

Perception on HIV Voluntary Counseling and Testing (VCT) and Antiretroviral Treatment (ART) Program of the general Thai population

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Introduction

The first HIV/AIDS case was reported in Thailand in 1984. Since then the situation of HIV/AIDS worsen during the past three decades. New information and knowledge were obtained from experiences with the disease and widely used to combat this significant public health problem. Measures including prevention and control of the disease and cares of patients were further developed and implemented over time. Among preventive measures, the use of condoms seemed to provide impressive results. However, as the epidemic expanded from affecting not only homosexual but also to a large extend heterosexual, and therefore spread from a specific group to the general population and from adults to teenagers as well, and since in addition the accessibility of teenagers to get condoms was not as good as it should be, HIV voluntary counseling and testing seem to be an alternative effective measure.

Based on evidences reported by several observational and controlled studies, there is currently a consensus about the efficacy and cost-effectiveness of the VCT intervention for HIV prevention and care. VCT has become or is being advocated as major component of any comprehensive national AIDS control in many countries. Major roles recognized for HIV VCT include enabling HIV VCT clients to cope and make personal decision related to HIV/AIDS, assisting HIV VCT clients to initiate and maintain preventive behaviors, serving an early referral and entry point to HIV care and support services, and to other prevention services, including family planning and helping to combat stigma and discrimination in the community.

Objective

This survey was conducted to investigate mainly the perception of the general Thai population about HIV voluntary counseling and testing (VCT) and antiretroviral treatment (ART) program.

Methodology

Three thousands, two hundreds and eight subjects were cluster randomly recruited from 8 purposive selected provinces. In each region one for low and one for high prevalence of HIV/AIDS infection rates were selected. Data were collected by means of questionnaires. The field workers were trained to avoid errors. Editing of the filled in questionnaires was performed in the field. Data entry was done using the ScanDevet commercial computerized program. The information about general characteristics, perception, knowledge and behaviors of those investigated was assessed by statistical means and are given in a descriptive fashion as mean, standard deviation and percentage using Minitab for Window release 12.2.

Results

General characteristics

There were 3208 subjects investigated (Table 1). The means for age ranged from 37.4 to 44.5. More female than male participated in all regions. The majority of them were married (70.8-76.3%). The means of number of household members ranged 4.1 to 4.7. The presence of children aged < 15 years and elderly aged > 60 years was found to be highest in the northeastern region. However, there was not much different on the number of child and elderly in each family.

Regarding accessibility to health care services, most Thai people resided within 3 kilometers to peripheral health care facilities (primary care unit/health center) and within 10 kilometers to the hospitals, except northeast people which their residences were far from the private services.

Table 1. General characteristics of general Thai subjects according to region

	Percentage				
	Central N=760	North N=813	Northeast N=724	South N=911	Total N=3208
Age in years (mean, SD)	37.4 (11.2)	39.8 (11.4)	44.5 (14.5)	38.7 (11.4)	40.0(12.4)
Sex					
Male	47.3	43.3	44.3	46.4	45.4
Female	52.7	56.7	55.7	53.6	54.6
Marital status					
Single	22.3	20.3	12.0	19.7	18.8
Married	70.8	71.7	76.6	73.8	73.2
Widow	3.2	3.0	7.8	2.8	4.0
Divorce	2.4	2.5	2.4	1.5	2.2
Separate	1.3	2.5	1.2	2.2	1.8
Number of household member (mean, SD)	4.3 (1.7)	4.1 (2.2)	4.7 (1.9)	4.5 (1.8)	4.4 (1.8)
Presence of child aged <15 years and/or elderly age > 60 year)	66.8	69.6	76.2	70.4	70.4
Number of child aged <15 years old (median (Q1-Q3))	1.6(0.8)	1.5(0.9)	1.6(0.7)	1.6 (0.8)	1.6 (0.8)
Number of elderly aged >=60 years old (median (Q1-Q3))	1.4(0.6)	1.3(0.6)	1.4(0.5)	1.3 (0.5)	1.3 (0.6)
Distance between residence to public primary care unit (in Km) (median (Q1-Q3))	2(1-3)	1 (1-3)	1 (1-3)	2 (1-3)	2 (1-3)
Distance between residence to nearest public hospital (in Km) (median (Q1-Q3))	7(4-12)	6 (2-10)	7 (3-20)	5 (3-12)	6 (3-12)
Distance between residence to nearest private hospital (in Km) (median (Q1-Q3))	10 (3-20)	10 (1-40)	36 (14-90)	10 (3-34)	13 (3-36)
Distance between residence to nearest private clinic (in Km) (median (Q1-Q3))	2 (1-7)	2 (1-7)	6 (1-18)	3 (1-9)	3 (1-9)

