

Condom Use among Male Migrant Workers in Dry Zone, Myanmar

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Objective: To study the factors associated with condom use among male Myanmar migrant workers in Pakokku, Myanmar.

Material and Method: This cross-sectional study used two stages cluster sampling with probability proportional to size (PPS) method to collect samples. During 1-14 February 2010, 324 male Myanmar migrant workers between 18 and 60 years of age were asked to complete face-to-face structured interview on knowledge, perception, cues to action, peer influence and sexual behaviors. Data were analyzed by descriptive statistics, Chi-square test and Fishers exact test.

Results: Results revealed that 71.0 percent of respondents were under young and middle adult age and 66.7 percent were married. It showed that 11.1 percent of the respondents used condom regularly with spouse or girl friends or sex workers during the past year. There were associations between age ($p = 0.006$), marital status ($p < 0.001$), educational level ($p = 0.014$), monthly income ($p = 0.015$), level of knowledge on HIV/AIDS ($p = 0.017$), perceived susceptibility of getting HIV/AIDS ($p = 0.024$) and condom use. No associations were noted between occupation, duration of career, duration of each trip, perceived severity, perceived benefit, perceived barrier, cues to action, peer influence and condom use.

Conclusion: With low proportion of regular condom use among study group, behavior change, communication interventions and strengthening of the 100.0% Targeted Condom Promotion Project are recommended to promote perception and knowledge about HIV/AIDS and condom use among male migrant workers.

Keywords: Migrant workers, Condom use, HIV/AIDS

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At the end of 2011, globally, there were an estimated 34 million people living with HIV, up 17.0% from 2001. The number of people dying of AIDS-related causes fell to 1.8 million in 2010, down from a peak of 2.2 million in the mid-2000s. In South and Southeast Asia, the estimated 270 000 new HIV infections in 2010 were 40.0% less than at the epidemic's peak in 1996⁽¹⁾. National HIV infection levels are highest in Southeast Asia, where there are disparate epidemic trends. The epidemics in Cambodia, Myanmar and Thailand all show declines in HIV prevalence⁽²⁾. The majority (68.0%) of reported cases of both AIDS and HIV, in Myanmar, are attributed to heterosexual transmission. Male to female ratio has changed from almost 8 to 1 in 1994 to 2.2 to 1 in 2006, showing steady increase in the proportion of women being infected over the last years⁽³⁾. People who move from the place of residences, such as truck drivers, commercial sex workers, seafarers

and migrant workers are away from their social, cultural and economic support networks and thus vulnerable on all fronts. Many people move because they seek economic opportunities outside their home environment. Migration is an inevitable issue in Myanmar and both internal and international migrations are common. Destinations of international migration are mostly in the Southeast Asia region, with some in Asia, Middle East, and North America. Proposed study site, Pakokku Township is located in central part of Myanmar where many people pass across by road, rail way and water way. That area has been not only the source but also transit place for the process of migration for a long time. The region is also called Dry Zone because of drought conditions for several years. Toddy palm business, agriculture, blanket productions are well known businesses of the region. Among them, crops cultivation such as pigeon pea, cow bean, mung bean, sesame seed and ground nut is the major income earning businesses and other income earning opportunities in that region are limited. The township is also included in the hot spot areas for HIV/AIDS in Myanmar. Accordingly, the Ministry of Health,

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Myanmar considered migrant worker as one of the vulnerable populations in National Strategic Plan on HIV/AIDS (2006-2010)⁽⁴⁾. Although National AIDS Control Program (NAP) of Myanmar has conducted the Behavioral Surveillance Survey BSS since 2000, it mainly focused on monitoring the trend about HIV/AIDS knowledge, attitudes and behavior amongs general population, which can be tracked over time. According to the Behavioral Surveillance Survey, 2007 to general population by National AIDS Program, about 11.3% of men had sex with non-regular partners. Among those who had sex with non-regular partners, 42.3% had used condom⁽⁵⁾. In Myanmar, particularly for internal migrant workers, a few studies were done to describe the association between general characteristics, level of knowledge, perception and sexual risk behaviors. The Health Belief Model is one of most widely used to describe one's behavior by describing perception of oneself in susceptibility, severity of disease, benefits and barriers of his/her behavior. Therefore, the conceptual framework of this study is based on the HBM to determine the association between general characteristics, level of knowledge on HIV/AIDS, perception on HIV/AIDS cues to action, peer influence and condom use among male Myanmar migrant workers in the Dry Zone, Myanmar.

