

## **Demand for Voluntary Counseling and Testing among Male Who Have Sex with Male, Thailand**

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Thailand has achieved remarkable reductions in population-based transmission of HIV over the past 10 years. While the HIV epidemic appears to be under control in Thailand, its resulting illness burden is such that AIDS is now the first leading cause of premature death and burden of diseases. The country tries to address the challenge of caring for the increasingly large numbers of people with symptomatic HIV disease. The government is aware of the need to implement an efficient, equitable and financially sustainable strategy for providing treatment and care to increasingly large numbers of people with late-stage HIV/AIDS and decided to approve a large-scale expansion of public funding for provision of antiretroviral treatment (ART) to patients with HIV/AIDS. The program is the “National Access to Antiretroviral Programs for PLWHAs” (NAPHA), implemented by the Ministry of Public Health aims to increase accessibility to selected regimes of antiretrovirals through the public health system.

Joint analysis by the Ministry of Public Health and the World Bank of this policy decision suggests that integration of treatment and prevention efforts is critical to the success of the Government’s policy of expanding ART. Treatment benefits can be maximized, and cost-effectiveness of ART increased, if ART is implemented in a way that stimulates voluntary counseling and testing (VCT) and early recruitment into ART, and hence strengthens prevention efforts. This research suggests that institutional arrangements to support the expansion of ART need to be adequately designed so as to integrate prevention and treatment. Thailand’s VCT system is a lynchpin in this effort; however, the system remains one of the least studied and understood parts of Thailand’s HIV/AIDS program.

For many years, there was virtually no data collected about male who have sex with male (MSM) and HIV in the world and also in Thailand. Recent efforts to fill this gap have confirmed some people fears and certain MSM populations have alarmingly high HIV prevalence rate<sup>1</sup>. In Thailand statistical shown that there were rise to 9.6% of MSM HIV infected prevalence rate in 2001<sup>2</sup> and in 2003 study found that 17 percent of men who have sex with other males were infected with HIV<sup>3</sup> and trend to increasing in all developing countries. <sup>4</sup> The male who have sex with male (MSM) is a special group which considered high risk for HIV infection. Their perception on VCT and ART is worth investigated to be used for setting appropriate strategy and expenditure concerning HIV/AIDS control. Their sex behaviors and condom used is importance for appropriate preventing HIV/AIDS measures.

### **Objectives:**

The study aimed

1. To assess self reported history and perception of the male have sex with male (MSM) on HIV voluntary counseling and testing (VCT).
2. To assess the demand of VCT among MSM
3. To access factors associated with demand for VCT and their willingness to pay for VCT

## Methodology

This cross-sectional study was conducted in 3 regions, the north, the south and the central regions between May and August 2005. One province was selected from each region. Two hundred and ninety eight male have sex with male who worked or clients of entertainment establishments, such as night clubs, massage parlors and karaoke, were selected to response to questionnaire interview by trained interviewers. The respondents were voluntarily and signed a consent form with the assumed of anonymity and confidentiality. Data entry was done using the Scan Devet commercial computerized program. The data on general characteristics, perception, knowledge and behaviors related to VCT, willing to pay for VCT, ART and risk to HIV infection was under gone descriptive statistical analysis for mean, standard deviation and percentage. Chi –square test, logistic regression were applied to test association of factors and demand for VCT using STATA version 9.1.

## Results:

### 1. General Demographic Characteristics of MSM

Two hundred and twenty eight MSM were questionnaire interviewed, of which 114 persons were from the Central, 102 from the North and 82 persons were from the South. Their age ranged from 16 to 50 years old with the average age of 23.8 years (S.D. = 5.8) (see Table 1). Most of these MSM were in the 21- 30 years age-group (61.7 percent) followed by 29.8 percent in the older than 20 year age group. When compared among region, it was found that the 21-30 age group was the highest across all regions (46.8-68.2 %). However, MSM in the South was older than in other region of which about 15 percent was older than 30 years old. In term of education, majority of them across all regions had reached secondary school level. Almost 30 percent of the respondents in the South finished at least bachelor degree. For marital status, majority of them were single, from 65.7 % in the North to 91 % in the South. However, almost 30 percent of MSM in the North were married. Nearly all of them were employee (91%). As for family income, a quarter of the respondents have income between 7,000-11,999 Baht. When compared among regions, majority of respondents from the North came from a lower income group: 3,500-6,999 Baht (36.3 %), in contrast, quite high percentage of respondents from the Central had higher income (12,000-19,999 Baht: 21.9 %, 20,000-29,999 Baht: 21.1 %).

Table 1: General Demographic Characteristics of MSM

Demographic Characteristics	North (N=102)		Central (N=114)		South (N=82)		Total (N=298)	
	N	%	N	%	N	%	N	%
<b>Age</b>								
Mean (SD)	22.5	(4.1)	23.3	(4.8)	26.7	(6.3)	23.8	(5.3)
Median (Min: Max)	22	17:50	22.5	16:35	25	16:45	23	16: 50
<b>Age group</b>								
≥ 20	34	33.4	42	36.8	13	15.8	89	29.8
21- 30	66	46.8	62	54.3	56	68.2	184	61.7
31- 40	1	0.9	10	8.7	9	10.9	20	6.8
≤ 40	1	0.9	0	0	4	4.8	5	1.7
<b>Education</b>								
Illiterate	16	15.6	2	1.7	1	1.2	19	6.4
Primary school	21	20.5	20	17.5	13	15.8	54	18.1
Secondary school	31	30.3	43	37.7	27	32.9	101	33.8
High school or equivalence	27	26.4	35	30.7	22	26.8	84	28.2