Perception of VCT and health care facilities.

Half of the Thai population had known VCT (ranged from 49.6 to 55.9%) (Table 2). The highest percentage was found in the northeast people. Only 26% of the northeast people had been ever tested for HIV/AIDS, however, the median number of being blood testing was highest among the northeast people (1.6 times). The lowest was reported in the southern people (1.2 times). Expense of blood testing for HIV/AIDS was highest among the central people (300 Baht) whereas the other regions were 200 Baht.

The number of subjects had ever been tested for HIV/AIDS ranged from 9 to 17.8%. The proportion was lowest for northern Thai people (9.6%) and highest for northeastern Thai people (17.8%). The reasons of being tested differed from region to region. The most commonly mentioned reason was that women were pregnant. Among the central Thai people the major reason for being tested was that they need the test results for job applications whereas the northern Thai people needed a test result for job applications and

for subscribing for a life insurance and being members of a cooperative. In the northeast the people being tested based on their own will and decision and in the south the people were tested along a general health examination.

Table 2. Blood testing for HIV/AIDS of general Thai population according to region

	Percentage				
	Central N=760	North N=813	Northeast N=724	South N=911	Total N=3208
Known VCT	49.6	52.5	55.9	55.1	53.3
Ever testing for HIV/AIDS	40.7 N=309	32.0 N=260	26.4 N=191	26.5 N=243	31.2 N=1104
Number of being blood testing for HIV/AIDS during last year (mean (SD))	1.3(0.7)	1.4 (1.4)	1.6(1.5)	1.2 (0.5)	1.3 (1.0)
Expense (in Baht) for last HIV/AIDS blood testing (median (Q1-Q2))	300(200-583)	200 (100-300)	200(150-800)	200 (30-500)	200 (157.5-500)
Reason for being tested					
Self-decision	12.9	9.6	17.8	11.1	12.9
Job application	20.4	7.7	8.4	6.2	11.3
Life insurance/cooperative	8.1	23.5	6.3	0.8	9.8
Married	4.5	4.6	4.2	4.5	4.5
Pregnancy	22.0	24.2	30.4	39.5	28.4
Health examination	11.0	14.2	14.1	21.8	15.0
Health personnel' s suggestion	1.6	2.3	2.6	1.2	1.9
Hospitalized patient	6.8	3.5	6.8	4.9	5.4
Blood donor	2.3	6.9	5.2	4.9	4.6
Others	10.4	4.6	3.1	5.8	6.2
	N=760	N=813	N=724	N=911	N=3208
Plan to be tested next year					
Tested	20.8	19.3	18.8	19.6	19.6
Not tested	66.6	65.7	60.5	63.8	64.2
Not sure	12.6	15.0	20.7	16.6	16.2
Tested under ART program					
Tested	65.3	57.1	64.8	65.2	63.1
Not tested	22.8	28.9	19.1	22.5	23.4
Not sure	11.9	14.0	16.2	12.3	13.5

Most of the general Thai population had a positive attitude toward VCT as indicated by high numbers of individuals being tested under the ART program and who did agree to implement VCT at all hospital as well as their willingness to suggest to others to undergo testing (Table 3). However only about half of those being asked (49.6-55.9%) had known VCT and 51.5-77.0% had known ART. It seems that VCT is less well known than ART (Table 2 and Table 6).