Material and Method

The total 324 male migrant workers who live in UNDP (United Nations Development Program) Project villages, Pakokku Township, Magway Division, Myanmar between 18-60 years of age were recruited through two stages cluster sampling with probability proportional to size method. Twenty-five villages out of 60 were selected in the first stage cluster sampling. For the second stage, 13-16 respondents from each village were selected by using systematic sampling method. Data collection was done during 1-14 February 2010 by using structured questionnaire. The questionnaire composed of 6 parts as follows.

General characteristics including age, marital status, duration of marriage, number of children education, occupation, income, duration of career and duration of each trip.

Knowledge of HIV/AIDS. It consisted of 13 items about the modes of HIV transmission, methods of prevention and usage of condom. Scoring was 1 for the correct and 0 for the wrong answers. The scores were ranged from 0 to 13, with 80.0% and higher, classified as high and those with less than 80.0% was low level of knowledge.

Perception on HIV/AIDS and condom use. Each portion namely perceived susceptibility, perceived severity, perceived benefit and perceived barrier included 4 items of questions with 3 possible answers. Answering "agree" earned 3, "uncertain" earned 2 and "disagree" earned 1 for positive perception and reverse for the negative perception. The total scores range from 4 to 12 for each portion. More than or equal to 80.0% of the score was considered high and those less than 80.0% was low perception.

Cue to action. Two items of this part asked about the most common media and the most influential person for HIV/AIDS information.

Peer influence. Five items with 3 possible responses including "never" (earned 1 point), "sometime" (earned 2) and "often" (earned 3) for positive statement and reverse. Total score ranges were from 5-15 and the respondents were divided into high peer influence if it was more than or equal to 80.0% and those with less than 80.0% were considered low level. Condom use was measured by asking the respondent's use of condom in having sex with partners during the past year. Using of condom was divided into regular and none/non-regular use.

Data collection was done by five well-trained volunteers who interviewed the respondents by using questionnaire written in Myanmar language. It took approximately 20-30 minutes to complete the interview. The association between general characteristics, level of knowledge, perception, cues to action, peer influence and condom use were determined by using Chi-square or Fisher's exact test. P-value <0.05 was considered as statistically significant.

Ethical consideration

The research was approved by the Ethics Committee for Human Research, Faculty of Public Health Mahidol University, Bangkok, Thailand with the approval number MUPH 2010-020. All the respondent's answers were kept confidential. Only a code was used to identify the data collection form. There was other information that will make it possible to identify the respondents.

Results

The respondents were mostly (71.0%) young and middle adult (25-54 years) with average age of 33 years old. Regarding marital status, 66.7 percent of them were married. About 44.0 percent of the married persons turned their marriage live between 5 to 14 years and about 68.0 percent of them had 1 to 3 children. With

respect to education, only 23.8 percent of respondents studied up to middle school level of Myanmar education system. According to the job, 39.2 percent of the respondents were farmer, 30.6 percent were casual labor, 17.0 percent were traders and 6.5 percent had their own business. Almost half of the respondents earned 30,000-60,000 Kyats a month with median monthly income was 40,000 Kyats. About 43.0 percent of the respondents worked as migrant workers for more than 6 years with median duration of career was 4 years. About 15 percent completed more than 16 trips in the past with median number of trips being 4 times. Almost 30 percent of the respondents spent one month or less in each migration trip. Mean duration of each trip was about 4 months.

