risky behaviors, because pre-travel face-to-face education of all travelers is not feasible and, in many instances, is not necessary. There are indications that travelers at increased risk may be identified by means of surrogate markers of sexual promiscuity: travelers who are male, unmarried, young in age, who are traveling alone, who travel to recurrent destinations (44), and who have a history of casual sex at home (31) and alcohol use (45). However, further prospective research on the predictive value of the above markers is required. There is some evidence of effective interventions in long-term travelers. The Peace Corps volunteers who served in Africa in the second half of the 1980s received intensive education and

counseling on HIV and its specific health risks. Between 1986 and 1989, the rate of all reported STD infections in such volunteers in Africa fell from 131 to 68 per 1000 population per year. Of 282 volunteers deployed in Zaire during 1985–1988, none displayed seroconversion for HIV, and the seroprevalence of any markers for HBV was similar to that of healthy Americans who were matched for age (46).

2.4 The Lethal bond, Travelling and HIV/AIDS

Travelling especially international travelling is likely to be significantly affected by HIV/AIDS, due to the mobility of the workforce, the nature of the industry, the presence of sex tourists and the heavy reliance of many countries on tourism revenues. Some have speculated that the fear of AIDS among tourists could discourage tourists from visiting certain countries. Others have even suggested that tourism should be discouraged, arguing that the industry further contributes to the spread of HIV/AIDS (47).

What is known is that travelers sometimes take risks that they otherwise would not take while at home. Tourists tend to drink more, use drugs more and are generally more adventurous when on holiday. These adventures occasionally include taking sexual risks, both by those who travel specifically to engage in sex with the local population (so-called "sex tourists") and for those who do not have this intention but eventually do engage in risky sexual behavior. Foreign tourists who engage in unprotected sex with nationals and fellow tourists represent a risk. The risk extends not only to the tourist, but also to any sexual partners they may have in their home countries. Risk is also incurred by the sex partner in the tourist destination and all of the sexual contacts that the local person may have. So, when tourists engage in unprotected sex with sex workers, hotel workers, and with others in the local population, a bridge may be created for HIV to cross back and forth between the tourist's home country and the tourist destination. Yet few HIV/AIDS interventions have been specifically targeted at travelers or those who work with travelers, largely because of fears that tourists will respond to such campaigns by perceiving the tourist destination as a place that is dangerous or unhealthy (48).

An informal study in Thailand concluded that the actual or the perceived prevalence of HIV does not affect the travel plans of travelers. Furthermore, the survey results indicated that tourists were supportive of the idea of receiving more information about the epidemic so that they could adequately protect themselves. Overall, a review of the existing literature reveals that there has been no definitive evidence that AIDS has had any lasting impact on the tourism industry anywhere in the world, despite the relatively high prevalence of HIV in such tourist destinations as Kenya and Thailand (49).

2.5 Role of condoms in prevention of HIV/AIDS

- **What Are Condoms?**

A condom is a tube made of thin, flexible material. It is closed at one end. Condoms have been used for hundreds of years to prevent pregnancy by keeping a man's semen out of a woman's vagina. Condoms also help prevent diseases that are spread by semen or by contact with infected sores in the genital area, including HIV. Most condoms go over a man's penis. A new type of condom was designed to fit into a woman's vagina. This "female" condom can also be used to protect the rectum (50).

- **What Are They Made Of?**

Condoms used to be made of natural skin (including lambskin) or of rubber. That's why they are called "rubbers." Most condoms today are latex or polyurethane. Lambskin condoms can prevent pregnancy. However, they have tiny holes (pores) that are large enough for HIV to get through. Lambskin condoms do not prevent the spread of HIV. Latex is the most common material for condoms. Viruses cannot get through it. Latex is inexpensive and available in many styles. It has two drawbacks: oils make it fall apart, and some people are allergic to it. Polyurethane is an option for people who are allergic to latex. One brand of female condom and one brand of male condom are made of polyurethane.

- **How Are Condoms Used?**

Condoms can protect you during contact between the penis, mouth, vagina, or rectum. Condoms won't protect you from HIV or other infections unless you use them correctly (50).

- Store condoms away from too much heat, cold, or friction. Do not keep them in a wallet or a car glove compartment.
- Check the expiration date. Don't use outdated condoms.
- Don't open a condom package with your teeth. Be careful that your fingernails or jewelry don't tear the condom. Body jewelry in or around your penis or vagina might also tear a condom.
- Use a new condom every time you have sex, or when the penis moves from the rectum to the vagina.
- Check the condom during sex, especially if it feels strange, to make sure it is still in place and unbroken.
- Do not use a male condom and a female condom at the same time.
- Use only water-based lubricants with latex condoms, not oil-based. The oils in Crisco, butter, baby oil, Vaseline or cold cream will make latex fall apart.
- Use unlubricated condoms for oral sex (most lubricants taste awful).
- Do not throw condoms into a toilet. They can clog plumbing.

- **Preventing HIV Infection and Other STDs**

Abstaining from sexual activity is the most effective HIV prevention strategy. However, for individuals who choose to be sexually active, the following are highly effective (51).

- Engaging in sexual activities that do not involve vaginal, anal, or oral intercourse
- Having intercourse only with one uninfected partner
- Using latex condoms correctly from start to finish with each act of intercourse

Early in the course of the AIDS epidemic, condoms were recognized as an effective means of prevention if used properly and consistently. All the European countries from which data are presented in this chapter have included the promotion

of condom use in their overall AIDS prevention policies, even if the importance of this element in relation to others, such as promotion of counseling and testing and advocacy of fidelity, has differed according to the different socio-cultural and political contexts (52).

The proper and consistent use of latex condoms when engaging in sexual intercourse--vaginal, anal, or oral--can greatly reduce a person's risk of acquiring or transmitting STDs, including HIV infection. In fact, recent studies provide compelling evidence that latex condoms are highly effective in protecting against HIV infection when used properly for every act of intercourse (51).

The protection that proper use of latex condoms provides against HIV transmission is most evident from studies of couples in which one member is infected with HIV and the other is not, i.e., "discordant couples." In a study of discordant couples in Europe, among 123 couples who reported consistent condom use, none of the uninfected partners became infected. In contrast, among the 122 couples who used condoms inconsistently, 12 of the uninfected partners became infected (52).

As these studies indicate, condoms must be used consistently and correctly to provide maximum protection. Consistent use means using a condom from start to finish with each act of intercourse. Correct method of condom use should include the following steps (52).

- Use a new condom for each act of intercourse.
- Put on the condom as soon as erection occurs and before any sexual contact (vaginal, anal, or oral).
- Hold the tip of the condom and unroll it onto the erect penis, leaving space at the tip of the condom, yet ensuring that no air is trapped in the condom's tip.
- Adequate lubrication is important, but use only water-based lubricants, such as glycerin or lubricating jellies (which can be purchased at any pharmacy). Oil-based lubricants, such as petroleum jelly, cold cream, hand lotion, or baby oil, can weaken the condom.

- Withdraw from the partner immediately after ejaculation, holding the condom firmly to keep it from slipping off.

- **Myths about condoms**

There continues to be misinformation and misunderstanding about condom effectiveness. The Centers for Disease Control and Prevention (CDC) provides the following updated information to address some common myths about condoms. This information is based on findings from recent epidemiologic, laboratory, and clinical studies (52).

1). Condoms don't work

Some persons have expressed concern about studies that report failure rates among couples using condoms for pregnancy prevention. Analysis of these studies indicates that the large range of efficacy rates is related to incorrect or i inconsistent use. The fact is: latex condoms are highly effective for pregnancy prevention, but only when they are used properly. Research indicates that only 30 to 60 percent of men who claim to use condoms for contraception actually use them for every act of intercourse. Further, even people who use condoms every time may not use them correctly. Incorrect use contributes to the possibility that the condom could leak from the base or break.

2). HIV can pass through condoms

A commonly held misperception is that latex condoms contain "holes" that allow passage of HIV. Although this may be true for natural membrane condoms, laboratory studies show that intact latex condoms provide a continuous barrier to microorganisms, including HIV, as well as sperm.

3). Condoms frequently break

Another area of concern expressed by some is about the quality of latex condoms. Condoms are classified as medical devices and are regulated by the FDA. Every latex condom manufactured in the United States is tested for defects before it is packaged. During the manufacturing process, condoms are double-dipped

in latex and undergo stringent quality control procedures. Several studies clearly show that condom breakage rates in this country are less than 2 percent. Most of the breakage is due to incorrect usage rather than poor condom quality. Using oil-based lubricants can weaken latex, causing the condom to break. In addition, condoms can be weakened by exposure to heat or sunlight or by age, or they can be torn by teeth or fingernails.

