

## **CHAPTER VI**

### **CONCLUSION AND RECOMMENTATIONS**

#### **6.1 Conclusion**

A cross-sectional descriptive, mixed method design was applied to meet the following objectives of the present study: 1) to determine the prevalence of use and intention to use HCT services among sexually experienced Thai youth: 2) to examine the predictors of use and intention to use HCT services among in-school Thai youth and 3) to explore Thai youth expectations regarding the characteristics of YFHCT services.

All of the participants were recruited from 6 high schools and 3 vocational schools in Bangkok. In all, 2,945 youth were invited to participate by using online questionnaires at school computer labs and 2,574 questionnaires were returned (87.40% by invited) via the internet. Finally, 2,536 questionnaires met the inclusion criteria for the study (86.10% of the recruits invited to participate). All participants (N= 2,536) consisted of 1,669 (65.8%) high school students, and 876 (34.2%) vocational school students, ranging in age between 15-24 years (mean =17.10 SD=1.3.96).

Among all of the participants, 738 youth reported having had sexual experience (prevalence = 30.88%). Of those who were sexually experienced, 159 (20.57 %) had sexual debut when aged less than 15 years. More than half of the vocational youth and 1 in 5 of the high school youth were sexually experienced. The high prevalence of sexual experience found in LGBT, males and youth living without parents with 20% of those who were sexually experienced and had sexual debuts at ages less than 15 years.

Among sexually experienced youth, 4 in 5 had been sexually active during the past year; 1 in 5 had used condoms consistently while 1 in 3 had had more than one sex partner; however, half of them perceived no risk for HIV infection and only 3 in 100 were able to correctly answer all of the questions about HIV/AIDS.

Unfortunately, only 143 sexually experienced youth had ever used HCT services (18.26%), the majority of whom were males, vocational students and practiced sexual risk behaviors. Of those who never used HCT services (n=640), however, 474 (74.07%) intended to use HCT services and 354 (53.91%) intended to use HCT services without any conditions.

Among those who had used HCT services (n=143), 66.43% (n= 95) had used the services once in their lifetimes, 8.39% (n=12) had used the services more than 3 times and 96.50% (n=138) reported they had received and were aware of their blood test results. Public hospitals and mobile HCT services were the most frequently used HCT service sites.

Binomial multiple logistic regression was used to examine the predictors of HCT service use while multinomial multiple logistic regression intention was used to examine HCT service use.

The findings of the binomial multiple logistic regression revealed that the HCT service use increased among those who were informed about HCT services and knew the location of HCT services (OR =4.373, 95% CI=2.319-8.249,  $p<.001$ ), were about to correctly answer all 9 questions on Knowledge about HIV (OR =3.105, 95% CI=1.289-7.482,  $p=.012$ ), had one sex partner in a past year and used condoms consistently (OR =356, 95 CI=1.158-4.479,  $p=.018$ ), had multiple sex partners without consistent condom use (OR =1.961, 95 CI=1.033 -3.722,  $p=.030$ ) and had higher scores on attitude toward HCT (OR =1.029, 95 CI=1.010-1.049,  $p=.003$ ). However, gender, perceived HIV stigma, level of risk for HIV perception, willingness to pay and YFHCT service expectations were excluded.

Moreover, the multinomial multivariate logistic regression analysis showed the predictors of intention to use HCT services among sexually experienced Thai youth who had never used HCT services. The Nagelkerke's  $R^2$  showed .262 or 26.2% of the variance in intention to use HCT services to be predicted by variables (chi square =164.669, df=38,  $p<.001$ ). The unconditional intention to use HCT services was raised with higher scores on expectations for YFHCT services (OR =1.020, 95%CI=1.012-1.0259,  $p=.001$ ), higher scores on attitude toward HIV testing (1.038, 95%CI= 1.0186-1.062,  $p<.001$ ), perceived high risk for HIV infection compared to perceived no risk for HIV infection (OR =2.452, 95%CI= 1.133-5.307,  $p$

=.023), Having multiple sex partners and using condoms consistently compared to no sexual activity during the past year (OR=3.714, 95%CI=1.354-10.185,  $p<.05$ ), willingness to pay for services (OR=3.453, 95%CI=2.138-5.579,  $p<.001$ ), and having HCT information and knowing where the HCT services are located compared to never being informed about HCT services and not knowing where HCT services are located (OR =2.348, 95%CI=1.387-3.977,  $p=.001$ ). However, gender, Knowledge about HIV and perceived HIV stigma could not predict unconditional intention controlling for no intention among youth who were sexually experienced.

Finally, conditional intention to use HCT services escalated with higher scores on expectations for YFHCT services (OR =1.018, 95%CI=1.008-1.028,  $p<=.001$ ), perceived low risk for HIV infection controlling for no risk perception (OR =1.892, 95% CI=1.086-63.312,  $p=.025$ ) and willingness to pay (OR=2.959, 95%CI=1.649-5.308,  $p<.001$ ).