Table 3. Acceptability of VCT of the general Thai population according regions

	Percentage				
	Central N=755	North N=810	Northeast N=716	South N=904	Total N=3185
VCT to all health care service clients but who can refuse to be tested					
Agree	94.4	82.8	91.2	91.6	90.0
Not agree	8.6	6.0	2.5	5.3	4.4
Not sure	2.0	11.1	6.3	3.1	5.6
Willing to suggest VCT to others	74.9	76.4	84.4	82.7	79.5

Among those who did not want to pay for VCT, 22.5-38.3% was willing to be tested if there was no fee (Table 4). The majority preferred to undergo VCT at the residential community hospital with the exception of the people in the central region, who wanted to be tested at a private hospital. The common reason was that the health service facility was easy-to-access. The distance between residence and the selected health facilities was ranged from 6 to 8 kilometer and the cost was ranged from 20 to 30 Baht. Beside that, it is also notified that a considerable number of the northeast people chose the mentioned health facilities because of 30-Baht UC scheme (17.3%), whereas the others chose because of good quality.

Table 4. Attending VCT service among general population who don't want to pay according to region

	Percentage				
	Central N=194	North N=284	Northeast N=303	South N=269	Total N=1681
Willing to be tested if it is free	23.7	22.5	38.3	29.4	29.1
	N=614	N=593	N=531	N=733	N=1931
Place to attend VCT service					
Residential community hospital	18.4	47.6	73.4	45.2	45.4
Non-residential community hospital	1.1	3.2	0.9	1.1	1.5
Other public hospital	19.9	16.5	5.3	5.7	11.8
Regional/provincial hospital	19.9	8.1	12.2	23.9	16.5
Private hospital	29.0	14.0	2.3	13.4	15.1
Private clinic	9.8	6.1	3.4	7.6	6.9
Others	2.9	4.6	2.4	1.8	2.8
Reason to choose that place					
Easy to access	53.1	64.6	63.5	53.6	58.2
Confidential	3.4	2.9	1.7	4.2	3.1
Familiar	2.6	2.5	0.8	3.9	2.5
Payable	2.9	2.7	0.8	1.8	2.1
30-baht UC scheme	5.7	8.3	17.3	11.4	10.5
No acquaintance	0.6	2.2	0.6	1.1	1.1
Good quality	14.8	8.3	10.2	14.3	12.1
Quick service	8.1	3.4	3.6	6.2	5.4
Others	8.6	5.2	1.7	4.0	5.0
Distance between residence to selected health service facilities (median(Q1-Q3))	8(3-17)	6 (2-19)	7 (2-20)	7 (3-20)	7 (3-19)
Cost for transportation from residence to selected health service facilities (median(Q1-Q3))	20(7-50)	20 (10-40)	20 (20-50)	30 (20-50)	20 (10-50)

Thai people trusted public health care services more than private health care services in all regions as far as confidentially is concerned (Table 5). The proportion of people who trust health services was highest for the northeastern Thai people (69.7%), while the proportion was lowest in the south.

Table 5. Trust on keeping information confidential by comparing public with private health care services according to region

	Percentage									
	Central (N=760)		North (N=813)		NE (N=724)		South (N=909)		Total (N=3206)	
	Public	Private	Public	Private	Public	Private	Public	Private	Public	Private
Trust	63.7	56.2	61.5	53.4	69.7	56.5	61.2	51.6	63.7	54.2
Not trust	14.1	13.9	15.6	14.6	13.0	14.1	18.0	19.1	15.4	15.6
Not sure	22.2	29.9	22.9	32.0	17.3	29.4	20.8	29.3	20.9	30.2

Perception and knowledge of the general Thai population about HIV/AIDS, anti-retrovirus treatment (ART) and ART program service

From the general Thai population still 4.7 to 10.2% believe that HIV/AIDS can be cured (Table 6). A majority of the general Thai population known ART, and know that ART can prolong life. However, 7.3-14.4% had no idea about the benefit of ART whereas 0.5-2.4% believed that ART can cure HIV/AIDS. Most of the general Thai population knows that ART is available at regional/provincial hospitals and at public hospitals. However, some of them believe that ART is available at Health Centers. This misunderstanding is particularly common among northern Thai people (7.0%). A considerable proportion of the general Thai population had no idea where ART is available (13.9-39.4%). The highest proportion was found among those live in the central region even though they did know best the ART.