2.6 Health Believe Model (Conceptual model)

Explaining health behaviors

- **Core Assumptions and Statements**

The HBM is based on the understanding that a person will take a health-related action (i.e., use condoms) if that person:

1. Feels that a negative health condition (i.e., HIV) can be avoided.
2. Has a positive expectation that by taking a recommended action, he/she will avoid a negative health condition (i.e., using condoms will be effective at preventing HIV).
3. Believes that he/she can successfully take a recommended health action (i.e., he/she can use condoms comfortably and with confidence).

The HBM was spelled out in terms of four constructs representing the perceived threat and net benefits: perceived *susceptibility,* perceived *severity,* perceived *benefits,* and perceived *barriers.* These concepts were proposed as accounting for people's "readiness to act." An added concept, *cues to action,* would activate that readiness and stimulate overt behavior. A recent addition to the HBM is the concept of *self-efficacy,* or one's confidence in the ability to successfully perform an action. This concept was added by Rosenstock and others in 1988 to help the HBM better fit the challenges of changing habitual unhealthy behaviors, such as being sedentary, smoking, or overeating.

Table 2 Theory at a Glance: A Guide for Health Promotion Practice (1997)

Concept	Definition	Application
Perceived Susceptibility	One's opinion of chances of getting a condition	Define population(s) at risk, risk levels; personalize risk based on a person's features or behavior; heighten perceived susceptibility if too low.

Table 2 Theory at a Glance: A Guide for Health Promotion Practice (1997) (cont.)

Concept	Definition	Application
Perceived Severity	One's opinion of how serious a condition and its consequences are	Specify consequences of the risk and the condition
Perceived Benefits	One's belief in the efficacy of the advised action to reduce risk or seriousness of impact	Define action to take; how, where, when; clarify the positive effects to be expected.
Perceived Barriers	One's opinion of the tangible and psychological costs of the advised action	Identify and reduce barriers through reassurance, incentives, assistance.
Cues to Action	Strategies to activate "readiness"	Provide how-to information, promote awareness, reminders.
Self-Efficacy	Confidence in one's ability to take action	Provide training, guidance in performing action.

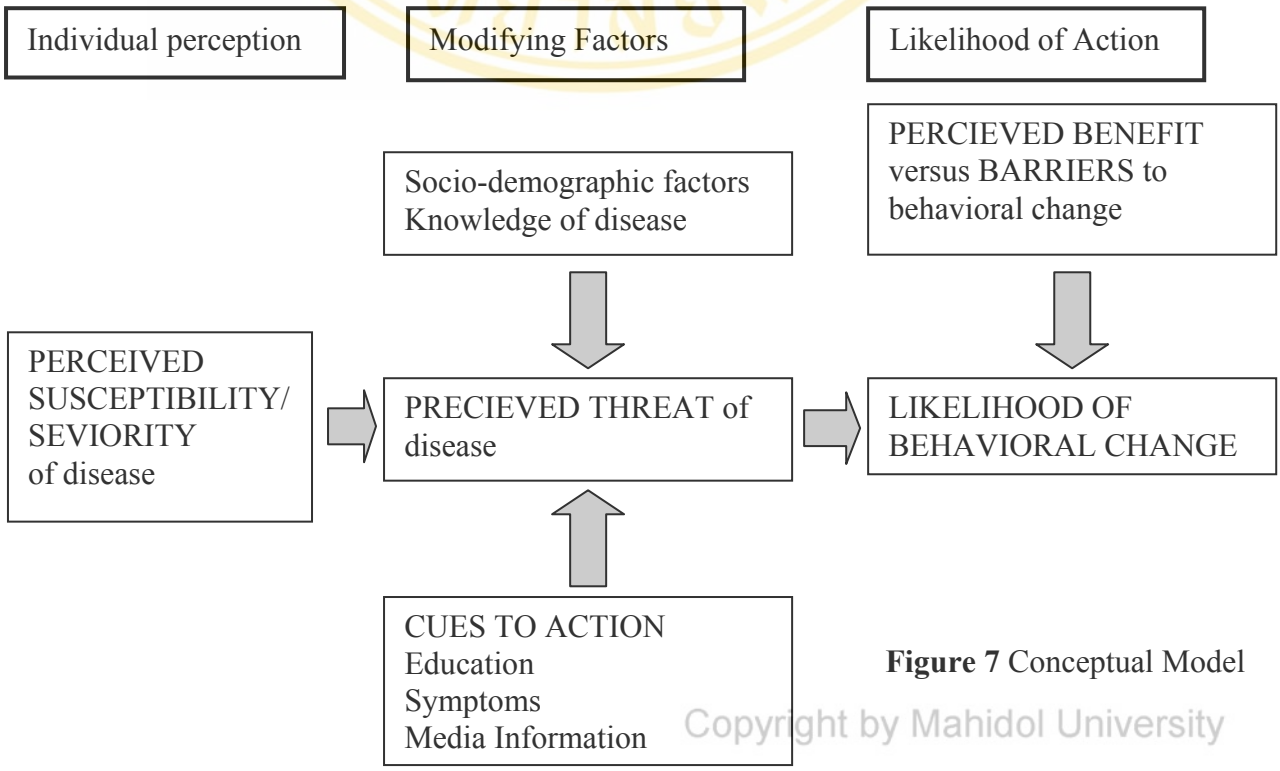


Figure 7 Conceptual Model

2.7 Studies on Sexual encounter of travelers in Thailand

Even though there are thousands of studies done in Thailand related to HIV/AIDS, only one study has ever performed in regarding tourists and sex. “HIV-related risk behaviors among Japanese tourists in Khaosan Road Area, Bangkok, Thailand” reveals.

Among the total of 150 study participants, 4 reported having never had sexual intercourse and 1 skipped the question. Ninety-four percent of the participants reported their sexual orientation as heterosexual, 0.7% as homosexual (only one male), 1.3% as bisexual, and 3.3% as unknown. The mean age of first sexual intercourse was 17.6 years (*SD* D 1:89). More than two-thirds (68%) had used a condom when they had had sexual intercourse for the first time. Study participants typically had had multiple private sex partners; the mean number of lifetime male partners among heterosexual females was 8.1 (*Mdn* D 6), and the mean number of lifetime female partners excluding female sex workers among heterosexual males was 13.5 (*Mdn* D 5). In the past 12 months, 51 participants (81% of 143 cases) reported that they had a steady sex partner, and among these, 25% and 84% had never used a condom with steady partners for vaginal and oral sex, respectively (53).

CHAPTER 3
RESEARCH METHODOLOGY

3.1 Study design

This research is a cross-sectional study; the aims of the study were to determine preventive behavior, in respect of avoiding being infected by HIV/AIDS, among Sri Lankan adult male visitors in Thailand by using condoms in any sexual act done with a person who met during the course of tour in Thailand.

3.2 Study population

As inclusion criteria, primarily four factors being considered,

Nationality: Should be a Sri Lankan citizen

Gender: Male

Age: 18 years or above

Reason for visit/stay in Thailand:

Who visits for, leisure as tourist, business trip, attending educational or professional programs during 20th January 2008-10th February 2008 were included in the study. Sri Lankans who are employed in Thailand and who are married with Thai women was not included

3.3 Sample size calculation

The following equation was used even though it is used to estimate sample size for simple random sampling. Here it was used as a guideline.

$$n = \frac{Z^2_{\alpha/2} P(1-P)}{d^2}$$

$$n = \frac{1.96^2(0.5)(1-0.5)}{(0.096)^2}$$

n = 105

n = The estimated sample size

α = The level of statistical significance set at 0.05

Z = 1.96 at 95% confident interval

P = The prevalence of condom use among Sri Lankan adult male visitors in Thailand. As there were no previous studies found, to gain maximum sample size it was set as 0.5

d = Precision of degree of accuracy required is set 0.096

3.4 Sampling technique

Combination of convenience and snowball sampling methods were used. Accidental sampling was based on using people who are a captive audience, just happen to be walking by or show a special interest in the research or as volunteers. Hence Sri Lankan travelers who met with the researcher or co-interviewers were requested to participate in this study after briefing about the purpose of it. And they were free to refuse to cooperate with the study.

Visitors who were willing to participate in this study were asked to introduce their friends, colleagues or family mates to expand the sample size. All respondents were interview by either the researcher or co-interviewers.

3.5 Research instruments

A structured questionnaire in English was used as research instrument for data collection it was not necessary to transferred into Sinhala language as all respondents were interviewed in English or Sinhala, depend on the respondents language skills . This was comprised of four parts as follows:

Part 1: Socio-demographic factors

This part consisted of eleven questions about factors describe the individual such as age, educational level, occupation, marital status, number of visits to Thailand, travel with whom, travel for what purpose, duration of stay and practice sex. The questions in this part were mostly close-ended.

