CONDOM USE AMONG MALE UNIVERSITY STUDENTS IN VIETNAM

NGUYEN THAI CHI

A THEMATIC PAPER SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF PUBLIC HEALTH FACULTY OF GRADUATE STUDIES MAHIDOL UNIVERSITY 2012

Thematic paper
entitled

SEXUAL EXPERIENCE AND CONDOM USE AMONG MALE UNIVERSITY STUDENTS IN VIETNAM

....……..……..
Mr. Nguyen Thai Chi
Candidate

……..……...……..
Assoc. Prof. Oranut Pacheun,
Dr.P.H.
Major advisor

…...…….....……..
Assoc. Prof. Chaweewoon Boonshuyar,
M.S.P.H.
Co-advisor

...…….. .....……..
Prof. Banchong Mahaisavariya,
M.D., Dip Thai Board of Orthopedics
Dean
Faculty of Graduate Studies
Mahidol University

Assoc. Prof. Oranut Pacheun, Dr.P.H.
Program Director
Master of Public Health, International Program
Faculty of Public Health
Mahidol University

Thematic paper
entitled

SEXUAL EXPERIENCE AND CONDOM USE AMONG MALE UNIVERSITY STUDENTS IN VIETNAM

was submitted to the Faculty Graduate Studies, Mahidol University
for the degree of Master of Public Health
on
October 25, 2012

.....
Mr. Nguyen Thai Chi
Candidate

.....
Professor Pensri Phijaisanit,
M.D.MPH.American Board of Pediatrics
Chair

.....
Assoc. Prof. Oranut Pacheun,
Dr.P.H.
Member

.....
Assoc. Prof. Chaweewoon Boonshuyar,
M.S.P.H.
Member

.....
Prof. Banchong Mahaisavariya,
M.D., Dip Thai Board of Orthopedics
Dean
Faculty of Graduate Studies
Mahidol University

.....
Assoc. Prof. Phitaya Charupoonphol,
M.D .Dip Thai Board of Epidemiology
Dean
Faculty of Public Health
Mahidol University

ACKNOWLEDGEMENTS

I would like to express my sincere gratefulness and appreciation to my major advisor, Associate Professor Dr. Oranut Pacheun for her valuable guidance, understanding encouragement and prompt assistance with great and warm help and support throughout the whole research process. My deepest thank is also extended to my co-advisor, Associate Professor Chaweewon Boonshuyar for her constructive comments, supervision and insightful guide throughout this study.

I am greatly thankful to the chair of the defense committee for my research project Professor Pensri Phijaisanit, as well as the members and their valuable comments that enabled this research most effectively. I am also heartily thankful to Associate Professor Dr.Nawarat Suwannapong and Associate Professor Chanin Chareonkul for their advices and helps during my study at the Master of Public Health program.

I state my thankfulness to SEAMEO TROPMED office for the all the best kindness and supports during my learning in Thailand.

I would like to express my sincere thankfulness to Associate Professor Dr. Pakimol Mahannop and Dr. Naruemon Auemaneekul who always share and support me during my study as well as my life by their best kindness as a mother and a sister and like a real friend also.

I sincerely thank my teachers, my colleagues and my students in Thai Nguyen University of Medicine and Pharmacy as well as the teachers and staff of Faculty of Public Health, Maihidol University for their best supports to my study in Thailand as well as my research in Vietnam. I deeply thank and appreciate my classmates, international as well as Thai friends who helped me a lot on my study and also my living in Thailand.

Finally, my special gratitude is offered to my family and my friends for their helps, warm, emotional and financial support and encouragement that inspired me to overcome many obstacles.

Nguyen Thai Chi

CONDOM USE AMONG MALE UNIVERSITY STUDENTS IN VIETNAM

NGUYEN THAI CHI 5437436 PHMP / M

M.P.H.

THEMATIC PAPER ADVISORY COMMITTEE: ORANUT PACHEUN, Dr.P.H. CHAWEEWON BOONSHUYAR, M.S.P.H.

ABSTRACT

This cross-sectional study was conducted to determine the prevalence of condom use during first sexual experience among first year and second year male university students and the factors affecting their condom use. This research was conducted in Thai Nguyen University of Medicine and Pharmacy from June 21st to 28th, 2012.The data were collected from 321 respondents by self-administered questionnaires. The associations between the independent and dependent variables were analyzed by using chi–square test.