Table 6. Perception on HIV/AIDS, ART (anti-retrovirus treatment) and ART program of general Thai population (in percent) according to region

Perception	Percentage				
	Central N=755	North N=813	Northeast N=724	South N=909	Total N=3201
AIDS is curable	4.7	6.6	5.0	10.2	6.8
Known ART	77.0	62.5	51.5	65.6	64.3
	N=586	N=507	N=374	N=601	N=2068
Benefit of ART					
Curing AIDS	1.2	2.4	0.5	1.0	1.3
Prolong life time	86.4	87.2	83.5	82.5	84.9
Year of prolong life (mean(SD))	6.5(4.0)	7.3 (4.6)	7.8 (4.6)	7.1(5.7)	7.1 4.8
Not prolong life time	2.0	3.2	1.6	3.3	2.6
Don't know	10.4	7.3	14.4	13.1	11.2
Known ART program	47.5	58.7	55.1	43.5	50.4
Place where to get ART					
Residential community hospital	17.7	54.3	64.4	43.0	43.4
Non-residential community hospital	7.4	23.0	17.8	22.8	17.7
Other public hospital	24.8	29.0	23.6	35.4	28.2
Regional and provincial hospital	36.2	24.3	44.7	62.7	40.8
Health center	3.2	7.0	1.9	3.0	4.0

Private hospital	3.9	10.0	6.3	14.4	8.7
Private clinic	1.1	4.3	0.	3.4	2.5
Don't know	39.4	22.0	13.9	21.7	24.8
Others	3.2	1.7	1.4	0	1.5

Risk and sexual behaviors

A low proportion of the general Thai population admitted to have sex with commercial sex worker (1.6-2.7%) and/or have a regular sex partner (2.2-3.8%) besides their spouses (Table 7). The proportion who admitted to have extramarital sex was highest in the central region. Condom use was lowest while having sex with RSP in comparison with CSW (Table 8). Among those who did not use condoms gave as reasons that at the time condoms were not accessible and that they were completely drunken the time they had sex with CSW, and those having sex with RSP thought that there was no risk to get the infection and that condoms were not accessible (Table 9).

Table 7. Percentage of the general Thai population having sex with commercial sex worker (CSW), with regular sex partner (RSP) according to region and drugs use

Partner	Percentage				
	Central N=760	North N=813	Northeast N=723	South N=911	Total N=3207
CSW	2.6	1.6	2.2	2.9	2.3
Number of female CSW (median (Q1-Q2))	2(1-3)	1.5 (1-2.2)	3 (2-8.8)	2(1-3.8)	2(1-3)
Number of male CSW (median (Q1-Q2))	1*	2 *	1*	0	1-1.75
RSP	3.8	3.2	2.2	2.9	3.0
Number of female RSP (median (Q1-Q2))	1(1-2)	1(1-2)	1 (1-2)	1(1-2)	1(1-2)
Number of male RSP (median (Q1-Q2))	1*	4*	1*	1(1-2)	1(1-1.5)
Drug uses (injection)	0.7	0.5	2.4	1.4	1.2

* there was only one value

Table 8. Percentage of condom use with commercial sex worker (CSW) and with regular sex partner (RSP) according to region

Condom use	Percentage									
	Central		north		northeast		South		Total	
	CSW N=20	RSP N=30	CSW N=13	RSP N=27	CSW N=15	RSP N=16	CSW N=25	RSP N=26	CSW N=73	RSP N=99
Last year every time	85.0	63.3	84.6	74.1	73.3	75.0	76.0	76.9	76.3	71.7
Sometime/never	15.0	33.7	15.4	25.9	26.7	25.0	24.0	24.1	23.7	28.3
Last sexual intercourse										
Use	90.0	68.4	92.3	72.7*	80.0	83.3	87.5	80.8	88.7	74.7