Part 2: Knowledge about HIV/AIDS

This part focused on questions of knowledge about HIV/AIDS in four main aspects. Those are etiology, transmission, treatment and prevention options of HIV/AIDS. Each question has four stems and one is correct and others are wrong. A score of one was assigned to each correct answer and zero for wrong answer or for a response of no idea. If there were more than one response for one question, only the first marked answer was considered as the proper response. Considering the non-normal distribution of data the knowledge was classified into three levels

- Good level of knowledge:[(Q3+1) to maximum]
- Moderate level of knowledge :[Q1 to Q3]
- Poor level of knowledge:[Minimum to (Q1-1)]

Part 3: Perception of HIV/AIDS

In this part the tourist's perception of susceptibility to get HIV/AIDS, perception of severity of HIV/AIDS and perceived benefits and barriers to use condoms were measured. Twenty questions in this part were revised by the experts in the HIV/AIDS field. Likert's scoring style was used for ranging scale. A score of five was given to answer "Strongly agree", score four was given to the answer "Agree", score of three was given to answer "Not sure", score of two was given to answer "Disagree" and score of one was given to answer "Strongly disagree". As the data did not show normal distribution, maximum, minimum, median and percentile scores were used for classifying of the level of perception.

- Positive/high level of perception: [(Q3+1) to maximum]
- Neutral/moderate level of perception: [Q1 to Q3]
- Negative/low level of perception: [Minimum to (Q1-1)]

Part 4: Use of condoms as HIV/AIDS preventive behavior

In this part tourists answered questions that were closed ended and open-ended. The questions cover the areas of proper use of, and frequency of using of condoms in regards to different sexual intercourse.

3.6 Pre-test of Questionnaire

Pre-test was conducted, prior to data collection by researcher, by using 30 questionnaires for evaluation of reliability of the questionnaire. Pre-test data were analyzed for the knowledge aspect by KR 20 which gave test result 0.78 and for attitude aspect by using Cronbach's alpha. Initially Cronbatch's alpha was 0.5. After making some questions more understandable, the co-efficient increased to 0.73 in the second test.

3.7 Data Collection

By using accidental and snowball sampling methods, the data were collected on twenty one days from 20th January 2008 to 10th February 2008. Collection was mainly done by the researcher other than the two trained co-interweavers, around Bangkok metropolitan area and in educational institutes in Bangkok

3.8 Method of Data Analysis

Descriptive and inferential statistics were used. Pearson's correlation and Chi-square analysis were used as inferential statistical methods. Association between each independent variable and dependent variable was calculated by using chi-squire test and Fisher exact test in case of obtaining invalid Chi-square test. During this analysis

level of significant (α) was set at 0.05. Following computer applications were used, Epidata version 3.0 for data processing and Minitab version 13.0 for data analyses.

CHAPTER 4
RESULTS

The purpose of this study was to investigate use of condoms as HIV/AIDS preventive/protective behavior among adult Sri Lankan male visitors in Thailand who practice either paid or unpaid sex. A total of 105 Sri Lankan visitors in Thailand, mainly around Bangkok metropolitan area were interviewed by questionnaire. The research was started on 20th January of 2008 and conducted till 10th February of 2008. Data collection was mainly done by the researcher (70%) other than the two co-interviewers.

The results from the study were presented in 8 parts, consists of:

4.1 Describe the socio-demographic characteristics of the sample. In aspect of age, education level, occupation, marital status, number of visits to Thailand, with whom they travel, reason for traveling and how long they stay in Thailand according to the schedule.

4.2 Pattern of sexual encounter either practiced paid sex or unpaid sex or both.

4.3 Evaluate the knowledge about the HIV/AIDS in respect of etiology, modes of transmissions, symptoms, treatment and prevention of transmission.

4.4 Measure the level of perception, severity of and susceptibility to get HIV/AIDS. Perception of benefits and barriers of using condoms as preventive measure against HIV/AIDS.

4.5 Ability to select and use a condom correctly.

4.6 Pattern of using condoms among who practiced sex during their stay in context of paid and unpaid sex.

4.7 Describe the association between socio-demographic characteristics, knowledge perception and practicing sex during visit.

4.8 Describe the association between socio-demographic characteristics, knowledge, perception and use of condoms during sexual encounter.

The results were presented in the form of tables using frequency and percentage distribution followed by narration.

4.1 Socio-demographic characteristics

Table3 showed the numbers and percentage distribution of socio-demographic factors. Mean age of visitors was 37.4 years and SD was 9.5 years, minimum and maximum ages were detected respectively as 19 years and 62 years.

A little more than one-halves of the sample (54.29%) received either bachelor or higher degree level education. Less than high school level includes, one person who completed primary school and three persons who completed lower secondary school level education. As whole educational level of Sri Lankan visitors in Thailand is relatively high as almost 96 percent of them had received more than secondary school education.

The unemployed group consisted of students only (18.1%). Employed were categorized in to three groups. Self-employed (consisted of businessmen only) were 26.68 percent of the sample, government offices accounted for 35.23 percent and non-government officers were 20 percent of the respondents

Most of the respondents were married they accounted for 65.71 percent. Single respondents accounted for 19.05%. All other divorced, separated and widower were together only 16 out of 105 (15.24%).

Majority of the respondents had visited Thailand 2-4 times (44.76%).Who visited only once accounted for 38.1 percent.

Nearly half of the sample (48.57%) was traveled alone. Out of them 53.33 percent had come for educational or training programs, 23.53 percent had come for business purposes, 8 (15.69%) as tourists. 35 out of 51 who came alone practiced sex during their stay (Table 4).

The purpose of visit for majority was “For educational or training programs” which corresponded for 53.33 percent, next main cause for visit was “as a tourist” consist of 31 respondents (29.52%). Only two persons were found for other purpose as visiting their relatives and attending a funeral ceremony. (Table 3)

Table 3 shows out of 105 respondents 71 (67.62%) were supposed to stay less than 14 days. Usually tourists stay few weeks and educational program either short as few weeks or longer than few months. This is shown by the total of tourists (40.85%) and who attended for educational or training programs (36.62%) is similar to the total number of who stay less than two weeks (67.62%) and more than 2 months (15.24%).

Table 3 Socio-demographic characteristics of the respondents

Socio-demographic characteristics	**Number (n =105)**	**Percent (%)**
Age Group		
19-28	20	19.05
29-46	66	62.86
47-62	19	18.1
Mean = 37.4, SD = 9.5, Min = 19, Max = 62.		
Education Level		
Master or Higher	19	18.10
Bachelor	38	36.19
Vocational	22	20.95
High School Level	22	20.95
Less than High School	4	3.81
Occupation		
Unemployed (students)	19	18.1
Self-employed (businessmen)	28	26.67
Government officers	37	35.23
Non-government officers	21	20.0

Table 3 Socio-demographic characteristics of the respondents (cont.)

Socio-demographic characteristics	**Number (n =105)**	**Percent (%)**
Marital status		
Single	20	19.05
Married	69	65.71
Divorced / Separated / Widower	16	15.24
Number of Visits		
1	40	38.10
2-4	47	44.76
≥ 5	18	17.14
Visit with whom		
Alone	51	48.57
With Family	11	10.48
With Friends	18	17.14
With Officials	25	23.81
Purpose of visit		
As a tourist	31	29.52
For business	16	15.24
For educational/training programs	56	53.33
Other	2	1.90
Duration of staying in Thailand		
Up to 14 days	71	67.62
15 to 60 days	18	17.14
Two months to 6 months	3	2.86
More than 6 months	13	12.38

Out of total 105 respondents only 59 had involved in active sex. Table 4 showed the socio-demographic variation of them. The age showed same variation as among the total visitors and who practiced sex the majority was in middle age between 30-45 years. Mean age was 37 years among those who practiced sex.

Educational level showed main changes even though majority of respondents were above the degree level when comes to practicing sex majority were below the degree level education. Only 45.61 percent who hold degree education had sex but below degree level it was 68.75 percent.

Regarding marital status, even the majority who practiced sex were married group, when consider the proportion it was only 51 percent. But all 16 either divorced, separated or widower have had sex (100%) during their stay in Thailand.

The number of visits of the respondents showed majority(45.76%) who had sex visited 2-4 times but every one who came five or more times had sex even the percentage according to count was only 30.51, the proportion is 100 percent.

Majority (59.32%) who participate in sex during their stay had come alone. Who came with friends or officials accounted only for nearly 15 percent to 20 percent. But when consider the proportion vast majority (72.22%) who came with friends. Either percentage (1.69%) or proportion (9.09%) was very low among who came with their families.