Bachelor degree	5	4.9	10	8.7	14	17.1	29	9.7
Master degree	2	1.9	4	3.5	5	11.3	11	3.7
<b>Marital status</b>								
Single	67	65.7	91	79.8	75	91.4	233	78.9
Married	27	26.4	61	14.1	4	4.8	47	15.8
Widow	0	0	0	0	1	1.2	1	0.3
Divorce	2	1.9	2	1.7	1	1.2	5	1.7
Separate	6	5.8	4	3.5	1	1.2	11	3.6
Other .....	0	0	1	0.9	0	0	1	0.3
<b>Occupation</b>								
Employer	0	0	0	0	2	2.4	2	0.70
Owned business	0	0	8	7.1	2	2.4	10	3.4
Family business	0	0	5	4.4	0	0	5	1.7
Government employee	0	0	1	0.9	0	0	1	0.3
State enterprise	0	0	0	0	2	2.4	2	0.7
Employee	102	100	96	84.9	73	89.2	271	91.2
Other	0	0	3	2.7	3	3.6	6	2.0
Total	102	100	113	100	82	100	297	100
<b>Families income</b>								
< 3,500	12	11.7	1	0.9	5	6.1	18	6.1
3,500- 6,999	37	36.3	11	9.6	21	25.6	69	23.2
7,000 - 11,999	24	23.6	26	23.8	27	32.9	77	25.9
12,000 - 19,999	21	20.6	25	21.9	15	18.3	61	20.6
20,000 - 29,999	7	6.9	24	21.1	6	7.3	37	12.4
30,000 – 39,999	1	0.9	13	11.4	3	3.7	17	5.7
40,000 – 49,999	0	0	3	2.6	4	4.9	7	2.4
50,000 – 59,999	0	0	3	2.6	1	1.2	4	1.3
60,000 – 79,999	0	0	2	1.7	0	0	2	0.7
> 80,000	0	0	5	4.4	0	0	5	1.7
Total	102	100	113	100	82	100	297	100

## 2. Perception and Experiences on VCT and HIV Test .

Most of the respondent knew about VCT (67.1 %) (see Table 2). Among the regions, the northern region had the highest percentage of MSM who had knowledge of VCT (70.6%). More than half of the total respondents (58.7 %) had ever tested for HIV/AIDS. However, there were quite big differences among the regions, i.e. 70.6 % in the South, 52.6 % in the North and 42.7 % in the Central had ever tested for HIV/AIDS. MSM who had done HIV test, on average (45 %) did it by their own intention, 32 % did because it was a requirement when applied for jobs. More than 63 % of the respondents in the North did because it was required by the workplace which was about 5-10 times higher than those from the other two regions. Overall, 78 % of the respondents had blood test during the last 12 months. During the last 12 months, about half (53.7 %) of MSM paid for HIV/AIDS tested. However, 70.9 percent of those in the North got free tested. The fee ranged from 300 to 1,500 Baht with the median of 400 Baht. About three quarter of MSM (76 %) felt that was good and did not need any improvement.

Table 2 : Knowledge and Experience on VCT and HIV Test

Knowledge and Experience on VCT, HIV test	North (N=102)		Central (N=114)		South (N=82)		All	
	N	%	N	%	N	%	N	%
<b>Knowing about VCT</b>								
Yes	72	70.6	71	62.3	57	69.5	200	67.1
No	30	29.4	43	37.7	25	30.5	98	32.9
Total	102	100	114	100	82	100	298	100
<b>Experience in HIV blood tested</b>								
Yes	72	70.6	68	59.6	35	42.7	175	58.7
No	30	29.4	46	40.4	47	57.3	123	41.3
Total	102	100	114	100	82	100	298	100
<b>Reason for HIV test</b>								
By own intension	20	27.8	41	62.1	17	48.6	78	45.3
Apply a job	46	63.9	4	6.1	5	14.3	55	32.0
Apply for life insurance	0	0	0	0	0	0	0	0
Before marriage	1	1.4	1	1.5	0	0	2	1.2
During pregnancy	0	0	0	0	0	0	0	0
Medical checkup	1	0.9	10	15.2	8	47.1	19	11.0
Advice form health personnel	1	1.4	0	0	0	0	1	0.6
When admitted in hospital	0	0	1	1.5	1	2.9	1	0.6
Blood donation	0	0	2	3.0	0	0	2	1.2
Other ...	3	4.2	7	10.6	4	11.4	14	8.1
Total	72	100	66	100	35	100	172	100
<b>Blood test during the last 12 months</b>								
No	10	13.9	14	20.9	14	40.0	38	21.8
Yes	62	86.1	53	79.1	21	60.0	136	78.2
Total	72	100	67	100	35	100	174	100
Mean (SD)	1.9	1.1	2.3	2.1	2.5	1.7	2.2	1.6
Median (Min:max)	2	1:5	1	1:12	2	1:7	2	1:12
<b>Place for blood test during the last 12 months</b>								
Community hospital	3	4.8	11	20.7	4	19.1	18	13.2
Province, regional hospital	0	0	1	1.9	2	9.5	3	2.2
University hospital	3	4.8	12	22.7	2	9.5	17	12.2
Private hospital	5	8.1	10	18.9	9	42.8	24	17.5
Clinic	6	9.7	12	22.7	4	19.1	22	16.2
Work place	20	32.3	2	3.7	0	0	22	16.7
Other.....	25	40.3	5	9.4	0	0	30	22.0
Total	62	100	53	100	21	100	136	100
<b>Expense for blood test during the last 12 months</b>								
No	44	70.9	14	26.4	5	23.8	63	46.3
Yes	18	29.1	39	73.6	16	76.2	73	53.7
Total	62	100	53	100	21	100	136	100
Mean (SD)	369.4	190.6	416.5	309.4	493.7	197.4	412.6	262.8
Median (Min:Max)	300	80:700	400	30:1500	500	200:900	400	30:1500