* n=11

Table 9. Reasons for no condom use with commercial sex worker (CSW) and regular sex partner (RSP) in general Thai population according to region

Condom use	Number of subject									
	Central		north		northeast		South		Total	
	CSW N=2	RSP N=6	CSW N=1	RSP N=3	CSW N=3	RSP N=3	CSW N=3	RSP N=5	CSW N=9	RSP N=17
Dislike	0	0	0	0	0	0	1	2	1	2
no risk	0	3	1	1	2	3	2	1	5	8
not preventable	0	0	0	0	0	0	0	0	0	0
not accessible	1	1	0	2	0	0	0	1	1	4
waste money	0	0	0	0	0	0	0	0	0	0
unconscious	1	2	0	0	0	0	0	0	1	2
AIDS is curable	0	0	0	0	0	0	0	0	0	0
partner not agree	0	0	0	0	1	0	0	0	1	0
Others	0	0	0	0	0	0	0	1	0	1

Regarding the perception about the risk to be infected with HIV/AIDS, over half of the respondents believe that they have no chance to get HIV/AIDS infection during their life time (Table 10). The highest proportion was reported among the northeast people. Meanwhile, only 0.7-1.3% thought that they were at high risk to get the infection and 6.8-9.4% was not sure about this.

Table 10. Perception on risk to get HIV/AIDS in their life time among general Thai population according to region

Risk	Percentage				
	Central N=759	North N=810	northeast N=724	South N=911	Total N=3204
No risk at all	52.3	64.6	71.1	60.4	62.0
Low risk	37.8	27.3	18.8	29.2	28.4
High risk	1.3	0.7	1.0	0.9	1.0
Already infected	0.3	0.6	0.0	0.1	0.25
not sure	8.3	6.8	9.1	9.4	8.4

Willing to pay for voluntary counseling blood testing.

In general, the percentage of people willing to pay gradually decreased when the fee increased (Table 11). This is clearly shown in the northeastern region. The percentage sharply decreased from 61.2% (initial fee

was 50 Baht) to 19.5% (fee was 400 Baht) and the percentage of the people in the central region willing to pay decreased from 83.2 to 48.7.

The median affordable fee varied according to an initial charged fee, except for the northeastern people. The fee mentioned was 100 baht regardless about the initial fee charged (Table 12). Comparing between regions, in the central people were willing to pay the highest fee in comparison with the people in the northeast, who were willing to pay a fee, which was the lowest mentioned from all other respondents.

Perception and demand on VCT and ART program according to area, sex and age.

The results indicate that people living in high incidence rate of HIV/AIDS perceived VCT and ever tested for HIV/AIDS than people living in low incidence rate (Table 13). In addition, experiencing on VCT was reported higher in young adults aged less than or equal to 30 years old (36.4%) comparing to adults aged more than 30 years old (29.4%). However, there is no significant different between male and female.

The reasons for attending VCT were varied according to area, sex and age. It was remarked that almost 50% of female subjects attending VCT because of pregnancy status.

There was no statistically significant difference on number of subjects attending VCT last years according to area, sex and age. However, people living in high incidence area (23.8%), male (21.8%) and young adults (22.7%) intended to attend VCT in the coming year comparing to low incidence area (15.9%), female (17.9%) and adults (18.6%), respectively.

In addition, people living in the high incidence area (66.5%) were willing to attend VCT in the condition of accessibility of ART program higher than people living in the low incidence area (59.9%). Even though there were not much differences of acceptability to test all health facility clients according to area, sex and age but the people living in high incidence area were more likely to support the mandate. Furthermore, they were also willing to suggest others to be tested for HIV/AIDS.

Around 30% of the people who deny attending VCT were willing to be tested if there is no charge for the test. And, there was no statistically significant difference on willing to attend VCT either they are living in high or low incidence area, male or female and young adults or adults.

People living in the incidence area perceived antiretroviral drug more than ones living in low incidence area. And among those who know about antiretroviral drug, ones living in high incidence area also knew ART program more than ones living in low incidence area. In addition young adults also knew more than adults statistically significant.