It is shown the majority who practiced sex were businessmen, even they only accounted for 38.98 percent among all, 82.14 percent of businessmen (23 out of 28) involve in active sex. This is the highest proportion comparative to other occupations. Nearly 70.0 percent of non-government officers involved in active sex though they only accounted for nearly 25 percent comparative to all occupations.

Table 4 Socio-demographic characteristics of respondents who had sex

Socio-demographic characteristics	Participation in active sex Number (n = 59)	Percent (%)
Age Group		
25-29	9	15.25
30-44	41	69.49
45-56	9	15.25
Mean = 37, SD =7.6, Min = 25, Max = 56.		
Education Level		
Degree level	26	44.07
Below degree level	33	55.93
Occupation		
Unemployed (students)	7	11.86
Self-employed (business men)	23	38.98
Government officers	14	23.74
Non-government officers	15	25.42
Marital status		
Single	8	13.56
Married	35	59.32
Divorced / Separated / Widower	16	15.24
Number of Visits		
1	14	23.73
2-4	27	45.76
≥ 5	18	30.51

Table 4 Socio-demographic characteristics of respondents who had sex (cont.)

Socio-demographic characteristics	Participation in active sex Number (n = 59)	Percent (%)
Visit with whom		
Alone	35	59.32
With Family	1	1.69
With Friends	13	22.03
With Officials	10	16.95
Purpose of visit		
As a tourist	14	23.73
For business	16	27.12
For educational/training programs	28	47.46
Other	1	1.69
Duration of staying in Thailand		
Up to 14 days	35	59.32
15 to 60 days	11	18.64
More than 2 months to 6 months	3	5.08
More than 6 months	10	16.95

4.2 Pattern of sexual encounter

In this issue it is concern that whether the visitors had practiced paid or unpaid sex and who were the partners in case of unpaid sex and how many partners they had, during the period of staying in Thailand. As shown in Table 5, out of 105 respondents, 59 (56.19%) had involved in sexual activity. Interviewees who had sex are described more in Table 6 according to the type of sex they had. Majority (44.06%) had had only paid sex with one or more commercial sex workers. Minority (23.74%) had practiced only unpaid sex.

Table 5 and 6; illustrate the pattern of paid and unpaid sex which they practiced. Major fraction of the respondents had bought the sex (67.8%) out of them 14 (23.74%) had unpaid sex too (Table 5). Nearly half (49.15%) of the visitor who engaged in sexual activity had one or more Thai girlfriends. Only 10 respondents (16.95%) had encountered sex with temporary partners.

Table 5 Pattern of sexual activity

	Number	**Percent (%)**
Having sex during stay in Thailand (N=105)		
Yes	59	56.19
No	46	43.81
Type of sex (N=59)		
Only paid sex	26	44.06
Only unpaid Sex	19	32.20
Both	14	23.74
Having paid sex (with commercial sex workers, N=59)		
Yes	40	67.80
No	19	32.20
Temporary partner		
Yes	10	16.95
No	49	83.05
Girl friend in Thailand		
Yes	29	49.15
No	30	50.85

According to Table 6, minority (42.37%) who engaged in sexual activity had only one sexual partner either as paid sex (56.0%) or as unpaid sex (44%). Majority of respondent had multiple sexual partners, 22.03% had two partners and 35.59% had

three or more sexual partners both groups had practiced either paid or unpaid sex or both.

Table 6 Number of sexual partners and type of sex

Number	Type of sex	Number (n =59)	Percent (%)
1		**25**	**42.37**
	Paid sex only	14	56.00
	Unpaid sex only	11	44.00
2		**13**	**22.03**
	Paid sex only	04	30.77
	Unpaid sex only	06	46.15
	Both	03	23.08
≥3		**21**	**35.59**
	Paid sex only	08	38.09
	Unpaid sex only	02	9.53
	Both	11	52.38

4.3 Knowledge about the HIV/AIDS

Knowledge about HIV/AIDS were measured by using ten questions which included stems about etiology, modes of transmissions, symptoms, treatment and prevention of transmission of the disease. Respondents were supposed to select mostly correct answer.

Table 7 shows the correct number and percentage of each question. The vast majority (99.05%) of respondents answered correctly about the mode of transmission (Q1) where the answer was “having sex with infected person”. A majority (94.28%) answered that HIV/AIDS can not be cured at present by any mode of treatment. Seven questions had been answered correctly more than 50% of respondents. Knowledge about mother to baby transmission is very poor, only 29 (27.62%) could give the correct answer.

Table 7 Percentage distribution of correct answers in knowledge part

Knowledge statement	correct answers	
	Number	Percent
1. One is at risk of getting HIV by having sex with an HIV infected person	104	99.05
2. HIV can be transmitted from mother to baby.	48	45.71
3. Vaginal. Anal and oral sex cause the transmission of HIV?	58	55.24
4. HIV infected person can not be identified only by symptoms	83	79.05
5. After a person got infected with HIV it may take 3 months up to 10 years for AIDS symptoms to develop	59	56.19
6. An HIV positive mother can transfer HIV to her baby during Pregnancy, delivery and breast feeding	29	27.62
7. At present HIV/AIDS disease can not be cured by treatment	99	94.28
8. HIV/AIDS is a viral infection which reduce the immunity	89	84.76
9. Abstinent of sex, be faithful and restrict to one partner and always using condoms help to prevent getting infected with HIV/AIDS	39	37.14
10. If you are suspicious after having unprotected sexual intercourse abstinent of sex and check for HIV definitely after 2-3 Months must	66	62.86

As Table 8 shows the level of HIV/AIDS knowledge among Sri Lankan adult male visitors in Thailand Majority (60.0%) has moderate (Q1-Q3) level of knowledge about particular issues mentioned above.

Table 8 Overall knowledge about HIV/AIDS

	Number (n =105)	**Percent (%)**
Good *(score > 8)*	19	18.10
Moderate *(score 5-8)*	63	60.00
Poor *(score < 5)*	23	21.90
Min = 2, Max = 10, Median =6, Q1 = 5, Q3 = 8, QD = 1.5		

4.4 Perception of severity and susceptibility of HIV/AIDS and benefits minus barriers of using condoms.

In this study, the perception of HIV/AIDS infection and preventive behavior composed of four parts. The first, perceived susceptibility to HIV infection had five positive statements. The second, perceived severity of infection had one negative and four positive statements. Third, perceive the benefit of preventive behavior (here use of condoms considered as preventive behavior) which had five positive statements. And last perceive the barrier to practice the preventive measure had two positive and three negative statements. All stems were scaled as strongly agree(SA), agree(A), not sure (NS), disagree (D) and strongly disagree (SD) each stem was given maximum 5 points when they strongly agreed in positive statements and strongly disagreed in negative statements(Likert's criteria).

Table 9 shows frequency and percentage distribution of the respondents' perception in regard to prevention of HIV/AIDS. In this Table the frequency and percentage of each statement, which was enumerated in the questionnaire, is given. Regarding perception of susceptibility almost two-thirds (65.71%) strongly agree that it is possible to reduce the risk of HIV infection by having sex only with one faithful partner. About susceptibility, respondents had overall positive perception as shown in Table 9 because 70% -80% had answer as strongly agree and agree.

Regarding perception of severity, nearly 15% (SA=9.52%+A=5.71%) not agree that HIV/AIDS incurable. Social stigmatism about been an HIV patient was been asked from stem 7-10 about 60% -70% respondents had positive perception about that HIV/AIDS patients be rejected or isolated from the society. This could be the gross view of the Sri Lankan society which is needed address.

Regarding perception of benefits 74.29% (N=78) perceive that use o condoms helps to get rid of life threatening situation due to HIV infection. Condom helps to prevent transmission of HIV is believed by nearly 84% (SA=59.05+A=24.76). Overall perception of using condoms as preventive measure is positively perceived by 70%-90% of respondents.

Regarding perception of barriers to use condoms as a preventive measure. Nearly 55-75 percent had positive perception for this issue (total of SA and S in positive statement and SD and D in negative statement) But a significant value, nearly 25 percent of respondents had negatively perceived the barrier to action which lead them not to use condoms during sexual act.

