Factors Associated With Condom Use Among Brothel-Based Female Sex Workers in Thailand

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**Country Profile**

- **Pop:** 65.4 million (July 2005 est.)
- **Age structure:**
  - 0-14 years: 23.9%
  - 15-64 years: 68.6%
  - 65 years and over: 7.5% (2005 est.)
- **Life expectancy:**
  - total population: 71.95 years
  - male: 69.65 years
  - female: 74.37 years (2005 est.)
- **IMR:** 20.48 deaths/1,000 live births
- **Birth rate:** 15.7 births/1,000 pop (2005)
- **Death rate:** 7.02 deaths/1,000 pop (2005)
- **HIV/AIDS prevalence rate:** 1.5% (2003)
Introduction

- First case of AIDS reported in Thailand in 1984\textsuperscript{1}
- Widespread transmission began in the late 1980s\textsuperscript{1}
- First HIV epidemic among Thai intravenous drug-users
  - Rose from 1% to 40% within a year
- Second HIV epidemic among Thai Female Sex Workers (FSW)
  - 1989, 44% of FSW in Chiang Mai were infected with HIV\textsuperscript{2}
- Throughout the 1990's subsequent waves of the HIV epidemic spread among the male clients of FSW, their partners, and children\textsuperscript{3}
- There are very few developing countries in the world that dealt with the HIV/AIDS epidemic more successfully than Thailand
- A massive public health initiative resulted in:
  - Reduction in male clients frequenting FSWs
  - Increased in FSW condom usage
  - Decreased STDs
  - Reduction in new HIV infections from 143,000 in 1991 to 29,000 in 2001\textsuperscript{4}

\textsuperscript{1}Limsuwan et al., 1986; Phanuphak et al., 1985, \textsuperscript{2}Weniger et al., 1991, \textsuperscript{3}Hsieh et al., 2000; Viravaidya et al., 1993, and \textsuperscript{4}World Bank, 2000.
 Nonetheless, 1-in-60 Thais in this country of 65.4 million is infected with HIV\textsuperscript{1} and AIDS has become the leading cause of death\textsuperscript{2}

One of the key contributing factors to the increased susceptibility of the FSW to HIV infection is the low socioeconomic status

Low wages for farmers
- \textit{Send children to search for employment in the cities}
- \textit{Easier for women to find a ‘job’ by becoming prostitutes}
- \textit{Earn 25\% more than factory workers}\textsuperscript{3}

Money is send back home to support their family, to construct Buddhist monasteries, and to send male siblings to be ordained as monks\textsuperscript{4}

Prostitution is culturally acceptable & FSW who gain wealth are more attractive martial prospect\textsuperscript{5}

\textsuperscript{1}UNAIDS, 2002, \textsuperscript{2}WHO, 2001. \textsuperscript{3}Chey-Nameth, 1998, \textsuperscript{4}Mueck, 1992; Wawaer et al., 1996, \textsuperscript{5}Hsieh et al., 2000; Virayaidya et al., 1993.
Introduction

- Limited bargaining power of the FSW.

- Depend on male clients attitude toward condom use:
  - Unnecessary
  - Undesirable
  - Willingness to increase financial compensation without the use of condom\(^1\)

- Cultural factors\(^2\):
  - Religious beliefs deeply steeped in fatalism
  - ‘Siang duang,’ which literally translates to ‘taking your fate’

\(^1\)Chey-Nemeth, 1998 and \(^2\)DaGrossa, 1989.
Sex Industry in Thailand

Sociocultural Factors:
- Fatalistic worldview
- Acceptance of polygamy and commercial sex
- High migration
- Economic responsibility
- Male/female double standard

Sex Establishments:
- Direct = brothels
- Indirect = bars, restaurants, massage parlors,
- Foreign born sex workers & FSW under 18
- High risk for exploitation
- Trafficking of women

Thai Males:
- Estimated 80% of Thai males have used a FSW

Thai FSW
- Estimated 500,000 to 2 million FSW
- Estimated fee for sex by a FSW was 10 U.S. dollars (2005).
Purpose

- This study sought to determine the actual levels of condom use by FSW in Thailand brothels.

- Specifically, it examined the influence that the country of origin of the FSW patrons exerted on usage of a condom.