Knowledge and Experience on VCT, HIV test	North (N=102)		Central (N=114)		South (N=82)		All	
	N	%	N	%	N	%	N	%
<b>Q1-Q3</b>	<b>270-</b>		<b>200-</b>		<b>350-</b>		<b>300-</b>	
	<b>500</b>		<b>500</b>		<b>550</b>		<b>500</b>	
<b>Improvement for VCT service</b>								
Good, no need to improve	54	87.1	34	64.2	16	76.2	104	76.8
Improve	0	0	0	0	0	0	0	0
Price	0	0	1	1.9	3	14.2	4	2.8
Stigma from health care worker	1	1.6	2	3.8	0	0	3	2.2
Health education	3	4.8	6	11.3	1	4.8	10	7.3
Keep secret	0	0	2	3.7	0	0	2	1.4
Other.....	4	6.5	8	15.1	1	4.8	13	9.5
Total	62	100	53	100	21	100	136	100

### 3. Intension to get VCT within the next 12 Months

More than three quarters (78 %) of MSM had planned to get VCT in the next 12 months (see Table 3). Reasons to take VCT in the future were mostly has risk behavior (56.6 %) and for job application (21.3 percent). About half of MSM in the north will take VCT for applying for a job (48.4 percent). Those who will not or not sure to take VCT gave the reason of having no risk behavior (41.5 percent), 18.5 percent were fear for stigmatization and 9.2 percent afraid they might not accept or solve the problems if they were HIV infected.

More respondents trusted health personnel in pubic sector in keeping their secret than personnel in private sector (66.1% and 55.7 %). Almost 60 percent of MSM in the central had no trust or not sure in health personnel in private sector concerning concealing their secret.

Table 3 Intension to get VCT with in the Next 12 Months

Intension to get VCT Within the next 12 months	North (N=102)		Central (N=114)		South (N=82)		All	
	N	%	N	%	N	%	N	%
<b>Plan for VCT within next 12 months</b>								
Yes	89	87.3	90	78.9	54	65.8	233	78.2
No	9	8.8	8	7.1	8	9.8	25	8.4
Not sure	4	3.9	16	14.0	20	24.4	40	13.4
Total	102	100	114	100	82	100	298	100
<b>Reason to get VCT</b>								
Risk behavior	40	44.9	55	61.1	37	68.5	132	56.6
Job application/ life insurance/ group and cooperative	44	48.4	2	2.2	4	7.1	50	21.3
Before marriage or pregnancy	0	0	6	6.7	2	3.7	8	3.4
AIDS can be cure	1	1.1	8	8.9	5	9.3	14	6.1
Other....	5	5.6	28	31.1	8	14.8	41	17.6
<b>Reason for not test or not sure</b>								

Intension to get VCT Within the next 12 months	North (N=102)		Central (N=114)		South (N=82)		All	
	N	%	N	%	N	%	N	%
No risk for HIV	5	38.5	15	62.5	7	25.0	27	41.5
Far from hospital	0	0	0	0	4	14.3	4	6.2
Have no money	0	0	1	4.2	0	0	1	1.5
Cannot accept, fear about the problem if HIV+,	0	0	0	0	6	21.4	6	9.2
Have been tested before	1	7.7	1	4.2	2	7.1	4	6.2
Fear of stigma	1	7.7	4	16.7	7	25.0	12	18.5
Other.....	6	46.2	3	12.5	2	7.1	11	16.9
<b>Trust in keeping confidentiality</b>								
<b>Public sector:</b> Trust	68	66.7	73	64.1	56	68.3	197	66.1
No trust	18	17.7	20	17.5	11	13.4	49	16.4
Not sure	16	15.6	21	18.4	15	18.3	52	17.5
Total	102	100	114	100	82	100	298	100
<b>Private sector:</b> Trust	63	61.8	49	42.9	54	65.8	166	55.7
No trust	19	18.6	24	21.1	8	9.7	51	17.1
Not sure	20	19.6	41	36.0	20	24.5	81	27.2
Total	102	100	114	100	82	100	238	100

#### 4. Willingness to pay for VCT

The respondents willing to pay 200 to 800 Baht- fee for VCT. Among 214 respondents who was willing to pay for VCT, 31.7 % willing to pay 200 Baht for the test, 25.7 % for 300 Baht and 23.9 %for 500 Baht.

Table 4: Fee which the MSM were willing to pay for VCT

Fee which willing to pay for VCT (Baht)	Yes		No	
	N	%	N	%
200	68	31.7	8	9.8
300	55	25.7	18	21.8
400	0	0	1	1.2
500	51	23.9	23	28.1
600	0	0	1	1.3
800	40	18.7	31	37.8
Total	214	100	82	100

The highest proportion of MSM intended to get VCT if the test fee was 200 Baht (72.2 %). Thirty five respondents who said they intended to take VCT if the charge decreased to 100 Baht. The Maximum charge for VCT, which all 102 MSM willing to pay ranged 50 to 8000 Baht with Q1 – Q 3 of 300 – 1,000 Baht.