Knowledge

Regarding knowledge of HIV and condom use among 324 migrant workers, more than three-fourths of the respondents (76.9%) had high level of knowledge and about one-fourth (23.1%) had low to moderate level. Nearly all respondents (98.5%) acknowledged HIV can be transmitted by having unprotected sex and again nearly all respondents (98.1%) accepted that HIV can be transmitted by using contaminated needles. About 97.0 percent of the respondents mentioned that voluntary confidential counseling and testing of HIV (VCCT) was the effective way for HIV prevention. However, about 73.0 percent of the respondents stated that HIV could not be transmitted by sharing meals with infected persons. In addition, merely half (49.0%) of the respondents accepted that a healthy looking person can have HIV.

Perception

According to the perception on HIV/AIDS and condom, about two-thirds of the respondents had low to moderate level of perceived susceptibility. About three-fourths of the respondents (74.7%) possessed low to moderate level of perceived barriers. However, nearly all respondents (94.8%) had high level of perceived benefits and 62.0 percent of the respondents had high perceived severity.

The majority (64.5%) strongly agreed that having multiple sexual partners was a high risk for HIV infection. About three-fourths (74.4%) accepted anyone can get HIV and again about three-fourths (73.1%) strongly agreed that failure to use condom in having sex with female sex worker once can get HIV. Although nearly half of the respondents (49.7 percent) disagreed on not using condom if a partner seems to be clean and healthy, a little less than half (42.9%) agreed on it.

Regarding perceived severity, about 86.0 percent acknowledged that HIV is an incurable and fatal disease. However, 67.0 percent perceived that HIV makes them feel embarrassed and failed to show up in social gathering. More than 95.0 percent of respondents were highly anxious about transmission of HIV to their spouses and also concerned about HIV prevalence of their township.

Almost all respondents revealed that faithfulness (99.4%), correct and regular use of condom (98.5%), are correct methods of HIV prevention and again almost all (98.1%) agreed that correct condom use can avoid pregnancy as an additional benefits of condom use. About 95.0 percent of the respondents strongly agreed that refraining from multiple partners can also prevent HIV.

Although a little more than two-thirds (67.9%) of respondents strongly disagreed that buying or asking condom was embarrassing, a little less than two-thirds (63.9%) strongly agreed that condom can reduce sexual pleasure. Again, a little less than two-thirds of the respondents (63.0%) strongly agreed that condom could create distrust in couples. About four out of five respondents (78.4%) agreed that condoms could often break.

Cue to action

With regard to media and influential persons for HIV/AIDS information, a little more than half (56.0%) of the respondents received most of the HIV/AIDS information from IEC materials such as Pamphlet and Booklet. In addition, the majority (64.5%) of the respondents acquired HIV/AIDS knowledge from health care workers.

Peer influence

Among 324 respondents, about 85.0 percent had lower level of peer influence and only one percent had higher peer influence level while about 14.0 percent having moderate level. Nearly two-thirds (65.0%) of the respondents spent their leisure time with their friends; discussed HIV/AIDS and condoms with friends occasionally. Although about one-fourth (23.0%) of the respondents refused to go to entertainment places, nearly half (45.0%) of the respondents were persuaded to go to sex workers by their colleagues frequently.

Condom use

Among 324 migrant workers, 234 men had sex during the last year. Mostly, 91.5 percent, had sex with their spouse or girl friend. However, only 26 or 11.1

percent of the respondents reported an “always using condom” in having sex with someone during the last years (Table 1). More than half, 57.0 percent of the respondents who had sex during the last year never used condom at all. Among 100 respondents who used condom during the last year, the main reason for condom use was to prevent pregnancy (71.0 percent). However, 20.0 percents of respondents used condom in order to prevent sexually transmitted infections. Among 134 respondents who never used condom, 23.1 percent gave the reason that ‘do not know how to use’, 11.2 percent said ‘not easily available’, 9.0% said ‘reduce pleasure’ and 7.5 percent were refused by partner. However, among 49.2 percent of the respondents who mentioned other reasons for not using condom, the majority (65.2%) was because of mutual trust. Other reasons for not using condom such as ‘want a baby’, ‘using other contraceptive method’, ‘not necessary’ and ‘too old’.