- Furthermore, it assessed the relevancy of constructs from the Health Belief Model in predicting FSW requesting condom usage by their clients.
Methodology

Sample Population

- Cross-sectional nonrandomized sample of convenience
- 150 brothel based female sex workers
- Volunteer participation, survey was completely anonymous and verbal consent was obtained
- Inclusions to the study had no specific requirements & did not restrict any brothel based FSW willing to participate
- Four geographical areas of Thailand (Bangkok, Chiang Mai, Mae Hong Son, & Other)
- Geographic locations were recommended because of their ability to represent the country
Methodology

Areas of Interest

(1) FSW demographics
(2) Customer data
(3) Condom utilization
(4) Infection history
(5) General concerns and worries about sexually transmitted diseases
Theoretical Framework

Health Belief Model

INDIVIDUAL PERCEPTIONS

Perceived susceptibility/seriousness of disease

MODIFYING FACTORS

Age, sex, ethnicity
Personality
Socio-economics
Knowledge

Perceived threat of disease

LIKELIHOOD OF ACTION

Perceived benefits versus barriers to behavioural change

Cues to action
- education
- symptoms
- media information

Likelihood of behavioural change
Results

Study Sample

- 150 FSW interviewed with a refusal rate of 30%
- Mean age was 24.60 yrs (range = 20-32 yrs)
- FSW from Mae Hong Son had higher mean age (28.2 yrs)
- Average number of years worked 3.83 (range = 1-10 yrs)
- FSW from Mae Hong Son worked longer in the sex industry (6.1 yrs)
- FSW averaged 5.41 customers per day but only 3.52 condoms used per day
- Mae Hong Son (4.2) and Other (4.1) had lower number of customers per day
- 70% of FSW purchased their own condoms, 30% provided by place of business (Bangkok and Chiang Mai)
- No indication of customers providing condoms
# Table 1.
Condom use and demographic factors among Brothel Based Female Sex Workers in Thailand

<table>
<thead>
<tr>
<th>Location</th>
<th>Age (^a)</th>
<th>Years Worked (^b)</th>
<th>Customers per day (^c)</th>
<th>Condom utilization per day (^d)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangkok</td>
<td>24.0</td>
<td>3.3</td>
<td>6.0</td>
<td>3.9</td>
</tr>
<tr>
<td>Chiang Mai</td>
<td>23.6</td>
<td>3.4</td>
<td>5.6</td>
<td>3.6</td>
</tr>
<tr>
<td>Mai Hong Son</td>
<td>28.2(^1)</td>
<td>6.1(^2)</td>
<td>4.2(^3)</td>
<td>2.5(^4)</td>
</tr>
<tr>
<td>Other</td>
<td>23.7</td>
<td>3.3</td>
<td>4.1(^3)</td>
<td>3.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>24.9</strong></td>
<td><strong>4.0</strong></td>
<td><strong>5.0</strong></td>
<td><strong>3.4</strong></td>
</tr>
</tbody>
</table>

\(^a\)F=14.02, p<.001, \(^b\)F=14.33, p<.000, \(^c\)F=13.05, p<.0000, \(^d\)F=5.64, p=.000

\(^1\)Turkey Test Significant, \(^2\)Turkey Test Significant, \(^3\)Turkey Test Significant, \(^4\)Turkey Test Significant
Results

Condom Use

- Condom utilization was significantly higher among the western customers (76%); foreign Asians (52%); native Thai (27%)

- Overall condom use was 51% and the mean did not change depending on the location

- Of the FSW surveyed, 13% asked for monetary compensation for vaginal sex without a condom

- A positive correlation between the mean number of condoms used per day and the mean number of customers per day

- Condom use showed the highest negative correlation in regards to age of the sex workers

- 57% of the FSW from big cities in Thailand consented to anal sex without the use of condom, as opposed to 100% from the smaller villages
Figure 1
Condom use among brothel-based FSW by ethnicity of patron

<table>
<thead>
<tr>
<th>Ethnicity of patron</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Westerners</td>
<td>76%</td>
</tr>
<tr>
<td>Foreign Asians</td>
<td>52%</td>
</tr>
<tr>
<td>Native Thai</td>
<td>27%</td>
</tr>
<tr>
<td>Total</td>
<td>51%</td>
</tr>
</tbody>
</table>
Results

Attitudes and Beliefs of FSW

- Feared getting an infection from their customers; believed condom can prevent transmission of these infection
- Co-workers did not always request condom use of their customers
- Did not view condoms as expensive
- Indicated HIV/AIDS as occupational worry
- Perceived that customers preferred not to use condoms disregarding location
- Correlation analysis indicated that worry about HIV/AIDS was negatively correlated with use of condoms by native Thai customers
Results

Attitudes and Beliefs of FSW

- Positively correlated with western and foreign Asian customers.