Table 5 MSM's Intension to get VCT with different fee charged for VCT

Variable	North (N=102)		Central (N=114)		South (N=82)		All	
	N	%	N	%	N	%	N	%
<b>If VCT charge at 200 baht, intension to test</b>								
Yes	68	66.7	90	78.9	57	69.5	215	72.2
No or yes if have more money	34	33.3	24	21.1	25	30.5	83	27.8
Total	102	100	114	100	82	100	298	100
<b>If VCT charge decreased to 100 bath, intension to test</b>								
Yes	35	51.4	52	57.8	31	54.4	118	54.9
No or yes if have more money	33	48.6	38	42.2	26	45.6	97	45.1
Total	68	100	90	100	57	100	215	72.1
<b>If VCT charge increased to 400 baht intension to test</b>								
Yes	15	44.1	15	62.5	11	44.0	41	49.4
No or yes if have more money	19	55.9	9	37.5	14	56.0	42	50.6
Total	34	100	24	100	25	100	83	100
<b>Maximum charge which willing to pay for blood test</b>								
Do not want to test	12	11.8	7	6.1	14	17.1	33	11.1
Intend to get the test	90	88.2	107	93.9	68	82.9	265	88.9
Total	102	100	114	100	82	100	298	100
<b>Maximum charge</b>								
Mean (SD)	756.2	1022.7	774.1	720.6	695.3	548.7	747.8	798.8
Median (Min:Max)	50	100:8000	500	30:500	500	30:300	500	30:800
				0		0		0
Q1-Q3	300	-8000	300	-1000	300	-1000	300	-1000

## 5. Experience with PHLA (People living with HIV/AIDS)

### 5.1 Direct Experiences with PHLA

For direct experience on HIV and AIDS, 62 % of the respondents did not know anyone with HIV or AIDS, 22 % got friends with HIV and AIDS, and 10.7 % had relatives who got it (see Table 6). About 35 percent of MSM in the South had friends who had HIV/ AIDS

Table 6 Direct Experience with PHLA

Variable	North (N=102)		Central (N=114)		South (N=82)		All	
	N	%	N	%	N	%	N	%
<b>Knew PHLA</b>								
No	71	69.6	71	62.3	45	54.8	187	62.7
Family member	0	0	3	2.6	4	4.9	7	2.3
Relative	9	8.8	15	13.2	8	9.8	32	10.7
Friend	12	11.7	26	22.8	29	35.4	67	22.5
Neighborhood	16	15.7	12	10.5	1	1.2	29	9.7

## 5.2 Knowledge and Perception on HIV/ AIDS and Anti- retroviral Therapy (ART)

About 5 up to 15.8 percent of MSM in all regions still believed that AIDS is curable as shown in Table 7. Almost three- quarters of these MSM knew ART. It was interesting that the North had the lowest rate among 3 regions of MSM knowing about ART (65.7 %). More than 80 % of respondents believed that ART could help extended survival time. They thought ART can extend the survival from 1 to 30 years with the median of 6 years. More than half of these MSM did not know about free ART program especially those from the central (60.6 %). Almost forty percent of these MSM did not know the places which provided free ART whereas the same proportion of 24 % knew said that community and university hospital provided free ART..

Table 7 Knowledge and Perception on HIV/ AIDS and Anti- retroviral Therapy (ART)

Variable	North (N=102)		Central (N=114)		South (N=82)		Total	
	N	%	N	%	N	%	N	%
<b>AIDS is curable</b>								
Yes	5	4.9	18	15.8	4	4.9	27	9.1
No	97	95.1	96	84.2	78	95.1	271	90.9
Total	102	100	114	100	82	100	298	100
<b>Known ART</b>								
Yes	67	65.7	93	81.6	55	67.1	215	72.2
No	35	34.3	21	18.4	27	32.9	83	27.8
Total	102	100	114	100	82	100	298	100
<b>Effectiveness of ART</b>								
Cured	1	1.5	0	0	2	3.6	3	1.4
Prolong survival time	63	94.0	68	73.1	45	81.9	176	81.8
<b>Number of years can be prolonged by ART</b>								
Mean (SD)	8.4	5.3	7.1	4.8	6.3	4.1	7.4	4.8
Median (Min:Max)	10	1: 30	5	1:25	5	1:20	6	1:30
Could not prolong survival time	0	0	3	3.2	6	10.9	9	4.2
Do not know	3	4.5	22	23.7	2	3.6	27	12.6
Total	67	100	93	100	55	100	215	100
<b>Known of free ART program</b>								
Know	33	49.3	37	39.4	30	54.5	100	46.3
Did not know	34	50.7	56	60.6	25	45.5	115	53.7
Total	67	100	93	100	55	100	215	100
<b>Place providing free ART</b>								
Community	6	18.2	8	21.6	10	33.3	24	24.0
Hospital with living								
Other community hospital	6	18.2	4	10.8	1	3.3	11	11.0
	6	5.8	13	35.1	5	16.7	24	24.0
University, municipal hospital								
Provincial, regional hospital	2	6.1	7	18.9	4	13.3	13	13.0