Table 9 Frequency and percentage distribution of perception statements

Statement	Number and percent of each answer				
	SA	A	NS	D	SD
Susceptibility					
1. Health care workers are at more risk of getting HIV/AIDS	53 50.48	36 34.29	4 3.81	9 8.57	3 2.86
2. Repeated blood transfusions may cause to get HIV/AIDS	42 40.0	39 37.14	9 8.57	14 13.33	1 0.95
3. Having sex with only one faithful partner can reduce the risk of HIV infection	69 65.71	25 23.81	1 0.95	6 5.71	4 3.81
4. People travel away from their families have more chance to expose HIV/AIDS	41 39.05	41 39.05	4 3.81	15 14.29	4 3.81
5. Intra-venous drug uses can be infected by HIV/AIDS	38 36.19	37 35.24	3 2.86	18 17.14	9 8.57
Severity					
6. HIV/AIDS is a curable disease	10 9.52	6 5.71	2 1.90	16 15.24	71 67.62
7. Being an HIV/AIDS patient, carries a bad reputation	28 26.67	39 37.14	12 11.43	17 16.19	9 8.57
8. If one infected with HIV/AIDS all his family, relatives and friends may leave him	20 19.05	45 42.86	19 18.10	14 13.33	7 6.67
9. You would be considered as had many sexual partners	28 26.67	36 34.29	13 12.38	24 22.86	4 3.81
10. People with HIV/AIDS are isolated from their communities.	27 25.71	40 38.10	11 10.48	25 23.81	2 1.9

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Table 9 Frequency and percentage distribution of perception statements (cont.)

Statement	Number and percent of each answer				
	SA	**A**	**NS**	**D**	**SD**
Benefits					
11. Condoms should be used during any sexual intercourse to minimize the HIV infection	78 74.29	18 17.14	2 1.9	6 5.71	1 0.95
12. If one practices casual sex, condom helps not to shorten his life span.	48 45.71	37 35.24	6 5.71	12 11.43	2 1.9
13. Expense a little money for condom will save high treatment cost	59 56.19	29 27.62	1 0.95	11 10.48	5 4.76
14. Using any type of condom is better than nothing to prevent transmission of HIV.	62 59.05	26 24.76	2 1.9	6 5.71	9 8.57
15. Use of condoms in casual sex will helps you to protect your family	43 40.95	33 31.43	7 6.67	19 18.1	3 2.86
Barrier					
16. Using condoms with your sexual partner(s) show some un-trust	16 15.24	42 40.0	7 6.67	25 23.81	15 14.29
17. Use of condoms with sexual partner is not practicable.	12 11.43	18 17.14	13 12.38	41 39.05	21 20.0
18. Use of condoms makes sex less enjoyable.	23 21.9	44 41.9	8 7.61	21 20.0	9 8.57
19. It is not easy to wear condoms correctly	3 2.86	21 20.0	4 3.81	51 48.57	26 24.76
20. Condoms tear frequently so no protection even used	12 11.43	12 11.43	4 3.81	26 24.76	51 48.57

SA= Strongly Agree, **A** = Agree, **NS** = Not Sure, **D** = Disagree, **SD** = Strongly Disagree

Overall perception of respondents for all four parts is shown in Table 10 according to individual total score. Majority of respondents (55.24%) had moderate perception and good (20.95%) and poor (23.81%) perception groups almost similar in number.

Table 10 Overall perceptions of HIV/AIDS and use of condoms

Perception	**Number (n =105)**	**Percent (%)**
Positive (95-84)	22	20.95
Neutral (83-73)	58	55.24
Negative (72-58)	25	23.81
Min=58, Max=95, Median = 78, Q1=73, Q3=83, QD = 5		

Among those who practiced sex (Table11), perception of susceptibility to HIV/AIDS was moderate nearly 60% and 30.51% accounted for poor. Perception of severity of HIV/AIDS was moderate among 52.42% and poor among 16 respondents (27.12%). Nearly 75% perceived the benefits of using condoms as good or moderate. The poorest out of poor perceptions is shown in perceiving the barriers of using condoms.

Table 11 Perception of HIV/AIDS among respondents who practice sex

Perception of	**Number (n = 59)**	**Percent %**
Susceptibility		
High	7	11.86
Moderate	34	57.63
Low	18	30.51
Severity		
High	12	20.34
Moderate	31	52.54
Low	16	27.12

Table 11 Perception of HIV/AIDS among respondents who practice sex (cont.)

Perception of	**Number (n = 59)**	**Percent %**
Benefits		
High	14	23.73
Moderate	30	50.85
Low	15	25.42
Barriers		
High	10	16.95
Moderate	25	42.37
Low	24	40.68

4.5 Ability to select and use a condom correctly

This was measured by using ten stems in two questions as mentioned below which was supposed to evaluate the ability of the respondents to select and use a condom correctly. If they selected correct answer 1 score and select most correct answer 2 scores were given. As shown in Table 12, 34.28% had good knowledge and only 17.15% had poor knowledge.

Table 12 Ability to select and use a condom correctly

Ability	**Number (n = 105)**	**Percent (%)**
Good (score 4)	36	34.28
Moderate (score 2-3)	51	48.57
Poor (score ≤ 1)	18	17.15

As mentioned in Table 13, majority (60.0%) could able to select the most correct answer but 9.52 percent did not consider any of those important factors which could be crucial in selecting a condom. In second question respondents had shown better results by 77 selecting the correct answer (73.33%).

Table 13 Questions to measure the ability of selecting a condom correctly

Question and stem	Number	Percent
1. When buy a condom you must consider about,		
(1) The material it made of	0	0.0*
(2) Expiry date	27	25.71*
(3) Condom size	5	4.76*
(4) All above	63	60.0 **
(5) None of above	10	9.52
Total	**105**	**100**
2. Which of following is correct use of condoms?		
(1) Do not leave an air space at tip of the condom	77	73.33 **
(2) Put the condom before erection occur.	12	11.43
(3) Unroll the condom before put on to the penis	6	5.71
(4) No need to be careful on removal after having sex	9	8.57
(5) Condoms can be reused	1	0.95
Total	**105**	**100**

*correct answer
**most correct answer

4.6 Pattern of using condoms among who practiced sex

According to Table 14, 42 respondents had used condoms always when they practiced sex, with in them majority had practiced paid sex (n = 33). Majority of who practiced only unpaid sex with their girl fried/s or/and temporary partner/s had used condoms at times (50.0%). Who never used condoms as preventive measure included only one respondents and he had experienced only unpaid sex with his girl friend in Thailand.

Table 14 Pattern of using condoms

	Type of sexual partner	Count (n = 59)	Percent (%)
Always used		42	71.19
	Paid sex only	24	57.14
	Unpaid sex only	9	21.43
	Both	9	21.43
Used only some times		16	27.12
	Paid sex only	1	6.25
	Unpaid sex only	8	50.0
	Both	7	43.75
Never used		1	1.69
	Unpaid sex only	1	100.0

Awareness to screen for HIV/AIDS is not significantly high among who practiced sex with in Thailand hence only 54.24% had checked for HIV. 27 respondents who practiced sex during their visit did not wanted to screen them selves. 8.70% interviewees who did not participate in any sexual activity with some one met during to visit had tested for HIV.

Table 15 Awareness of checking for HIV/AIDS among interviewees

Who practiced sex (n = 59)	**Number**	**Percent**
Checked	32	54.24
Not checked	27	45.76
Who did not practice sex (n = 46)	**Number**	**Percent**
Checked	4	8.70
Not checked	42	91.30

4.7 Association between socio-demographic characteristics and practicing sex while visiting to Thailand

Following Table 16 shows the X^2 and P-values for each socio-demographic characteristic. To find the association, X^2 was gained by cross tabulation. Fisher exact test was performed if invalid Chi-square result was obtained.

Age (p-value = 0.005), educational level (p-value = 0.017), occupation (0.001), number of visits (p-value =0.001), travel with whom (p-value =0.001) and duration of stay (p-value =0.04) showed some association with practicing sex during their visit to Thailand. Other socio-demographic characteristics did not show any association.

Table 16 Association between the socio-demographic factors and practicing sex

Socio-demographic factor	**Practicing sex**				X^2	**P-value**
	Yes		**No**			
	n	**%**	**n**	**%**		
Age						
19-28	8	40.0	12	60.0	10.66	0.005
29-46	45	68.18	21	31.82		
47-62	6	31.58	13	68.42		
Educational level						
Master or higher	9	47.37	10	52.63	5.666	0.017
Bachelor	17	44.74	21	55.26		
Vocational training	13	59.09	9	40.91		
High school level	18	81.82	4	18.18		
Less than High school level	2	50.0	2	50.0		

Table 16 Association between the socio-demographic factors and practicing sex (cont.)