The results of this study reveal that 24.6% of the respondents had previous sexual experience, but only 25.3% used a condom during their experience. 2.5% of the respondents had poor knowledge of HIV/AIDS and STDs. The remaining had moderate and good levels of knowledge; 44.5% and 53.0%, respectively. Only 4.4% of the respondents knew the steps of proper condom use. In terms of attitudes on sex and condom use, 95.3% of students had a positive attitude regarding sex and condom use. Most students got condoms from the pharmacy (90.9% of respondents). Regarding the usage of condoms, 69% of students answered that condoms were always available, and 66% said it was easy to access a condom .

The results of this study suggest that health education on HIV/AIDS and STD and proper condom use is still needed for HIV/AIDS and STDs prevention. Life skills training strategies for youth such as training in social, interpersonal, cognitive, and emotional coping skills are necessary to prepare youth and prevent HIV/AIDS and STDs.

KEY WORDS: CONDOM USE / MALE UNIVERSITY STUDENTS / HIV/AIDS / STDs / VIETNAM

85 pages.

CONTENTS

CONTENTS (cont.)

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATION

AIDS	Acquired Immune Deficiency Syndrome
HIV	Human Immuno-deficiency Virus
STDs	Sexually transmitted diseases
UNAIDS	The United Nations Programme on HIV and AIDS
UNDP	The United Nations Development Programme
USAIDS	The United States Agency for International Development
WHO	World Health Organization
CSW	Commercial sex worker

CHAPTER I
INTRODUCTION

1.1 Rationale and justification

UNAIDS estimates that there were 33.3 million [31.4 million–35.3 million] people living with HIV at the end of 2009 compared with 26.2 million [24.6 million–27.8 million] in 1999—a 27% increase [1]. Although the annual number of new HIV infections has been steadily declining since the late 1990s, this decrease is of set by the reduction in AIDS-related deaths due to the significant scale up of antiretroviral therapy over the past few years. In Asia, AIDS is an epidemic with an estimated 4.9 million [4.5 million–5.5 million] people living with HIV in 2009, about the same as five years earlier.

Most national HIV epidemics appear to have stabilized. No country in the region has a generalized epidemic. Thailand is the only country in this region in which the prevalence is close to 1%, and its epidemic appears to be stable overall. A resurgent epidemic in the late 1990s (when up to 60 000 people were becoming newly infected annually) has since receded. The adult HIV prevalence was 1.3% [0.8%–1.40%] in 2009, and the HIV incidence had slowed to 0.1%. In Cambodia, the adult HIV prevalence declined to 0.5% [0.4% –0.8%] in 2009, down from 1.2% [0.8%–1.6%] in 2001. Nevertheless, the HIV prevalence is increasing in such low prevalence countries as Bangladesh, Pakistan (where drug injecting is the main mode of HIV transmission), and the Philippines [1].

Young people are at the centre of the global AIDS epidemic. Of the 1.7 billion young people worldwide, 5.4 million are estimated to be living with HIV (2007). About 40 percent of new HIV infections are among young people. This age group also has the highest rates (over 500,000 infections daily) of sexually transmitted infections excluding HIV. Young people are particularly vulnerable to HIV infection for social, political, cultural, biological, and economic reasons. [2]

Following the report of The Socialist Republic of Viet Nam (2010) 'The fourth country report on following up the implementation to the declaration of commitment on HIV and AIDS', UNAIDS (2011)

Viet Nam is estimated total population, 2010: 89,571,130 people. Number of people living with HIV/AIDS, end 2009 estimated is 280,000 people. Adult HIV prevalence, at the end of 2009 is 0.40%. [1]

In most parts of the world, HIV is spread primarily through unprotected sexual intercourse. Changing behavior to promote safer sexual practices, including condom use, is therefore fundamental to controlling the epidemic. Male and female condoms are key because they are currently the only barrier methods that protect against sexually transmitted infections (STIs), including HIV. Correct and consistent condom use is one of the most effective means of preventing sexual transmission of HIV, and it belongs at the heart of any HIV prevention strategy. Moreover, experience has shown that actions to increase uptake and use of effective barrier methods are more successful and sustainable when they are part of a strategic, coordinated and comprehensive condom programming effort. Despite this knowledge, condom programming has not been scaled up at the urgent pace the epidemic demands. In many countries, condom programming is hampered by weak political leadership and inadequate resources. [3]