Variable	North (N=102)		Central (N=114)		South (N=82)		Total	
	N	%	N	%	N	%	N	%
PCU or sub-district health centre	0	0	3	8.1	4	13.3	7	7.0
Private hospital	2	6.1	4	10.8	2	6.8	8	8.00
Private clinic	1	3.0	2	5.4	2	6.8	5	5.00
Do not know	15	45.5	13	35.1	9	30.0	37	37.0
Other .....	4	12.1	1	2.7	1	3.3	6	6
<b>Intention to have VCT if know that there have free ART ,good quality, and extend survival time and can access in community hospital not far from home</b>								
Yes	89	87.3	104	91.2	64	78.1	257	86.2
No	12	11.8	6	5.3	7	8.5	25	8.4
Not sure	1	0.9	4	3.5	11	13.4	16	5.4
Total	102	100	114	100	82	100	298	100
<b>If you are AIDS patient, do you want to join with ART project</b>								
<b>Yes</b>								
Access to care	49	48.1	70	61.4	54	65.8	173	58.1
Free	29	28.4	30	26.3	10	12.2	69	23.2
Extend survival time	47	46.1	46	40.4	14	17.1	107	35.9
Other	5	4.9	13	11.4	2	2.4	20	6.7
<b>No</b>								
Do not want other to know that you are AIDS patient	6	5.9	3	2.6	7	8.5	16	5.4
Fear of ART side-effect	0	0	2	1.7	0	0	2	0.6
ART is less of efficiency	1	0.9	1	0.8	0	0	2	0.6
Other .....	5	4.9	4	3.5	4	4.8	13	4.4

### 5.3 Intension to get VCT with Relation to Free ART

If ART were free, 86.2 % of MSM across 3 regions said they will get VCT, however it was the lowest in the South 78.1 %. Among those who intended to get ART if they were HIV positive, their common reasons were needed health care (58.1 %), prolong survival time (35.9 %) and it was free of charge (23.2%)

Table 8 Intension to get VCT if could get Free ART

Intention to get VCT	North (N=102)		Central(N=114)		South (N=82)		Total	
	N	%	N	%	N	%	N	%
<b>Intention to get VCT If ART is free</b>								
Yes	89	87.3	104	91.2	64	78.1	257	86.2
No	12	11.8	6	5.3	7	8.5	25	8.4
Not sure	1	0.9	4	3.5	11	13.4	16	5.4
Total	102	100	114	100	82	100	298	100
<b>Intension to get ART If HIV+</b>								
<b>Yes : Reasons</b>								
need health care	49	48.1	70	61.4	54	65.8	173	58.1
Free	29	28.4	30	26.3	10	12.2	69	23.2

<b>Intention to get VCT</b>	<b>North (N=102)</b>		<b>Central(N=114)</b>		<b>South (N=82)</b>		<b>Total</b>	
	N	%	N	%	N	%	N	%
Prolong survival time	47	46.1	46	40.4	14	17.1	107	35.9
Other	5	4.9	13	11.4	2	2.4	20	6.7
<b>No : Reason</b>								
Don't want to disclose	6	5.9	3	2.6	7	8.5	16	5.4
Afraid of ART side-effect	0	0	2	1.7	0	0	2	0.6
Don't think ART will help	1	0.9	1	0.8	0	0	2	0.6
Other .....	5	4.9	4	3.5	4	4.8	13	4.4

## 6. Risk Behavior

### 6.1 Illicit Drug Used

Less than 5 percent of the respondent had experienced using illicit drug injection. However the proportion of illicit drug in the south was the highest among three regions (7.3 %)

Table 9: Illicit Drug Used

<b>Risk Behavior</b>	<b>North (N=102)</b>		<b>Central(N=114)</b>		<b>South(N=82)</b>		<b>Total</b>	
	N	%	N	%	N	%	N	%
<b>Illicit drug (injection)</b>								
Yes	2	1.9	4	3.5	6	7.3	12	4.1
No	100	98.1	110	96.5	76	92.7	286	95.9
Total	102	100	114	100	82	100	298	100

### 6.2 Sex Behavior (Unsaved Sex)

As shown in Table 10, 88 % of the respondents said they had sexual intercourse (SI) with male partners during the last 12 month. About one forth (25.9%) seldom used condoms, and 2.3 % did not use condom at all. Reasons for not using condoms were, 20.7 % thought they had no chance to get infected and the same percentage thought they could not access to condoms, 13.8 % did not want to, and the same percentage said they were not fully control themselves e.g. drunk and using illicit drug.

Table 10 Sex with Male

<b>Risk Behavior</b>	<b>North (N=102)</b>		<b>Central(N=114)</b>		<b>South(N=82)</b>		<b>Total</b>	
	N	%	N	%	N	%	N	%
<b>Sex with male during the last 12 months</b>								
No	15	14.7	15	13.2	6	7.3	36	12.1
Yes	87	85.3	99	86.8	76	92.7	262	87.9
Total	102	100	114	100	82	100	298	100
Mean and SD if yes								
Mean (SD)	68.9	108.2	43.2	58.5	62.6	102.6	57.4	91.8
Median (Min:Max)	20	1:500	20	1:305	25	1:600	20	1:600
<b>Condom used (if yes)</b>								
Always	67	77.0	70	70.7	51	67.1	188	71.8
Seldom	18	20.7	26	26.3	24	31.6	68	25.9