Factors associated with condom use

With reference to age group, respondents who are youths or young adults used condom regularly, 25.0 percent and 13.4 percent, respectively ($p = 0.006$). Regarding marital status, respondents who stay as a single (single/widower/divorced/separated) used condoms regularly (50.0 percent) than married persons (6.7 percent) ($p < 0.001$). It is found that there is an association between educational level and frequency of condom use ($p = 0.013$). Respondents with high school and above level (23.8 percent) used condom regularly compared to primary and middle school level, 7.7 percent and 9.7 percents, respectively. An association is found between monthly income and condom use ($p = 0.015$). Those who earned monthly income less than or equal to 29,999 Kyats and more than or equal to 60,000 Kyats used condom regularly; 18.9 percent and 15.2 percent, respectively compared to those who earned income between 30,000-60,000 Kyats (5.2 percent). However, there is no association between occupation, duration of careers, duration of each trip and condom use (Table 2).

There is an association between level of

Table 1. The proportion of condom use among 234 Myanmar migrant workers

Condom use	Number	Percentage
Regular use	26	11.1
None or non-regular use	208	88.9

knowledge on HIV/AIDS and frequency of condom use ($p = 0.017$). Respondents with higher level of knowledge (13.7 percent) used condoms more regular than those with low to moderate level of knowledge (1.9 percent) (Table 3).

There is an association between perceived susceptibility and frequency of condom use ($p = 0.024$). Respondents with higher perceived susceptibility used condom more regularly than those with low perceived susceptibility, 18.1 percent and 8.0 percent, respectively. However, there is no association between perceived severity ($p = 0.227$), perceived benefit ($p = 0.616$) and perceived barrier ($p = 0.874$) with frequency of condom use. There is no association between cues to action (media and persons), Persons for HIV information and level of peer influence and condom use among migrant workers (Table 3).

Discussion

Among those who had sex during the past year, about 91.0 percent had sex with their wives or girl friends and about 4.0 percent had sex with sex workers. Nevertheless, 5.0 percents of respondents had sex both with wife/girl friend and sex worker in the past year. It can be inferred that about 9.0 percent of the migrant workers had sex with non-regular partners. It was close to the results of Behavioral Surveillance Survey, 2007 that was 11.3 percent⁽⁵⁾ but higher than migrant workers in Thailand which was 5.2%⁽⁶⁾. In this study, it revealed that 11.1 percent declared using condom every time they have sex. The result was much different from that of BSS, 2007 which was 42.3 percent⁽⁵⁾ in which the higher rate of regular condom use may be due to different type of partner who was sex worker. The present study of Chamrathirong et al⁽⁶⁾ showed that regular use of condom among Myanmar migrant worker in Thailand were 10.3, 31.7 and 76.2% for every sex with regular, casual partner and sex workers, respectively. A study among commercial male sex workers in Nepal showed 69.5% of regular use of condom with their clients⁽⁷⁾. The main reason for condom use in this study was to prevent pregnancy (71.0 percent). However, 20.0 percents of respondents used condom in order to prevent sexually transmitted infections. Among those who never use condom, 49.3 percent argued that they did not use condom at all because majority of them had sex and their wives or girl friends and trust each other. There was a significant association between the age group and condom use. Youth groups used condoms more regular than young and middle adult age groups. This finding was in conformity with the study in

Table 2. Association between general characteristics and condom use among 234 Myanmar migrant workers