Socio-demographic factor	Practicing sex				X^2	P-value
	Yes		No			
	n	%	n	%		
Occupation						
Unemployed	7	36.84	12	63.16	17.592	0.001
Self-employed	23	82.14	5	17.86		
Government officers	14	37.84	23	62.16		
Non-government officers	15	71.43	6	28.57		
Marital status						
Single	8	40.0	12	60.0	2.442	0.118
Married	35	50.72	34	49.28		
Divorced/Separated / Widower	16	100.0	0	0.00		
Number of visits						
1	14	35.00	26	65.00	11.787	0.001
2-4	27	57.47	20	42.53		
≥ 5	18	100.0	0	0.00		
Travel with whom						
Alone	35	68.63	16	31.37	17.659	0.001
With family	1	9.09	10	90.01		
With friends	13	72.22	5	27.78		
With officials	10	40.0	15	60.0		
Purpose of visit						
As tourist	14	45.16	17	54.84	1.868	0.172
For business propose	16	100.0	0	0.00		
For educational/training	28	50.0	28	50.0		
Other	1	50.0	1	50.0		

Table 16 Association between the socio-demographic factors and practicing sex (cont.)

Socio-demographic factor	Practicing sex				X^2	P-value
	Yes		No			
	n	%	n	%		
Duration of stay						
Less than 2 week	35	49.3	36	50.7	4.234	0.04
2 week up to 1 month	11	61.11	7	38.89		
>1 month to < 6 months	3	100.0	0	0.00		
≥ 6 months	10	76.92	3	23.08		

4.8 Association between independent variables and use of condoms

Table 17 demonstrates the associations if any, between socio-demographic characteristics which had association with practicing sex and use of condoms in sexual encounter.

When consider the chi-squire and p-values, those variables do not show any statistical significant association with use of condoms.

Table 17 Association between socio-demographic characteristics and use of condoms

Socio-demographic factor	Using condoms always				X^2	P-value
	Yes(n =42)		No(n =17)			
	n	%	n	%		
Educational Level						
Degree level	21	80.77	5	19.23	2.081	0.149
Below degree level	21	63.64	12	36.36		
Employment						
Unemployed	4	57.14	3	42.86	1.369	0.242
Self-employed	18	78.26	5	21.74		
Government officers	9	64.29	5	35.71		
Non-government officers	11	73.33	4	26.67		
Marital status						
Married & living together	18	42.86	6	35.29	0.287	0.592
Other	24	57.14	11	64.71		
Number of visits						
One visit	9	21.43	5	29.41	0.426	0.839*
More than one visit	33	78.57	12	70.59		
Travel with whom						
Alone	23	54.76	12	70.59	1.256	0.262
Not alone	19	45.24	5	29.41		

Table 17 Association between socio-demographic characteristics and use of condoms (cont.)

Socio-demographic factor	Using condoms always				X^2	P-value
	Yes(n =42)		No(n =17)			
	n	%	n	%		
Purpose of visit						
For Business	22	52.38	6	35.29	1.417	0.234
Not for business	20	47.62	11	64.71		
Duration of staying						
Less than one week	24	57.14	11	64.71	0.287	0.592
One week or more	18	42.86	6	35.29		

* by Fisher exact test

CHAPTER 5
DISCUSSION

This study was a cross sectional study. Its main objective was to study the use of condoms as HIV/AIDS preventive/protective measure among Sri Lankan adult male visitors in Thailand. However the study also focused to determine the relationship between knowledge and perception on HIV/AIDS among the respondents and using of condoms.

This study showed that mean age of Sri Lankan adult male visitors in Thailand was 37.4 years and they were possessing comparatively high educational level (54.29% in degree level and 96.19% above high school level education) and most of them were married (65.71%) and employed (86.67%).The main reason for visit Thailand was to attained an educational or training programs (53.33%), not as tourist that one would be expecting. Majority had visited for first time (38.1%), traveled alone (48.57%) and duration of stay was less than two weeks (67.62%).

Sri Lanka's population is highly educated with a total literacy rate of 92% (male 94.8% and female 90.0%), higher than that expected for a third world country. Sri Lanka has one of the highest literacy rates of South Asia. This can mainly be attributed to the free education system in Sri Lanka (58), this could be the reason why this study shows that majority of travelers had high educational level. Obviously to travel some one should be considerably wealthy, wealth and level of education are quite parallel factors. It could be considered as the educated people use to travel than the others.

The results of this study showed that just above a half (56.19%) of Sri Lankan visitors in Thailand engaged in paid or unpaid sexual activity during their stay with one or several partners. The knowledge among Sri Lankan visitors in Thailand about

HIV/AIDS is considered as moderate hence 60 percent of visitors had shown so. About one –fifth of visitors had good perception and just above a half of visitors had moderate perception about HIV/AIDS and use of condoms as preventive measure but a significant level (23.81%), nearly one-fourth of visitors had poor perception about this issue. They can be considered as in great risk of getting and transmitting HIV.

The ability to choose and use a condom correctly shows satisfactory results as above 85 percent had moderate or good ability. Out of the all visitors who practiced sex, 71.19 percent used condoms always. Only one person had never used condoms while engaging in sex, but he had sex with his girl friend. Every one who had paid sex had used condoms.

Among those who practiced sex, above one-half (54.24%) had done screening for HIV/AISD and 8.7 percent had checked for HIV/AIDS even though they said that did not practice sex during the visit. This could be explained as due to rendering the true situation or could have screened as a part of routing examination. Otherwise this could be some one who respond as not practiced sex but used condoms (16.2%).

5.1 Association between socio-demographic characteristics and practicing sex during the visits

In this study age, educational level, occupation, marital status, number of visits, travel with whom, purpose of visit and duration of stay were used as descriptive characteristics. But only educational level, occupation, number of visits, visit with whom and duration of staying showed some association with involving in sexual activity in Thailand.

Age was showed normal distribution with minimum age 19 years and maximum age 62 years, categorized in to three parts by using mean age (37.4 years) and standard deviation (9.5 years).First group19-28 years [min- (mean-SD)], second group 29-46 years [(mean-SD)-(mean + SD)], third group [(mean + SD)-max]. There

is statistically significant association between the age of travelers and practicing sex during the visit.

Educational level of the visitors who had responded were classified in to five groups in the questionnaire but during analysis of the association they were re-grouped in to two groups (1) degree level education (2) Below degree level education. This showed a significant association in practicing sex during the visit as p-value = 0.017.

Occupation of the respondents of this research was varied in broad spectrum as it was an open ended question. For analytical purpose those were categorized in to four groups self employed (all self employed respondents were businessmen) 26.67 percent, government officers 35.23 percent, non-government officers 20.0 percent and unemployed (18.1%), unemployed group were consisted only with students. Occupation of the travelers showed a significant association with practicing sex during the travel (p-value = 0.001).

Marital state was considered to be significant factor by the researcher but it does not show any significant relationship for participation in sexual activity with a partner who met during the course of stay in Thailand. Chi-squire analysis showed up insignificant association.

Number of visits was expected to be significant as it is proportionate to the chance of sexual exposure. In case of finding the association it was considered as one visit or more. Higher number (38.1%) of respondents had visited for first time but majority (44.76%) for second to fourth time and who had visited five or more times only17.14 percent. Chi-squire analyses showed significant p-value 0.001 which indicated that number of visits has significant relationship with practicing sex.

If one travel with family the chances of involving in active sex are definitely lesser than traveling with alone or friends but peer influence plays a major role in case of gathering, consumption of alcohol, drugs and sexual activity because of peer

motivation. In this study it was shown whom the respondent travel with has a significant association with participating in sexual activity for pleasure. Chi-squire analyses showed p-value = 0.001.

This study shows that there is no significant association between the purpose of travel and practicing sex during the course of tour as both chi-squire and p-value are insignificant. But interesting finding was out of the total respondents (105) every man who came for business purpose (15.24%) had engaged in sex with local partner.

Duration of stay was classified into (1) less than 14 days (2) 15-60 days (3) 61 days to 6 months (4) more than 6 month, majority of respondent (67.62%) were supposed to stay less than 14 days. It showed there was a slight association between duration of stay and participation of sexual activity with a local woman. (p-value = 0.04).

5.2 Pattern of sexual encounter among Sri Lankan adult male visitors who practice sex in Thailand

Only 59 percent of total respondents were practiced sex during their stay in Thailand. Majority of them had experienced paid sex, 44.06 only paid sex and 32.2 percent unpaid sex, 23.74% had practiced both paid and unpaid sex. This can be explained as it was the need of the visitor and as part of sex tourism commercial sex workers are ready to provide the service. The group who had unpaid sex, their main partners were girl friends in Thailand (49.15%).

Nearly half (42.37%) of the respondents who practiced sex had engaged in sex with only one partner either as paid sex (56.0%) or as unpaid sex (44.0%). More than one-third (35.59%) had engaged in sex with three more than three partners. Among them 90.47 percent had bought sex. It shows the number of sexual partners directly proportionate to the number of commercial sex workers that they met with and indirectly proportionate to the number of unpaid sexual partners.