Risk Behavior	North (N=102)		Central(N=114)		South(N=82)		Total	
	N	%	N	%	N	%	N	%
Not used	2	2.3	3	3.0	1	1.3	6	2.3
Total	87	100	99	100	76	100	262	100
<b>Condom used for last SI with male</b>								
Yes	82	94.3	86	86.9	65	85.5	233	88.9
No	5	5.7	13	13.1	11	14.5	29	11.1
Total	87	100	99	100	76	100	262	100
<b>Reasons for not using condom</b>								
Did not want to use	1	20.0	0	0	3	27.2	4	13.8
Perceived of no chance to get infected	1	20.0	4	30.7	1	9.1	6	20.7
Did not sure that condom could protect from HIV and AIDS infection	0	0	0	0	0	0	0	0
Could not access to condom	1	20.0	3	23.1	2	18.2	6	20.7
Had no money to buy	0	0	0	0	0	0	0	0
Not fully control themselves (Drunk, Illicit drug used)	0	0	3	23.1	1	9.1	4	13.8
AIDS could be cured	0	0	0	0	0	0	0	0
Partner did not want to use	1	20.0	0	0	2	18.2	3	10.3
Other	1	20.0	3	23.1	2	18.2	6	20.7
Total	5	100	13	100	11	100	29	100

Half of the respondents had sexual intercourse (SI) with female during the last 12 months. It was highest in the north (75.5 %) followed by the central region (56.2 %). Less than half of the respondent always used condom (44.3 %), whereas 38.3 % seldom used and 17.3 % did not use at all. There were highest proportion of the respondents who seldom and not use condom (70.2 %) compared with other regions. They usually had sex with girl friends (51.7%) and wife or partners (43.6 %). About forty percent of the respondents did not use condom during the last sexual intercourse. Common reasons for not using condom was did not want to use 20.7 % and not perceived the change of getting infection 19.6 %.

Table 11 Sex with women

Risk Behavior	North (N=102)		Central (N=114)		South (N=82)		All	
	N	%	N	%	N	%	N	%
<b>Sex with female during the last 12 months</b>								
No	25	24.5	50	43.8	74	90.2	149	50
Yes	77	75.5	64	56.2	8	9.8	149	50
Total	102	100	114	100	82	100	298	100
<b>Number of sexual intercourse</b>								
Mean (SD)	27	97.7	20.8	35.3	5.1	6.2	23.3	73.9
Median (Min:Max)	5	1:800	4	1:192	3	1:20	4	1:800
<b>Condom used</b>								

Risk Behavior	North (N=102)		Central (N=114)		South (N=82)		All	
	N	%	N	%	N	%	N	%
(if yes)								
Always	23	29.8	36	56.3	7	87.5	66	44.3
Seldom	37	48.1	19	29.7	1	12.5	57	38.3
No used	17	22.1	9	16.8	0	0	26	17.4
Total	77	100	64	100	8	100	149	100
<b>To whom that having sex with</b>								
Wife or partner	45	58.4	19	29.7	1	12.5	65	43.6
Friend	27	35.6	9	14.1	3	37.5	39	26.2
Girl friend	40	51.9	32	50	5	62.5	77	51.7
Female prostitute	14	18.2	9	14.1	0	0	23	15.4
Other	24	31.2	22	34.4	1	12.5	47	31.5
<b>Condom used during the last sexual intercourse with female</b>								
Yes	40	51.9	41	64.1	7	78.5	88	59.1
No	37	36.3	23	35.9	1	12.5	61	40.9
Total	77	100	64	100	8	100	149	100
<b>Reasons for not using condom</b>								
Did not want to use	6	16.2	7	30.4	0	0	13	21.3
Thought that they had no chance to get infected	5	13.5	7	30.4	0	0	12	19.6
Did not sure that condom could protect from HIV/AIDS	0	0	0	0	0	0	0	0
Could not access to condom	3	8.1	1	4.3	0	0	4	6.6
Have no money to buy	0	0	0	0	0	0	0	0
Not fully control themselves (Drunk or illicit drug used)	1	2.7	1	4.3	1	100	3	4.9
AIDS could be cured	0	0	0	0	0	0	0	0
Partner did not want to use	2	5.4	1	4.3	0	0	3	4.9
Other	20	54.1	6	26.3	0	0	26	42.7
Total	37	100	23	100	1	100	61	100

### 6.3 Perceived on Risk to be infected with HIV

Regarding the perception of male who have sex with male on their risk to get HIV infection, almost half (45.7%) thought they had low risk , 29.5 % perceived of having high risk whereas 13.1 percent stated that they had no chance to get HIV infection

Table 12 Perceived on Risk to be infected with HIV

Perceived risk to get HIV infection	North (N=102)		Central (N=114)		South (N=82)		All	
	N	%	N	%	N	%	N	%
Have no chance	15	14.7	12	10.5	12	14.7	39	13.1
Small chance	55	53.9	43	37.8	38	46.3	136	45.7
High chance	29	28.5	40	35.1	19	23.2	88	29.5
Already HIV +	0	0	1	0.8	2	2.4	3	1.0
Not sure	3	2.9	18	15.8	11	13.4	32	10.7
Total	102	100	114	100	82	100	298	100

## 7. Factors Associated with VCT

### 7.1 Demographic characteristics

MSM who got VCT and did not get VCT had different characteristics including; age ( $p=0.006$ ), education attainment ( $p=0.01$ ), marital status ( $p=0.02$ ), nevertheless, there were no deference with occupational, their income and illicit drug used.