General characteristics	Total respondents	Condom use				p-value*
		Regular use		None or non-regular		
		Number	Percent	Number	Percent	
Age groups						0.006**
<24 years	32	8	25.0	24	75.0	
25-34 years	82	11	13.0	71	86.6	
≥35 years	120	7	5.8	113	94.2	
Marital status						<0.001**
Single/divorce/widower/separated	24	12	50.0	12	50.0	
Married	210	14	6.7	196	93.3	
Educational level						0.014**
Primary and below	130	10	7.7	120	92.3	
Middle school	62	6	9.7	56	90.3	
High school & above	42	10	23.8	32	76.2	
Income/month (Kyats***)						0.015**
<29,999	53	10	18.9	43	81.1	
30,000-59,999	115	6	5.2	109	94.8	
≥60,000	66	10	15.2	56	84.8	

* tested by Chi-square test, ** statistically significant (p-value <0.05), *** 1 US\$ = 1,000 Kyats

Dominican Republic⁽⁸⁾ where men younger than 25 years were more likely to use condoms regularly compared to older men. Regarding marital status, 66.7% of the study population were married. There was an association between marital status and condom use. Respondents staying single (single/widower/divorced/separated) used condoms more regularly than married persons do, 50.0 percent and 6.7 percent, respectively. This finding was consistent with a study in Nigeria where men who use condoms for all sexual encounters were more likely to be single⁽⁹⁾. In respect to education, there was a significant association between education level and condom use. Respondents who studied up to middle and high education level were more likely to use condom regularly than those who studied up to primary education level. This finding is in conformity with a study in sub-Saharan Africa⁽¹⁰⁾ in that condom use was associated with higher educational level. There was a significant association between monthly income and condom use. However, respondents in the lowest income group (<300,000 Kyats) used condom more regularly than those in middle and high income groups. Lowest income group used condom regularly (18.8 percent) compared to middle income group (5.2 percent) and highest income group (15.2 percent). But, a study by Wong ML et al⁽¹¹⁾ revealed that condom use was

significantly higher among higher income than lower income sex workers. This is the same as a study in Myanmar⁽¹²⁾ in which higher income (having income greater than Kyats 100,000) is a significant predictor of consistent condom use.

Among 324 respondents, over three-fourths (76.9%) of migrant workers had high level of knowledge on HIV/AIDS and condoms and about one-fourth (23.1%) had low to moderate level. Although most of the respondents had higher level of knowledge on HIV/AIDS and condom, correct knowledge on some specific issues was still low. For example, only 49.0 percent accepted that healthy looking person could contract HIV infection. In addition, there was some misconception among migrant workers; 27.0 percent agreed that HIV could be transmitted by sharing meals with infected persons. About 22.0 percent of respondents thought that HIV cannot be transmitted from infected mother to her baby. This suggests that it might be still needed to improve knowledge about HIV/AIDS among migrant workers. There was a positive association between level of knowledge and frequency of condom use among migrant workers. Respondents with higher level of knowledge use condoms more regular than those with a lower level. This finding was consistent with a study conducted by Isarabhakdi P⁽¹³⁾

Table 3. Association between level of knowledge, perception, cue to action and condom use among 234 Myanmar migrant workers

Factors	Total respondents	Condom use				p-value*
		Regular use		None or non-regular		
		Number	Percent	Number	Percent	
Level of knowledge						0.017**
High	182	25	13.7	157	86.3	
Moderate & low	52	1	1.9	51	98.1	
Perceived susceptibility						0.024**
High	72	13	18.1	59	81.9	
Moderate & low	162	13	8.0	149	92	
Perceived severity						0.227
High	151	14	9.3	137	90.7	
Moderate & low	83	12	14.5	71	85.5	
Perceived benefit						0.616***
High	223	26	11.7	197	88.3	
Moderate & low	11	0	0	11	100	
Perceived barrier						0.874
High	60	7	11.7	53	88.3	
Moderate & low	174	19	10.9	155	89.1	
Cues to action						
Media for HIV information						0.852
Pamphlet/booklet	131	15	11.5	116	88.5	
Others	103	11	10.7	92	89.3	
Persons for HIV information						0.848
Health provider	148	16	10.8	132	89.2	
Others	86	10	11.6	76	88.4	
Level of peer influence						0.765***
Moderate	32	4	12.5	28	87.5	
Low	200	22	11.0	178	89.0	

* tested by Chi-square test, ** statistically significant (p-value <0.05), *** tested by Fisher's exact test

showing that the question on knowledge about HIV/AIDS correlates with sexual behavior. The more knowledge about HIV infection prostitute's patrons has, the more likely they use condoms consistently⁽¹³⁾. However, a study by Lalou R et al⁽¹⁴⁾ indicated that there was no direct link between knowledge of HIV infection and condom use. This was explained that it was depend largely on the individual's perceived risk of infection.