5.3 Knowledge on HIV/AIDS of Sri Lankan adult male visitors in Thailand

Knowledge was analyzed in overall, among all the respondents who participated in this research. More than half (60.0%) of the study group possessed moderate level of knowledge about HIV/AIDS. And only 21.9 percent had poor level of knowledge. In overall this figures showed that study group possessed a better level. The reason could be most of them are young adult including considerable number of health workers. And overall awareness about HIV/AIDS among educated population could be higher than poorly educated population.

For assessment of knowledge the respondents were questioned about etiology, mode of transmission, symptoms and preventive measures. As preventive measures it was asked not only about practicing condoms but also about other safe sex behaviors such as abstain of casual sex and having one faithful partner.

There were some questions which were answered in very poor level, Q6 in knowledge part “An HIV positive mother can transfer HIV to her baby during” and answers were (1) Pregnancy (2) Delivery (3) breast feeding (4) All above, only 29 percent selected the correct answer. Most of respondents did not know HIV can be transferred during all three stagers that mentioned above. This could be explained by the low national awareness about this kind of transmission because still Sri Lanka is low prevalence country. Q9 in knowledge part “what is the correct way to prevent getting infected with HIV/AIDS” the answers were (1) Abstinent of sex (2) Be faithful and restrict to one partner (3) Always use condoms correctly (4) All above, only 39 percent could select the correct answer, answer 4.

5.4 Association between level of knowledge on HIV/AIDS and use of condoms as preventive measure.

There was significant different in knowledge level between total respondents and the respondent who practiced sex during the stay. Who involved in either paid or unpaid sex seems to be having better knowledge than total respondents. As 64.41

percent had moderate level of knowledge and only 18.64 percent possessed poor level which was 21.9 percent in total respondents.

Use of condoms was grouped in to two (1) who always used condoms (2) who did not use condoms always, this includes the respondents who used some times and never used. First group consist of 42 persons (71.19%) and second group consist of 17 persons (28.81%), out of the second group 27.12 percent used condom some times but 1 person had not used condoms at all.

Association between knowledge and use of condoms as protective measure is statistically insignificant.

5.5 Perception of HIV/AIDS and use of condom as protective measure

The health believe model was used in this research as conceptual model as it is mentioned the theoretical model the perception is measured in four aspects. This is applied regarding a process or act which may harm the health of the respondent. In this research having sexual intercourse and getting infected with HIV/AIDS is the harmful action, so the respondent should perceive the susceptibility and the threat of the action. Though the risk is known the subject is still willing to continue the harmful action but through a protective measure, in this case use of condoms. This is the net effect of benefit of the protective action and its barriers to activate the particular measure. In this study myths and misbelieves about condom use.

The overall perception of susceptibility and severity for HIV/AIDS and perception of benefits and barriers to use condoms had 5 answers for each statement, Strongly agree (SA), Agree (A), not sure (NS), disagree (D) and strongly disagree (SD) according to whether the sentence negative or positive the score for each statement differs. For positive statement, strongly agree carries 5 points, agree carries 4 points, not sure 3 points and disagree 2 point and strongly disagree 1 point. For negative statement strongly agree carries 1 point, agree carries 2 points, not sure 3 points, disagree 4 points and strongly disagree carries 5 points. To measure the overall

perception, sum up the total score for each respondent. As this total score did not show normal distribution, they were categorized into perception level by using percentiles (Median = 78, Min = 58, Max = 95) who gets score 58-72 [Min to (Q1 – 1)] considered as having poor/negative perception level, who gets score 73-83 (Q1 to Q3) considered as having moderate/neutral level of perception and who gets score 84-95 [(Q3 + 1) to Max] considered as having high/positive level of perception. Just above one-halves of total respondents (55.24%) had moderate level of overall perception.

Perception scales are relating crude measuring instruments and we can not expect too much from that. Their main function is to divide people roughly in to a number of broad groups. Such scales can not be themselves been expected to provide us with sublet insight in an individual case. They are technical in placing people in a continued relation to one another and absolutely impossible to say which method is best. Each has important described features but each of them also opened to criticism. If we wish to say perception patterning or explore theories of perception than probably the Likert's procedure will be the most relevant.

5.6 Association between perception of HIV/AIDS and use of condoms

Regarding perceived susceptibility of HIV infection the study found that nearly 60 percent had good level of perception among who practiced sex. But 30 percent of this group possessed a poor level of perception regarding the susceptibility. The severity of HIV infection was moderately perceived by the majority which was 52.54 percent, in this issue also nearly 30 percent had poor level of perception. Perceived benefits of using condoms as protective measure also showed the same pattern with 50.85 percent of moderate level and slightly low percent for poor perception level (25.42%). This lower percent of poor perception level reflect that they were willing to use condoms as protective measure against HIV infection. But this action will be modified according to how they perceive the barriers of using condoms; this study found the gross effect was negative motivation. Because perceived levels were inversed, good level of perception reduced to nearly 17 percent,

moderate level of perception reduced to nearly 42 percent and poor level of perception increased to nearly 41 percent.

The overall perception score showed normal distribution with mean = 79, maximum = 95, minimum = 58 and SD = 8. This score grouped in to three (1) good level of perception (87-95), (2) moderate level of perception (72-86), (3) poor level of perception (58-71) by using mean and SD. Good = [Max – (Mean + SD)], moderate = [(Mean + SD) – (Mean – SD)] and poor = [(Mean – SD) – Min). The association of overall perception with use of condoms was not significant at level of significant 0.05.

CHAPTER 6
CONCLUSION AND RECOMMENDATION

6.1 Conclusion

This study was carried out to determine the pattern of sexual encounter, knowledge and perception on HIV/AIDS and use of condoms as protective measure by Sri Lankan adult male visitors in Thailand and to describe the associations between those factors. Health believe model was use as theoretical model. Research design was cross-sectional study. Sample size was hundred and five. Research instrument used was interviewed questionnaire. Data were collected during two weeks period by the researcher and trained assistants and data were analyzed by using statistical method of Pearson's correlation, chi-squire test and descriptive statistics.

Regarding socio-demographic characteristics, the data gathered showed the age range of respondents was between 19 to 62 years. The mean age was 37.41 years and stranded deviation was 9.5 years. The vast majority of visitors are in working age group (26 to 46 years), nearly 63 percent.

The educational level of Sri Lankan visitors in Thailand is quiet high, nearly 54 percent were educated up to degree level which included bachelor or higher. Almost 96 percent have higher educational level (high school level or more)

Majority of visitors are employed in non-health care sector either in governmental or private services. Almost 20 percent of visitors among males are businessmen. Majority of visitors are married. Number of visits is inversely proportionate to number of visitors. Nearly 50 percent of visitor travel alone and main reason of visiting Thailand is not the pleasure as expected but educational or professional programs (53.33% visited for educational/training programs and only

29.52% visited as tourists). There is significant number of visitors who come for business purposes.

Majority of visitors live in Thailand less than two weeks which includes tourists, businessmen and participants for short term training programs. Only 12.38 stay more than 6 months and 100 percent of them were on long term studying.

Just more than half (56.19%) of Sri Lanka visitors engaged in paid or unpaid sex during the stay in Thailand and majority used to have sex with one or more commercial sex workers (67.8%).

With respect to use of condoms during sexual encounter, 43.81 percent use condoms always, 17.14 percent use condoms some times out of them 50 percent practice paid sex (22.22% only paid sex with commercial sex workers and 77.78% both paid and unpaid sex) and 50 percent only unpaid sex. A very significant number of visitors never use condoms in their sexual intercourse, the figure is 11.43 percent. Out of then 33.33 percent experienced paid sex (50.0% only paid sex with commercial sex workers and 50.0% both paid and unpaid sex) and 66.67 enjoy only unpaid sex. This is the most vulnerable group to be infected with HIV/AIDS.

Regarding the overall knowledge about HIV/AIDS, 18.1 percent visitors were having good level of knowledge. 60 percent of visitors had moderate level of knowledge and nearly 22 percent had poor level of knowledge. There was no significant relationship of using condoms as protective measure with level of knowledge about HIV/AIDS.

With respect perception of HIV infection, the overall perception among visitor either they involved in sexual activity or not, good among 17.14 percent of visitors, moderate among 63.81 percent visitor and 19.05 percent possessed poor level of perception and there is no significant association between perception of HIV/AIDS and use of condoms as preventive measure.

6.2 Recommendation

6.2.1 Recommendation for implementation

Based on the findings of this research the following recommendations are suggested:

1. Even though STDs including HIV/AIDS are not given the priority among Sri Lankan travelers, it should be stressed on launching primary preventive measures effectively. This should be multi-disciplinary approach by travelling authorities, health ministry.