Qualitatively, the semi-constructed telephone interviews were conducted. The participants were 20 voluntary youth with 9 from high schools and 11 from vocational schools (males and females = 7 and 13, respectively) participated in this study. There were 8 sexually experienced youth who had used HCT services, 8 sexually experienced youth who had never used HCT services, and 4 who had been sexually experienced. Those who had used HCT services were asked about their experience and expectations for YFHCT services while those who had never used HCT services were asked about their expectations regarding whether or not they would need to use HCT services. Similarly, those who had never been sexually experienced were asked about their perspective of the YFHCT service characteristics they expected.

The results of the content analysis revealed the characteristics of youth-friendly HCT services expected by youth who volunteered to be interviewed on three major themes composed of the following: 1) HCT service locations should not be in hospitals and should be private with a good atmosphere; 2) Youth-friendly HCT services should be provided with accessible, unlimited, convenience, time and appropriate payments; and 3) friendly providers should be of the same gender with understanding, confidentiality and no judgment.

## **6.2 Strengths of the study**

This research was conducted to analyze the use and intention to use HCT services among sexually experienced Thai youth and differs from previous studies analyzing all participants. The research findings represent new evidence in Thailand revealing the prevalence of sexually experienced youth who have used HCT services and intend to use HCT services. Furthermore, the findings also gain new knowledge about the predictors for the use and intention to use HCT services among sexually experienced Thai youth.

As this research was conducted among Thai youth who were studying in high schools and vocational schools, data analysis focused on youth who were sexually experienced. The researcher used online self-report questionnaires unable to be identified by others. The sampling units were classrooms, so all youth in selected classrooms were invited to complete the questionnaires. The respondents were permitted to stop completing the questionnaires or make a new decision to send to the researcher before clicking to send without anyone knowing.

Moreover, none of the participants' identities were revealed concerning sensitive issues in this study, except for voluntary use in the interviews. Some youth gave the researcher their e-mail addresses or mobile phone numbers to contact for the interviews. However, the participants were allowed deciding about being interviewed when the researcher contacted them.

## **6.3 Limitations of the study**

The limitation encountered in the present study is in the data collection process, online questionnaires were used in the computer labs in schools. Hence, the self-reporting questioning might have resulted in some incomplete data received, particularly concerning sexual history which might have been absent because some of the youth might not have wanted to disclose their sexual history.

This study used a cross-sectional study design which has a limitation that a causal relationship cannot be drawn. Therefore, the results of this study could determine the associations of independent variables and dependent variable while they cannot indicate cause and effects.

Finally, in the qualitative part, some participants had never experienced either sexual intercourse or HCT service use. However, the youth were willing to be interviewed and share their expectations on the characteristics of YFHCT services because they had known their friends to have taken risks. Moreover, the results of the content analysis were also similar to the perceptions and expectations of youth who were sexually experienced.

## **6.4 Recommendations**

### **6.4.1 Health policy**

Although the findings of this study revealed Thai youth to be at risk for HIV infection, more than 80% of them had never used HCT services while most of those who had never used HCT services intended to use the services in the future. Therefore, policy should pay greater attention as follows:

6.4.1.1 Sex education in schools should focus on assuring that all youth be aware of their risks for HIV infections, particularly among those who are sexually experienced. Moreover, they should be provided with information about HCT services for youth to gain confidence concerning the use of HCT services at least once a year.

6.4.1.2 While sexually experienced youth are encouraged to use HCT services, policy should eliminate all obstacles, particularly the law requiring parental consent in youth under 18 years.

6.4.1.3 The logistic model revealed attitude toward HIV testing and information about HCT to be significant predictors of use and intention to use HCT services. Therefore, policy should concern this issue and solutions through social or virtual media should be found to improve youth attitudes toward HIV testing.

6.4.1.4 The results in the qualitative part revealed that youth expected YFHCT to be available as a mobile service in schools. Therefore, policy should be concerned with providing mobile YFHCT services in schools.

### **6.4.2 Nursing practice and health care services**

6.4.2.1 In establishing YFHCT services, proactive publicity is essential to fostering good attitude, knowledge and awareness of HCT among Thai youth.

6.4.2.2 HCT services should be youth-friendly and providers should understand without placing blame.

6.4.2.3 HCT service sites should not be in hospitals or busy places.

6.4.2.4 If possible, in-school mobile YFHCT services should be provided

6.4.2.5 Services should be flexible time-wise, particularly in the evenings and on weekends if possible.

### **6.4.3 Nursing education**

As most providers of HCT services are nurses, nursing education should develop special training curriculum to instruct youth-friendly providers.

Moreover, these results also reflect that care for youth aged 15-24 years requires providers who understand in the development processes of youth. While adolescent is a transition from childhood to adulthood, nursing care for childhood and adulthood is separated in all nursing curriculum in Thailand. Nursing education, therefore, should be concerned with gaining knowledge about youth development.

### **6.4.4 Further study**

6.4.4.1 To expand research generalization, similar research should be conducted in youth in universities, out-of-school, small cities or rural areas.

6.4.4.2 To push for national policy, school-based mobile YFHCT services are required. Therefore, studies should be conducted on the cost-effectiveness and outcomes of HCT services. Moreover, to develop suitable YFHCT services, experimental and evaluative research are required.