Most of the respondents had low to moderate perceived susceptibility and perceived barrier towards HIV/AIDS and condom. However, there were high perceived severity and perceived benefit seen among migrant workers. It was noted that there was a significant association between perceived susceptibility and frequency of condom use. This is consistent with the present study by Ford K et al⁽¹⁵⁾

among the migrant workers in Thailand in which condom use was higher in men with lower perceived AIDS risk. However, concern about perceived susceptibility, the study showed that 42.9% of the respondents agree on not using condoms if a partner seems to be clean and healthy. Furthermore, a study in Myanmar also revealed that 'knowing that one cannot tell by looking at someone whether or not she has HIV' is a significant predictor of consistent condom use⁽¹²⁾. Although respondents had high perceived severity and benefit, no association was seen between level of perceived severity or benefit and condom use. However, a study of condom use among migrant female workers in Shanghai, China showed the association between perception of benefits and condom use⁽¹⁶⁾. Even though most of the respondents had fewer barriers on condoms, condom use among respondents with high and low

barriers was nearly the same. In addition, there was no significant association seen between level of perceived barrier and condom use. This finding is contrary to a study in Benin, West Africa reporting that having reported problems with using condom (perceived barrier) was associated with lack of use of condom⁽¹⁷⁾ Regarding media exposure, more than half of the respondents (56.2%) received HIV/AIDS information and knowledge from pamphlets/booklets. Television was the second most common media for HIV/AIDS information. A study in Thailand among migrant workers showed that television was the most common media outlet⁽⁶⁾. However, for the internal Myanmar migrant worker, it seems like “printed media” is an important channel for HIV/AIDS information but there was no significant association found between media exposure and frequency of condom use among migrant workers. Regarding influential persons for HIV/AIDS information, most of the respondents (64.5%) learned HIV/AIDS information from health provider and about 27.0 percent heard about HIV/AIDS from their friends. However, there was no significant association between the influential person and frequency of condom use. The present study among the international migrant workers also showed that most of them received information by participating in campaigns or awareness-raising activities while in Thailand⁽⁶⁾.

Among 324 respondents, about 85.0 percents had lower level of peer influence and only one percent had higher peer influence level. Accordingly, researchers omitted respondents with high peer influence level in the analysis. There was no significant association seen between level of peer influence and condom use in the present study. However, study among migrant seafarers by Ford K et al⁽¹⁸⁾ found that peer pressure was an important factor in risky sexual behavior. Disparity of the results between two types of migrant workers may be due to less time spent at leisure among the migrant workers compared to seafarers.

In conclusion, the findings in the present study were somewhat related to the suggestions of HBM itself as well as to the results of many prior HBM base studies. The present study showed that mere perception of the chance of getting HIV/AIDS could influence the migrant workers to use condom regularly. Based on the findings in the present study, to promote the regular use of condom among the target population, the policy or programmatic recommendations should include: 1) An innovative promotion project of 100.0% Targeted Condom Use as the study shows a low proportion of regular condom use among the male

migrant workers; 2) Continued promotion of knowledge on HIV and condom use in which HIV can be transmitted by having unprotected sex; 3) Promote understanding of HIV risk particularly the fact that one cannot tell HIV status of someone even if they look clean and healthy; 4) Promote using of condom as it has dual protection, avoiding pregnancy and HIV protection; 5) Focus on regular condom use among male migrant workers at lower educational level and older age group. However, any suggestion for further study should include some interesting missing data such as job at place of destination, lifestyle of migrants, living encouragement, condom self-efficacy and sexual risk behavior. In addition, for further study, other models or theories could also explain one’s behavior, especially HIV protection behavior.