Regarding to perception of chance to be HIV infected, it is logically found that people living in high incidence area perceived that they are risk to be HIV infected than people living in low incidence area. Similarly, male (34.0%) and young adults (39.1%) also perceived that they are risk to be HIV-infected comparing to female(24.4%) and adults (25.1%), respectively.

Table 11. Percentage of subjects willing to pay for blood testing of various fees according to regions

given fee (Baht)	Willing to pay for a given fee					Willing to pay for half of a given fee					Willing to pay for double of a given fee				
	Central	North	NE	South	Total	Central	North	NE	South	Total	Central	North	NE	South	Total
50	83.2 (n=155)	66.3 (n=166)	61.2 (n=152)	70.3 (n=182)	70.2 (n=655)	87.8 (n=131)	79.1 (n=110)	70.6 (n=92)	90.7 (n=129)	83.1 (n=462)	0 (n=24)	8.9 (n=56)	23.1 (n=65)	16.1 (n=56)	14.4 (n=201)
100	77.1 (n=153)	60.6 (n=175)	54.9 (n=144)	67.9 (n=193)	65.3 (n=665)	81.7 (n=120)	59.8 (n=107)	64.2 (n=81)	85.5 (n=131)	74.3 (n=439)	18.2 (n=33)	4.4 (n=68)	13.0 (n=69)	4.8 (n=62)	9.0 (n=232)
150	66.7 (n=150)	51.6 (n=159)	42.8 (n=152)	72.3 (n=177)	58.8 (n=638)	66.0 (n=100)	45.1 (n=82)	51.6 (n=64)	74.2 (n=128)	61.8 (n=374)	8.2 (n=46)	19.5 (n=77)	24.4 (n=90)	13.2 (n=53)	17.9 (n=266)
200	61.9 (n=147)	44.2 (n=154)	34.7 (n=147)	67.9 (n=184)	53.0 (n=632)	50.6 (n=91)	36.8 (n=68)	56.9 (n=51)	70.3 (n=128)	56.2 (n=338)	26.8 (n=56)	15.1 (n=86)	25.2 (n=99)	15.0 (n=60)	20.6 (n=301)
400	48.7 (n=152)	32.1 (n=159)	19.5 (n=128)	53.4 (n=174)	39.6 (n=613)	43.2 (n=74)	23.5 (n=51)	42.3 (n=26)	60.2 (n=93)	45.5 (n=244)	24.4 (n=78)	13.0 (n=108)	23.0 (n=100)	22.6 (n=84)	20.3 (n=370)
all	67.6 (n=757)	51.3 (n=813)	43.3 (n=723)	66.5 (n=910)	57.7 (n=3203)	69.2 (n=516)	53.8 (n=418)	60.5 (n=314)	77.2 (n=609)	66.9 (n=1857)	18.3 (n=240)	12.7 (n=395)	22.2 (n=423)	14.9 (n=315)	17.1 (n=1373)

* NE stands for northeast

Table 12. Percentage of subjects willing to be paid-blood testing for HIV/AIDS and median and Q1-Q3 of affordable fee for testing according region