Table 13 Comparative demographic characteristics between MSM who got VCT and did not get

Characteristic	Test N= 175	Not test N= 123	p-value	95%CI
<b>Age</b>				
Mean (SD)	24.4(5.1)	23.0(5.3)	0.01	0.21-263
<b>Age groups</b>				
≤ 20 yrs.	42 (47.9)	47 (52.8)	0.006	
21- 30 yrs.	117 (63.6)	67 (36.4)		
31-40 yrs.	15 (75.0)	5 (25.0)		
≥ 40 yrs.	1 (20)	4 (80)		
<b>Education</b>				
Illiterate	16 (84.2)	3 (15.8)	0.01	
Primary school	30 (55.6)	24 (44.4)		
Secondary school	56 (55.4)	45 (44.6)		
High school	49 (58.3)	35 (41.6)		
Certificate	15 (51.7)	14 (48.3)		
Bachelor degree	9 (81.8)	2 (18.2)		
<b>Marital status</b>				
Single	126 (54.1)	107 (45.9)	0.002	
Married	38 (80.8)	9 (19.5)		
Widow	0	1 (100)		
Divorce	3 (60.0)	2 (40.0)		
Separate	8 (72.7)	3 (27.3)		
<b>Occupation</b>				
Employer	0	2 (100)	0.52	
Owner business	7 (70.0)	3 (30.0)		
Family business	2 (40.0)	3 (60.0)		
Government employee	1 (100)	0		
Government enterprises	1 (50.0)	1 (50.0)		
Employee	160 (59.1)	111 (40.9)		
Other	4 (66.7)	2 (33.3)		

Characteristic	Test N= 175	Not test N= 123	p-value	95%CI
<b>Income</b>				
< 3,500	8(42.1)	11(57.9)	0.50	
3,500- 6,999	37(53.6)	32(46.4)		
7,000 - 11,999	45(58.4)	32(41.5)		
12,000 - 19,999	40(65.6)	21(34.6)		
20,000 - 29,999	23(62.2)	14(37.8)		
30,000 – 39,999	9(52.9)	8(47.1)		
40,000 – 49,999	4(57.2)	3(42.8)		
50,000 – 59,999	4(100)	0		
60,000 – 79,999	1(50.0)	1(50.0)		
> 80,000	4(80.0)	1(20.0)		
<b>Illegal drug used.</b>				
Yes	6(50)	6(50)	0.53	
No	169(59.1)	117(40.9)		

## 7.2 Factor Associated with MSM experience in getting VCT

It was found that when controlled for effect of other variables, age and VCT was strongly significant associated ( $p=0.01$ ). MSM older than 40 years old were 1.7 times more likely to get VCT when compared with MSN age not more than 20 year old (95% CI = 0.1-20.3) . Furthermore, association was found among income, marital status and MSN had sexual intercourse with female ( $p=0.000$ ,  $p=0.02$ ,  $p=0.000$  respectively)

Table 13 Logistic regression of factors associated with getting VCT

Variable	N	%	OR (crude)	OR(adjust)	95%CI	p-value
<b>Region</b>						
North	72	34.2	1	1		0.12
Central	68	38.2	1.6	1.4	0.7,2.7	
South	35	27.6	3.2	2.6	1.2,5.6	
<b>Age groups</b>						
≤ 20 yrs.	89	29.8	1	1		0.01
21- 30 yrs.	184	61.7	0.5	0.4	0.2,0.8	
31-40 yrs.	20	6.8	0.2	0.2	0.06,0.9	
≥ 40 yrs.	5	1.7	3.5	1.7	0.1,20.3	
<b>Education</b>						
Illiterate	19	6.4	1	1		0.3
Primary school	54	18.1	4.2	1.8	0.4,8.0	
Secondary school	101	33.8	4.2	1.9	0.4,8.1	
High school	84	28.2	3.8	1.9	0.4,8.1	
Certificate	29	9.7	4.9	2.1	0.4,10.1	
Bachelor degree	11	3.7	1.2	0.6	0.07,5.4	
<b>Marital status</b>						
Single	233	78.9	1	1		0.02
Married	47	15.8	0.3	0.3	0.1,0.8	
Divorce	5	1.7	0.8	1.1	0.1,7.1	
Separate	11	3.6	0.4	0.9	0.2,4.1	
<b>Occupation</b>						
Owner business	10	3.1	1	1		0.2
Family business	5	1.7	1.7	0.3	0.16,2.7	

Variable	N	%	OR (crude)	OR(adjust)	95%CI	p-value
Employee	271	91.2	1.1	0.4	0.6,3.4	
Other	6	2.0	0.5	0.2	0.01,2.6	
<b>Income</b>						
< 3,500	18	6.1	1	1		0.00
3,500- 6,999	69	23.2	0.6	5.1	0.24,1.1	
7,000 - 11,999	77	25.9	0.5	3.0	0.17,5.5	
12,000 - 19,999	61	20.6	0.3	2.0	0.12,3.6	
20,000 - 29,999	37	12.4	0.4	1.4	0.7,2.4	
30,000 – 39,999	17	5.7	0.6	2.0	0.11,3.6	
40,000 – 49,999	7	2.4	0.5	2.3	0.12,4.7	
> 50,000	11	3.7	0.7	1.02	0.2,3.7	
<b>Illegal drug used.</b>						
No	286	95.9	1	1		0.5
Yes	12	4.1	1.1	1.4	0.54,4.9	
<b>Known ARV</b>						
No	83	27.9	1	1		0.09
Yes	215	72.1	0.8	0.9	0.5,1.7	
<b>Had sex with male</b>						
No	36	12.1	1	1		0.08
Yes	262	87.9	0.7	1.6	0.8,3.4	
<b>Had sex with female</b>						
No	149	50	1	1		0.000
Yes	149	50	0.2	0.3	0.2,0.5	

### 7.3 Factors Associated with Intension to get VCT in the Future

Factors statistically associated with future VCT were marital status ( $p = 0.05$ ), occupation ( $p = 0.05$ ), place for getting VCT ( $p < 0.001$ ), had sexual intercourse with male ( $p = 0.05$ ) had sexual intercourse with female ( $p < 0.001$ ) and free blood test ( $p < 0.001$ ) were strongly deference.