- Willingness of customers to use a condom was negatively correlated with use of condoms by foreign Asians ($r = -0.4590$) and native Thai customers ($r = -0.280$) and positively correlated with western customers ($r = +0.1910$).

- Strongest positive correlation between FSW worry about HIV/AIDS and the willingness of western customers to use a condom.

- Also positively correlated with FSW condom use per day.
**Table 2.**
Attitudes and Beliefs of FSW Partly Derived from the Health Belief Model

<table>
<thead>
<tr>
<th>Attitudes and Beliefs of FSW</th>
<th>Health Belief Model Construct</th>
<th>Means*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Fear of STD transmission from customer</td>
<td>Perceived Susceptibility</td>
<td>6.6</td>
</tr>
<tr>
<td>2. Condoms can prevent infection</td>
<td>Perceived Benefit</td>
<td>6.9</td>
</tr>
<tr>
<td>3. Co-workers always request condoms</td>
<td>Social Cues to Action</td>
<td>3.3</td>
</tr>
<tr>
<td>4. Condoms are expensive</td>
<td>Perceived Barrier</td>
<td>2.9</td>
</tr>
<tr>
<td>5. HIV/AIDS is an occupational worry</td>
<td>Perceived Risk</td>
<td>5.1</td>
</tr>
<tr>
<td>6. Customers prefer not to use condoms</td>
<td>Perceived Barrier</td>
<td>5.1</td>
</tr>
</tbody>
</table>

*Note: 7=Strongly Agree to 1=Strongly Disagree*
### Table 3.
Correlational Analysis of FSW HIV/AIDS Worry, Willingness of Customer to Use a Condom, & Condom Use Per Day Among the Different Ethnic Origin Patrons of FSW

<table>
<thead>
<tr>
<th>Ethnic Origin of the Patrons of FSW</th>
<th>FSW HIV/AIDS Worry</th>
<th>Willingness of Customer to Use a Condom</th>
<th>Condom Use Per Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Westerners</td>
<td>.275(**)</td>
<td>.191(*)</td>
<td>.496(**)</td>
</tr>
<tr>
<td>Foreign Asians</td>
<td>-.461(**)</td>
<td>-.459(**)</td>
<td>.044</td>
</tr>
<tr>
<td>Native Thai</td>
<td>-.300(**)</td>
<td>-.280(**)</td>
<td>-.125</td>
</tr>
</tbody>
</table>

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).
Discussion

- Average condom utilization among FSW was 51%. Far from the Thai Ministry of Public Health’s goal of 100%
- Western patrons had the knowledge and willingness to utilize condoms
- FSW had greater worry about the risk of contracting HIV/AIDS from western patrons than from foreign Asian or native Thai patrons
- FSW made more frequent demands of condom use with western patrons
- The age of FSW was inversely related to condom use
  - Males tend to favor younger women for sexual relations even outside the sex trade context
  - Number of patrons per day was inversely correlated with the age of the FSW; older FSW may have diminished ‘bargaining’ capacity with potential patrons, and hence are less able to insist on condom use.

1Buss, 1994; Buss & Barnes, 1986
Discussion

- Condom utilization gap was evident in the study:
  - Average of 3.52 condoms were used per day
  - 5.41 patrons per day
- This suggests that FSWs on average did not use condoms with approximately two patrons a day.
- Respondents in Mae Hong Son and the smaller rural areas had significantly lower numbers of condom utilization and also had the fewest patrons per day.
- Reduced demand of FSW may contribute to their decreased utilization of condoms.
- Perceived susceptibility to a sex-based infection was the only determinate of requesting condom use among all the six Health Belief Model constructs.
- ‘Fear-based’ messages for motivating condom request usage may work.
- FSW attitudes’ showed evidence of high agreement with the fact that patrons prefer not to use condoms.
Conclusions

1. Overall condom compliance was 51%
2. Native Thai patrons exhibited the lowest level of condom use (27%)
3. Mean number of years worked as an FSW was 3.83 years
4. Respondent age ranged from 20-32 years old
5. FSW averaged 5.41 customers/3.52 condoms were used per day
6. FSW did not perceive condoms as being expensive
7. FSW perceived a barrier relating to customer resistance to use condoms
8. Lower percentage of condom use (51%) than reported by the Thai Ministry of Health (84%)
Recommendations

- Governmental and non-governmental educational and behavioral intervention programs
- Prevention efforts targeting native Thai patrons
- Enhance FSW perceived susceptibility from Thai patrons
- Enhancing the negotiation power of FSW