Given fee (Baht)	Willing to be paid-blood testing for HIV/AIDS (percent)					Median of affordable fee (upper limited fee) (in Baht)				
	Central	North	NE	South	Total	Central	North	NE	South	Total
50	83.9 (n=155)	69.9 (n=166)	65.6 (n=151)	73.1 (n=182)	73.1 (n=654)	200 (100-500) (n=129)	150 (50-300) (n=116)	100 (50-200) (n=102)	200 (100-325) (n=133)	100 (100-300) (n=480)
100	81.7 (n=153)	63.4 (n=175)	57.0 (n=142)	70.3 (n=192)	68.3 (n=662)	200 (200-500) (n=125)	200 (100-300) (n=110)	125 (50-200) (n=80)	200 (100-350) (n=137)	200 (100-300) (n=453)
150	72.0 (n=150)	67.9 (n=159)	62.4 (n=149)	75.7 (n=177)	69.8 (n=635)	300 (165-500) (n=109)	175 (100-300) (n=108)	100 (50-200) (n=95)	300 (150-500) (n=134)	200 (100-500) (n=446)
200	73.5 (n=147)	67.5 (n=154)	63.9 (n=144)	75.0 (n=184)	70.3 (n=629)	250 (200-500) (n=111)	200 (100-300) (n=104)	100 (50-300) (n=92)	300 (200-500) (n=138)	200 (100-500) (n=445)
400	67.6 (n=151)	59.2 (n=159)	61.6 (n=125)	76.9 (n=173)	66.8 (n=608)	500 (300-1000) (n=103)	400 (100-500) (n=94)	100 (50-200) (n=79)	400 (137.5-500) (n=134)	400 (100-500) (n=410)
All	75.8 (n=756)	65.6 (n=813)	62.2 (n=711)	74.1 (n=908)	69.7 (n=3188)	300 (150-500) (n=574)	200 (100-300) (n=532)	100(50-200) (n=449)	200 (150-500) (n=676)	200 (100-450) (n=2234)

Table 13. Percentage of subjects' perception and demand on VCT and ART program according to area, sex and age.

	Percentage											
	Incidence			Sex		Age (in year)				Province		
	High	Low	p-value	male	female	p-value	<=30	>30	p-value	Rayong	Chiangmai	Trang
	(n=1512)	(n=1693)		(n=1452)	(n=1750)		(n=816)	(n=2389)		(n=409)	(n=422)	(n=446)
Known VCT	56.7	50.3	<0.001	53.6	53.1	0.780	53.4	53.3	0.965	54.0	56.6	51.7
Ever testing for HIV/AIDS	39.3	23.9	<0.001	29.6	32.5	0.071	36.4	29.4	<0.001	46.9	44.6	27.9
Reason for being tested	(n=594)	(n=405)	<0.001	(n=429)	(n=569)		(n=297)	(n=702)		(n=192)	(n=197)	(n=130)
Self-decision	13.8	11.6		17.8	9.3		8.1	15.0		14.1	10.7	11.5
Job application	12	10.4		17.3	6.8		17.2	8.8		22.4	6.1	5.4
Life insurance/cooperative	14.1	3.5		11	9		5.4	11.7		12.5	29.4	0.8
Married	4.2	4.9		6.1	3.2		4.0	4.7		4.2	4.6	3.8
Pregnancy	24.9	33.3		0	49.2		41.4	22.8		19.3	20.3	39.2
Health examination	15	15.1		20.4	11.1		8.1	17.9		9.4	14.2	24.6
Health personnel' s suggestion	2.2	1.5		2.4	1.6		0.3	2.6		1.0	2.5	1.5
Hospitalized patient	4	7.4		7.1	4.2		3.7	6.1		6.2	2.5	3.1
Blood donor	3.7	5.9		8	2.1		4.7	4.6		2.6	4.6	5.4
Others	6.1	6.4		9.9	3.5		7.1	5.8		8.3	5.1	4.6
Tested during the past year	38.1	36.8	0.68	40	35.8	0.167	43.0	35.2		39.1	34.5	39.4