Encyclopedia of the Nations Powered by Jrank," Condom use, population ages 15-24, male (% of males ages 15-24) - Millennium Development Goals Indicators" reported prevalence of condom use among males ages 15-24 of Viet Nam is 16.4%. [4]

Among Vietnamese males, the rate of engagement in non-marital sexual behaviors at 20 years is 9% to over 33% at 24 years. In addition, young men are engaging in casual and transactional sexual relations and inconsistent condom use. [5]

Thai Nguyen is a province in northeastern Vietnam. It is a mountainous, midland province with natural area of 3534.45 square kilometers and a population of 1,149,100 people. Its multiethnic society is represented by eight ethnic groups.

With its rich mineral resources and salubrious climate, the province offers significant opportunities for industrial development for domestic and foreign investors. Thai Nguyen is also known as an educational centre and ranks 3rd nationwide with 21

universities and colleges. With advantage conditions of social economic and education, Thai Nguyen attracts many people from other province to come to study or work and most of them are young persons. Beside ,there are many social problems such as drug and sex worker could affect to student's living as well as their health including HIV/AISD, STDs.

There are not many studies on safe sex and condom use among students in Viet Nam. Especially, there is no such study on sexuality and condom use among students in Thai Nguyen University. Thus, there is a need to conduct this kind of research on students of Thai Nguyen medicine and Pharmacy College to assess the status of knowledge and attitude on sex, HIV / AIDS, STDs and their condom use.
Moreover, with the results, further investigations can be made at students if this age group in different regions across the country and the results can be compared and contrasted so that the patterns of their condom use can be generalized and interventions taken to promote the prevention of sex-related morbidities and mortalities.

1.2 Research Objectives

1. To determine the prevalence of condom use at the first sex among male university students studying in Thai Nguyen college of medicine and pharmacy

2. To assess the knowledge on HIV /AIDS, STDs and condom use among male university students studying in Thai Nguyen college of medicine and pharmacy

3. To assess the attitude on sexuality and condom use among male university students studying in Thai Nguyen college of medicine and pharmacy

4. To assess the accessibility to condoms among male university students studying in Thai Nguyen college of medicine and pharmacy

5. To identify the general characteristics of the male university students studying in Thai Nguyen college of medicine and pharmacy

6. To determine the factors associated with condom use at the first sex among male university students studying in Thai Nguyen College of medicine and pharmacy

1.3 Research hypotheses

1. There is an association between socio-demographic factors and condom use at the first sex among male university students studying in Thai Nguyen College of medicine and pharmacy.

2. There is an association between knowledge on HIV/AIDS, STDs, condoms use and condom use at the first sex among male university students studying in Thai Nguyen College of medicine and pharmacy.

3. There is an association between attitude on sexuality and condom and condom use at the first sex among male university students studying in Thai Nguyen College of medicine and pharmacy.

4. There is an association between accessibility to condoms and condom use at the first sex among male university students studying in Thai Nguyen College of medicine and pharmacy.

1.4 Variables of the research

Dependent variable: Condom use at the first sex among male university students studying in Thai Nguyen College of medicine and pharmacy

Independent variables:

Socio-demographic factors:

Age, year of study, ethnicities, religion, present residence, monthly allowance, parents' education, and parents' occupation.

Knowledge on HIV/AIDS, STDs and condom use

Attitude on sexuality and condom use

Accessibility to condoms

1.5 Operational definitions

Dependent variable:

Condom use: In this study, condom use means the use of condom at the first sex of the respondents.

Independent variables:

Socio-demographic factors

Age: Age means the current age of the male students responding in the study.

Year of study: Year of study means the current year of study the respondents were studying. This study conduct on the first year and the second year students.

Ethnicity: Ethnicity means an ethnic group that belongs to the respondents whose members identify with each other, through a common heritage, often consisting of a common language, a common culture, and/or an ideology that stresses common ancestry or endogamy.

Religion: Religion means the state of belief of the respondents in Buddhism, Christianity or others

Present residence: Present residence means the place where the respondent is living during their studying

Allowance: Allowance means the money the respondents gets from their family or other sources every month during their studying,classified into three levels; always enough, some time not enough and not enough.