2. Information, education and counseling about HIV/AIDS should be freely available for travelers beyond the social and cultural norms. This information can be provided at emigration bureau, embassies and travel agencies. Similarly condom promotion also can be carried out in same settings.

3. The behavioral modifications will be more effective regarding long term preventive plan. The knowledge, attitudes and perception on HIV/AIDS should be improved to a level where their behavior could be changed and could realize the severity of the disease. And it is not only for the particular individual but also to his family and whole community. This could be carried out at national level rather targeting only travelers. Every adult especially young generation can be targeted who could be the traveler and the victim.

4. Travelers who visit to high HIV prevalence countries should be more targeted. The necessity of travel medicine unit for proper training teaching and intervention would like to be emphasized in here which can help for surveillance of high risk travelers.

5. Even though the strategic approach for HIV/AIDS control in Sri Lanka follow the A,B,C method that wont be helpful to control who is at risk

to expose HIV out side the country. Different approach is needed to control emigrants. The policy makers should be considering this point before it gets too late. Regular blood check on embarkation could be advisable for surveillance.

6. The results of this study could be used as a guideline to improve sex education, counseling develop strategies to increase condom use and surveillance by travelers medical unit or teams establishment. Moreover it should be emphasized the perceived susceptibility and severity of HIV/AIDS.

6.2.2 Recommendation for future researches

1 It seems that this issue is not very interesting topic among researches. There are no much researches carried out among people other than commercial sex workers in Sri Lanka. It is important to research about the advocacy, policy, awareness about HIV/AIDS and risk groups who brings HIV/AIDS to Sri Lanka.

2 In this research most difficult part was data collection as there is no centre of flowing of Sri Lankans. Even embassy has no records about the visitors. The researcher would like to suggest for future research to collect data with more diversity of visitors.

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APPENDIX

APPENDIX A

Questionnaire

For

Use of condoms as HIV/AIDS preventive behavior among Sri Lankan adult male visitors in Thailand.

Instructions: Code Number: _ _ _ _ _

- **When a blank is provided, please write down a most appropriate answer.**
- **Please read the questions carefully and DO NOT skip any questions (*unless it's mentioned specifically*).**
- **Please tick ( ) ONLY ONE RESPONSE (*unless it's mentioned specifically*) that you think which is the most correct answer.**

Part 1: Socio-demographic characteristics;

1. **Age: _ _ _ _ years**

2. **Educational Level**
   - (1) Master or higher
   - (2) Bachelor
   - (3) Vocational training
   - (4) High school level
   - (5) Less than high school level

3. **Occupation _ _ _ _ _ _ _ _**

4. **Marital status**
   - (1) Single
   - (2) Married
   - (3) Divorced/Separate
   - (4) Widower

5. **Number of visits to Thailand (including present visit)**
   - (1) 1
   - (2) 2
   - (3) 3
   - (4) 4
   - (5) ≥

6. Travel with whom

- (1) Alone
- (2) With family
- (3) With friends
- (4) With officials
- (5) Other (Please specify)…….

7. For what purpose you travel to Thailand?

- (1) As tourist
- (2) For business purpose
- (3) For educational/training program
- (4) Other (Please specify)...……

8. How long you have been in Thailand on this visit?

- (1) Up to two weeks(up to 14 days)
- (2) More than two weeks up to two months (15 days to 60 days)
- (3) More than two months up to six months
- (4) More than 6 months

9. Have you had sex with any one who is not your spouse and met during your stay in Thailand? *(During any visit)*

- (1) Yes [Please continue]
- (2) No [Please go to Part2]

10. Your sexual partner(s) was(were), (*May answer more than one response*)

- (1) Commercial sex worker(s)
- (2) Temporary partner/escort service
- (3) Girl friend in Thailand
- (4) Other (please specify)

  …….

11. How many sexual partners you had/have during your stay in Thailand?

- (1) Only one
- (2) Two
- (3) Three or more

Part 2: Knowledge about HIV/AIDS

1. One are at risk of getting HIV by,

- (1) Sharing toilet with HIV infected persons
- (2) Sharing swimming pool with HIV infected persons
- (3) Having sex with an HIV infected person
- (4) Hugging an HIV infected person

2. **Which of the following is a way of transmission of HIV?**
   - (1) Swimming in a common pool while having a wound
   - (2) Mosquito bite
   - (3) Mother to baby during breast feeding
   - (4) Non of above

3. **Which type of sex causes the transmission of HIV?**
   - (1) Vaginal sex
   - (2) Anal sex
   - (3) Oral sex
   - (4) All above types

4. **Can HIV infected person be identified by the following symptoms?**
   - (1) They generally looks weak
   - (2) They have genital discharge
   - (3) Have fever
   - (4) Can not identify

5. **How long does it take for AIDS symptoms to develop after a person got infected? (*select the most appropriate answer*)**
   - (1) Few days to 3 weeks
   - (2) 4 weeks to 2 months
   - (3) 3 months up to 10 years
   - (4) None of those are correct

6. **An HIV positive mother can transfer HIV to her baby during**
   - (1) Pregnancy
   - (2) Delivery
   - (3) Breast feeding
   - (4) All above are correct

7. **At present HIV/AIDS disease can be treated and cured,**
   - (1) By vaccine
   - (2) By antibiotic
   - (3) By Anti Retro Viral treatment
   - (4) No cure for HIV/AIDS

8. **Which statement is true regarding HIV/AIDS?**
   - (1) It's a bacterial infection reducing the immunity
   - (2) It's a viral infection reducing the immunity
   - (3) It's a parasitic infection reducing immunity
   - (4) None of above is correct

9. **What is the correct way to prevent getting infected with HIV/AIDS**
   - (1) Abstinent of sex
   - (2) Be faithful and restrict to one partner

- (3) Always use condoms correctly
- (4) All above

10. If you are suspicious after having unprotected sexual intercourse, you must, (*select the most appropriate answer*)

- (1) Clean genitalia so you are not at risk of getting HIV at all
- (2) Check immediately for HIV
- (3) Not worry as you are immune to HIV
- (4) Abstinent of sex and check for HIV definitely after 2-3 Months

Part 3: Perception of HIV/AIDS

Please put a tick mark (√) with each of the following sentences at a particular number: (if you, strongly agree = 5, Agree = 4, Not sure = 3, Disagree = 2, strongly disagree = 1)

No	Statement	5	4	3	2	1
1	Health care workers are at more risk of getting HIV/AIDS					
2	Repeated blood transfusions may cause to get HIV/AIDS					
3	You can reduce the risk of HIV infection by having sex with only one faithful partner					
4	People travel away from there families have more chance to expose HIV/AIDS					
5	Intra-venous drug uses can be infected by HIV/AIDS					
6	HIV/AIDS is a curable disease					
7	Being an HIV/AIDS patient, carries a bad reputation					
8	If you are infected with HIV/AIDS all your family, relatives and friends may leave you					
9	You would be considered as had many sexual partners					
10	People with HIV/AIDS are isolated from their communities.					
11	Condoms should be used during any sexual intercourse to minimize the HIV infection.					
12	If one practices casual sex, condom helps not to shorten his life span.					
13	Expense a little money for condom will save high treatment cost					
14	Using any type of condom is better than nothing					

	to prevent transmission of HIV.					
15	**Use of condoms in casual sex will helps you to protect your family**					
16	**Using condoms with your sexual partner(s) show some un-trust**					
17	**Use of condoms with sexual partner is not practicable.**					
18	**Use of condoms makes sex less enjoyable.**					
19	**It is not easy to wear condoms correctly**					
20	**Condoms tear frequently so no protection even used**					

Part 4: HIV Preventive behavior:

1. **When buy a condom you must consider about,**
   - (1) The material it made of
   - (2) Expiry date
   - (3) Condom size
   - (4) All above
   - (5) None of above

2. **Which of following is correct use of condoms?**
   - (1) Do not leave an air space at tip of the condom
   - (2) Put the condom before erection occur.
   - (3) Unroll the condom before put on to the penis
   - (4) No need to be careful on removal after having sex
   - (5) Condoms can be reused

3. **How frequently you use the condoms, when you have sex in Thailand?**
   - (1) Always use condoms
   - (2) Use only some times
   - (3) Never use a condom even I practice sex
   - (4) Never use as I did not practice sex in Thailand
   - (5) Other (Please specify)……

4. **You use condoms when you have sex with, *(may answer more than one response)* during your stay in Thailand.**
   - (1) Never had sex during my stay in Thailand
   - (2) Commercial sex worker(s)
   - (3) Temporary partner/escort service
   - (4) Girl friend in Thailand
   - (5) Other (Please specify)…….

5. Have you ever checked yourself for HIV infection?

- (1) Yes
- (2) No

Thank you!

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