	Percentage											
	Incidence		p-value	Sex		p-value	Age (in year)		p-value	Province		
	High	Low		male	female		<=30	>30		Rayong	Chiangmai	Trang
Plan to be tested next year	(n=1512)	(n=1691)	<0.001	(n=1452)	(n=1749)	0.001	(n=815)	(n=2388)	<0.001	(n=409)	(n=442)	(n=466)
Tested	23.8	15.9		21.8	17.9		22.7	18.6		23.7	22.6	23.0
Not tested	62.4	65.8		60.7	67.1		57.9	66.3		62.1	66.1	61.8
Not sure	13.8	18.3		17.5	15.0		19.4	15.1		14.2	11.3	15.2
Tested under ART program	(n=1512)	(n=1692)	<0.001	(n=1452)	(n=1750)	0.986	(n=815)	(n=2389)		(n=409)	(n=442)	(n=466)
Tested	66.5	59.9		63	63.2		66.9	61.7		61.9	59.3	73.2
Not tested	24.9	22.1		23.6	23.3		17.7	25.4		23.9	34.6	19.9
Not sure	8.6	18		13.5	13.5		15.4	12.9		14.2	6.1	6.9
VCT to all health care service clients but who can refuse to be tested	(n=1502)	(n=1678)	<0.001	(n=1439)	(n=1739)	0.666	(n=806)	(n=2374)	0.887	(n=409)	(n=440)	(n=466)
Agree	92.6	87.7		89.5	90.4		90.4	89.8	n.s.	95.4	90.2	91.8
Not agree	5.3	3.6		4.7	4.1		4.2	4.5		2.9	7.7	5.4
Not sure	2.1	8.7		5.8	5.5		5.3	5.7		1.7	2.0	2.8
Willing to suggest VCT to others	81.3	77.9	0.018	79.2	79.8	0.712	80.6	79.2	0.383	74.4	77.8	87.7
Willing to be tested if it is free	(n=402)	(n=646)		(n=474)	(n=573)		(n=213)	(n=835)		(n=101)	(n=118)	(n=105)
	30.6	28.2	0.401	30.6	27.9	0.344	30.0	28.9	0.734	17.8	27.1	30.5

	Percentage											
	Incidence			Sex		Age (in year)				Province		
	High	Low	p-value	male	female	p-value	<=30	>30	p-value	Rayong	Chiangmai	Trang
	(n=1509)	(n=1683)		(n=1450)	(n=1740)		(n=813)	(n=2379)		(n=407)	(n=442)	(n=465)
Known ART	68.5	60.5	<0.001	64.6	64.1	0.782	68.0	63.0	0.01	79.6	67.9	65.0
	(n=1034)	(n=1018)		(n=942)	(n=1128)		(n=555)	(n=1516)		(n=325)	(n=300)	(n=303)
Known ART program	53.7	47	0.002	48.1	52.2	0.061	42.3	53.3	<0.001	54.8	64.0	43.9
Chance to be infected												
No risk at all	62	61.1	<0.001	57.8	65.5	<0.001	49.4	66.3	<0.001	48.8	64.4	66.5
Low risk	29.6	27.3		33.2	24.4		38.0	25.1		41.9	31.5	24.0
High risk	1.2	0.8		0.8	1.1		1.1	0.9		1.2	0.7	1.5
Already infected	0.2	0.2		0.2	0.3		0.1	0.3		0.5	0.4	0.0
not sure	6	10.6		8	8.7		11.3	7.4		7.6	3.0	8.0

Conclusion

Thai people in general had a positive attitude towards VCT at hospitals. They trust public health facilities more than private health facilities as far as confidentiality is concerned. However, people in the central region preferred to utilize private facilities more than public health facilities. Accessibility was the main determinant for the selection of facilities for testing. About one fourth of the people were tested for HIV/AIDS. The common reason was that women were tested in the course of pregnancy, followed by the need to have a test result for a job application and to subscribe to a life insurance/cooperative. People in general know about anti-retrovirus treatment (ART) more than VCT as there was a campaign focusing on the ART program which used the slogan "Access to All" to publicize the government policies.

Risky sexual behavior and drug use seem to be low among the general Thai population. However, condom use was found to be low when having sex with a regular partner compared to commercial sex workers.

Generally, Thai people are willing to pay for HIV/AIDS blood testing. The fee should be 100-200 Baht. However, not all of them were willing to be tested. And the willingness to be tested was higher for the central and southern people followed by the people in the north. The willingness of people in the northeast to be tested was lowest regardless of the fact that many migrants, who are generally known as risk group, are staying in the northeast.

It should also remark that vaccination trial has been implemented in Rayong province, one of the studied provinces. Comparing Rayong to other high incidence rate provinces, Chiangmai and Trang, there were not much differences on perception of VCT, experiencing on VCT, testing for HIV during the past 12 months and intention of being tested in the coming year, testing under ART program, supporting testing for all health facilities clients. However, the people living in Rayong seem to know about antiretroviral drug and perceived risk more than people living in Chiangmai and Trang.

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