Table 14 Factor Associated with for intension to get VCT in the future.

Variables	Yes	No	Not sure	P-value
<b>Age groups</b>				
≤ 20 yrs.	69(77.5)	8(8.9)	12(13.4)	0.3
21- 30 yrs.	147(79.9)	12(6.5)	25(13.6)	
31-40 yrs.	13(65.0)	4(20.0)	3(15.0)	
≥ 40 yrs.	4(80.0)	1(20.0)	0	
<b>Education</b>				
Illiterate	19(100)	0	0	0.1
Primary school	44(81.5)	2(3.7)	8(14.8)	
Secondary school	78(77.2)	7(7.0)	16(15.8)	
High school	58(69.2)	13(15.4)	13(15.4)	
Certificate	25(86.2)	2(6.9)	2(6.9)	
Bachelor degree	9(81.8)	1(9.1)	1(9.1)	
<b>Marital status</b>				
Single	174(74.7)	24(10.3)	35(15.0)	0.05
Married	42(89.4)	1(2.1)	4(8.5)	
Divorce	4(80.0)	0	1(20)	

<b>Variables</b>	<b>Yes</b>	<b>No</b>	<b>Not sure</b>	<b>P-value</b>
Separate	11(100)	0	0	
<b>Occupation</b>				
Employer	0	2(100)	0	0.05
Owner business	8(80.0)	1(10.0)	1(10.0)	
Family business	2(40.0)	2(40.0)	1(20.0)	
Employee	216(79.7)	19(7.1)	36(13.2)	
<b>Illegal drug used.</b>				0.2
Yes	8(66.6)	2(16.6)	2(16.8)	
No	225 (78.7)	23(8.1)	38(13.2)	
<b>Place for blood test</b>				0.000
Community hospital with living	41(68.3)	5(8.3)	14(23.4)	
Other community hospital	4(57.1)	2(28.6)	1(14.3)	
Government hospital such as university, municipal hospital	36(90)	0	4(10)	
Province, regional hospital	15(88.2)	1(2.9)	1(2.9)	
Private hospital	49(80.3)	5(8.2)	7(11.5)	
Private clinic	44(77.2)	7(12.3)	6(10.5)	
<b>Keep secrets form government</b>				0.4
Yes believe	159(80.7)	13(6.6)	25(12.7)	
Not believe	36(73.5)	5(10.2)	8(16.3)	
Not sure	38(73.0)	7(13.5)	7(13.5)	
<b>Keep secrets from private hospital</b>				0.08
Yes believe	136(82.0)	15(9.0)	15(9.0)	
Not believe	38(74.5)	2(3.9)	11(21.5)	
Not sure	59(72.8)	8(8.9)	14(17.3)	
<b>Sex with male</b>				0.05
Yes	204(77.8)	21(8.1)	37(14.1)	
No	29(80.6)	4(11.1)	3(8.3)	
<b>Variables</b>	<b>Yes</b>	<b>No</b>	<b>Not sure</b>	<b>P-value</b>
<b>Sex with female and condom used</b>				0.003
Always used	57(86.4)	3(4.5)	6(9.1)	
Sometime	52(91.3)	2(3.5)	3(5.2)	
None	23(88.5)	2(7.7)	1(3.8)	
<b>Free for blood test</b>				0.000
Test	18(69.2)	6(23.1)	2(7.7)	
Not test	2(25.0)	3(35.5)	3(35.5)	

## Conclusion

Access to population of males who have sex with male remains a problem. Therefore it is difficult to access their problems because there were special closed group and were varied among sub-groups such as sex worker, guy, male who have sex with both male and female groups. In this study researcher found that in Thailand, the highest proportion of MSM both working and clients in entertainment placed aged between 20 to 30 years old (61.7%) and finished mostly secondary school (33.8%). Their knowledge of HIV and AIDS were quite high. However, only about 70 % of them usually using condom when had sex with male and even lower when sexual intercourse had with female (44.3 %). In addition, reasons for not using condom were they did not want to used, could not access condom, and they thought they had no risk to infected. Less than 70 percent of knew about VCT while 72.1 % aware of ART %), and want to get ART if they were infected. Almost 80 percent of these MSM



intended to get VCT with in the next 12 months for the reasons of having high risk (56.6%). Some MSM will not take VCT for fear of stigmatization; especially in the South it was as high as 25 %. MSM willing to pay up to 800 baht (median of 500 baht), consequently, the policy of government for free ART induced the intension for MSM to get VCT. It was found that older aged MSM were more likely to get VCT than younger group. Association was found among income, marital status and MSN had sexual intercourse with female with intension to get VCT.

There were some consideration for study and working with this group as follow:

- 1 Address the specific behaviors that caused infections and provide specific services and commodities to reduce those risks is essential in HIV prevention.
2. Information on services both on VCT and ART is important for HIV control.
3. Availability of condom affected risk behavior of HIV.
4. Health education such as, HIV prevention, condom used, VCT and ARV project should be available and accessed to these specific groups,
5. Ensure that the social, political and security environment supports the provision of appropriate HIV/AIDS services to those most at risk, allowing them to access to appropriate care.

In conclusion government policy, health education program contributed to risk behaviors of HIV infection of the people. As a result, providing good prevention, care and treatment program should make a safer life and reduce the risk of HIV/AIDS in normal MSM and extend survival time if infected. There is nothing inevitable about the spread of HIV, the right prevention services for the right people can change the course of HIV epidemics in MSM.

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