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Potential conflicts of interest

None.

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การใช้ถุงยางอนามัยในแรงงานย้ายถิ่นชายชาวเมียนมาร์ในเขตชายโขงประเทศเมียนมาร์

ขอ มิน อู, ศุภชัย ปิติกุลตั้ง, สุธรรม นันทมงคลชัย

วัตถุประสงค์: เพื่อศึกษาปัจจัยที่สัมพันธ์กับการใช้ถุงยางอนามัยในคนงานชายที่เป็นผู้อพยพที่เมืองปากก๊อ กู ประเทศเมียนมาร์
วัสดุและวิธีการ: เป็นการศึกษาแบบภาคตัดขวางโดยใช้ two stages cluster sampling with probability proportional to size (PPS) เก็บข้อมูล ในระหว่างวันที่ 1-14 กุมภาพันธ์ พ.ศ. 2553 กลุ่มตัวอย่างเป็นแรงงานย้ายถิ่นชาย ชาวเมียนมาร์ จำนวน 324 ราย มีอายุระหว่าง 18-60 ปี เก็บข้อมูลโดยการสัมภาษณ์เกี่ยวกับข้อมูลด้านความรู้ การรับรู้สิ่งชักนำให้เกิด การปฏิบัติ อิทธิพลกลุ่มเพื่อนและพฤติกรรมทางเพศ วิเคราะห์ข้อมูลโดยใช้สถิติ ความถี่ ร้อยละ การทดสอบ Chi-square และ Fisher's exact

ผลการศึกษา: ผลการศึกษาพบว่า ร้อยละ 71.0 ของกลุ่มตัวอย่างอยู่ในกลุ่มวัยผู้ใหญ่ตอนต้นและตอนกลาง ร้อยละ 66.7 สมรสแล้ว กลุ่มตัวอย่างเพียง ร้อยละ 11.1 ใช้ถุงยางอนามัยอย่างสม่ำเสมอทุกครั้งเมื่อมีเพศสัมพันธ์กับคูครองของตน หรือแฟนสาวหรือผู้ให้บริการทางเพศในช่วงปีที่ผ่านมา ปัจจัยที่มีความสัมพันธ์กับการใช้ถุงยางอนามัยอย่างมีนัยสำคัญทางสถิติ ได้แก่ อายุ ($p = 0.006$) สถานภาพสมรส ($p < 0.001$) ระดับการศึกษา ($p = 0.014$) รายได้ต่อเดือน ($p = 0.015$) ระดับความรู้เกี่ยวกับ HIV/AIDS ($p = 0.017$) การรับรู้เกี่ยวกับความเสี่ยงต่อการได้รับเชื้อ HIV/AIDS ($p = 0.024$) ส่วนปัจจัยที่ไม่มีความสัมพันธ์กับการใช้ถุงยางอนามัย ได้แก่ อาชีพ ระยะเวลาของการประกอบอาชีพ ระยะเวลาของการย้ายถิ่น ไปทำงานแต่ละครั้ง การรับรู้เกี่ยวกับความรุนแรง การรับรู้ประโยชน์ การรับรู้อุปสรรค สิ่งชักนำให้เกิดการปฏิบัติและอิทธิพล กลุ่มเพื่อน

สรุป: กลุ่มตัวอย่างมีการใช้ถุงยางอนามัยอย่างสม่ำเสมอในสัดส่วนที่ค่อนข้างต่ำ จึงเสนอแนะให้มีการปรับเปลี่ยน พฤติกรรม มีการสื่อสารด้วยสื่อต่างๆ และส่งเสริมโครงการ 100.0% Targeted Condom Promotion Project เพื่อส่งเสริมการรับรู้ และความรู้เกี่ยวกับ HIV/AIDS และการใช้ถุงยางอนามัยในกลุ่มแรงงานย้ายถิ่นชาย