Parents' occupation: Parents' occupation means the main job that fathers and mothers of the respondents did to earn money to support the family.

Parents' education: Parents' education means the highest education of the parents of the respondents.

Knowledge about HIV/AIDS,STDs and condom use in this study is the level of understanding about HIV/AIDS, STDs and condom use regarding to infection, transmission, risk activities involving sexual activities of getting HIV/AIDS and STDs. The level of knowledge on HIV/AIDS ,STDs and condom use in this study was classified into three levels; poor, moderate, good.

Attitude towards sexuality and condom use: Attitude towards sex and condom use means beliefs, needs and values on sex and condom use of the respondents. The level of attitude on sex and condom use in this study was divided into positive attitude and negative attitude.

Accessibility to condoms: Accessibility to condoms means whether the respondents know where they can get the condom. And in this study, accessibility to condoms involves getting the condom from and services of condom.

1.6 Conceptual framework

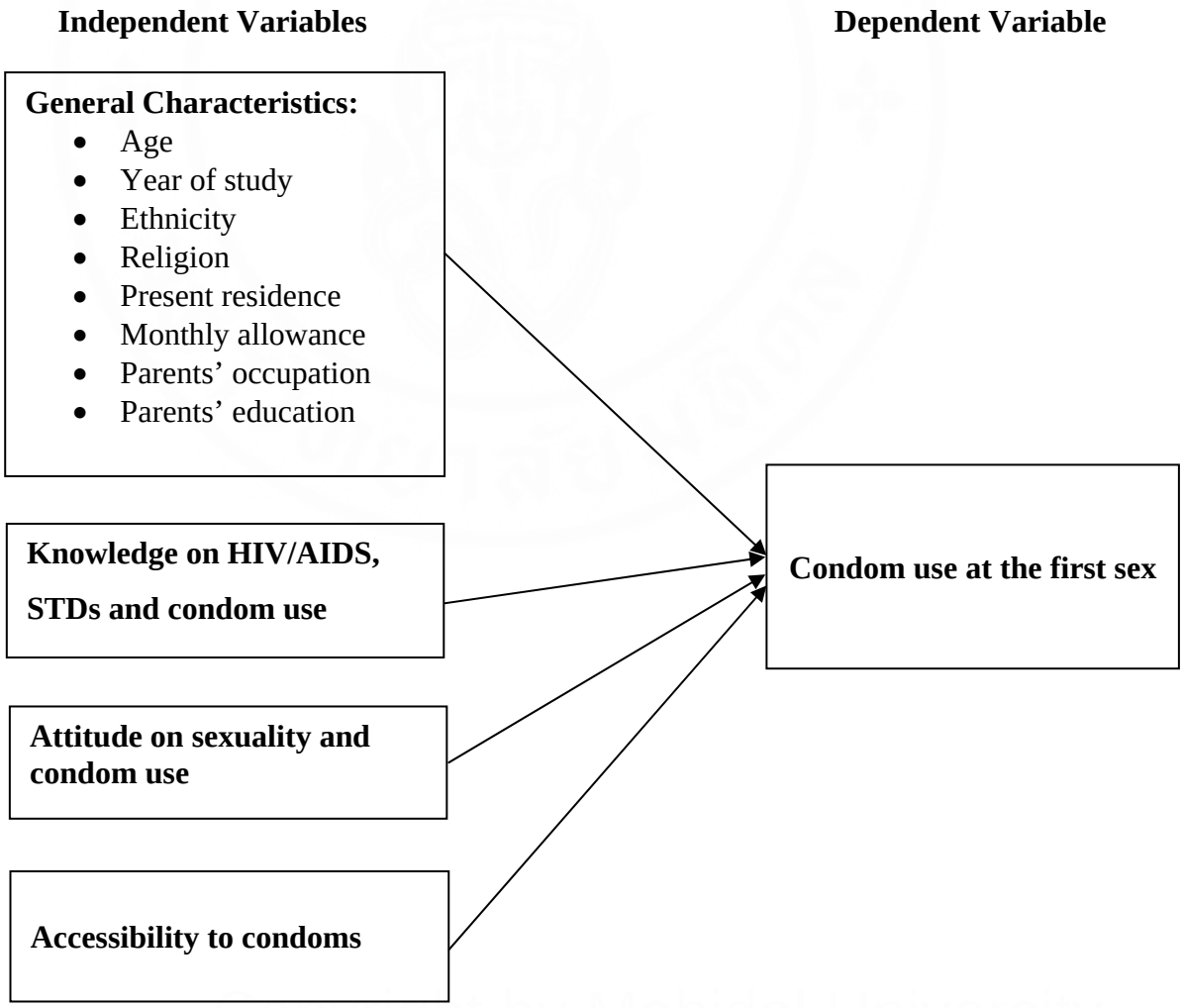

Figure 1.1 Conceptual Framework of the Study

CHAPTER II
LITERATURE REVIEW

This chapter reviews the theories and concepts for the study of "The factors associated with condom use at the first sexual intercourse among male university students studying in Thai Nguyen College of medicine and pharmacy".

The followings are the reviewed topics in this chapter:

2.1. HIV, STDs in Viet Nam

2.2 Sexuality and condom use in young people in the world

2.3. Sexuality and condom use in young people in Vietnam

2.4. Review from related concept and theory:

2.5. Factors affecting condoms use

2.1 HIV and STDs in Viet Nam

The first case of HIV was diagnosed in Viet Nam in 1990. Since that time, cases of HIV have been identified in all 61 provinces of the country.

Following report of The Socialist Republic of Viet Nam (2010) 'The fourth country report on following up the implementation to the declaration of commitment on HIV and AIDS', UNAIDS (2011):

Estimated total population of Viet Nam is, 2010: 89,571,130 people. Number of people living with HIV/AIDS, end 2009 estimated is 280,000 people, adult HIV prevalence, end 2009 is 0.40% and is claiming 0.47% of the population in 2012. Among these, 5,670 are children[5] .According to the IMF, this trend is placing Vietnam at the threshold of moving the disease from the high-risk groups of drug users and sex workers to the general population. [6].

Major cause is Injecting drug , Injecting drug users (IDU) account for up to 65% of people living with HIV. [7] The HIV prevalence among male IDU is estimated to be 23.1%.[5] Drug injection is reported as the major cause for doubling the number of

HIV/AIDS patients from 2000 to 2005[8]. Although there appears widespread awareness of using sterile needles among IDU (88% reported doing so in the last injection[5] sharing needles is common among those who have already contracted HIV/AIDS. In a survey of 20 provinces in Vietnam, 35% of IDU living with HIV shared needles and syringes. [9] Besides, IDU often engage in risky sexual behaviours. 25% of male IDU in Hanoi reported that had sex with commercial sex worker and did not use condoms. Meanwhile, female IDU often sell sex to finance their drug need. [7] This raises the risk of spreading HIV/AIDS to the general population.

Another main cause of HIV/AIDS spread is sexual transmission through the sex workers. While 97.1% of female sex workers (FSW) reported using condoms with their most recent clients, [5] the rate is much lower at 41.1% among those who are living with HIV. [9]

2.2 Sexuality and condom use in young people in the world

According to some studies in the world, there are differences on sexuality activities among youth in different countries with different culture and religion and some else.

From a survey of 978 Japanese students to assess their attitudes toward sex and sexual behavior, it was found that seven hundred and eighty-five Japanese students (80.3%) responded to the questionnaire. There, 90% of male students and 83% of female students indicated that they expected to have sexual intercourse before marriage, while 8% of male students and 3% of female students indicated that it was not wrong to have extramarital sexual intercourse. In addition, 75% of sexually experienced students reported that they used a condom during their first sexual intercourse, while 73% reported using a condom during their most recent sexual intercourse. The more sexual partners the students had, the less condom use they reported for both their first and most recent sexual intercourse. The proportion of Japanese students who used condom is high in comparison to that of students in other countries. However, as students are prone to have sexual intercourse with non-steady, casual partners. [10]

A research on premarital sexual behavior among male college students of Kathmandu, Nepal showed a continuum of sexual behavior ranging from kissing,

fondling to sexual intercourse. For example, more than half of the male (57%) had experienced kissing, while three-fifths of them (60%) reported that they placed their hand on a girl's breast. Similarly, more than a third (35%) reported that they placed their hand on a girl's sex organ. Dating in Nepali context seems to be less common compared to other non-penetrative sexual activities. Slightly less than half of the respondents (46%) reported that they experienced dating. Overall, nearly half of men, both married and unmarried men (47%) had experienced sex while more than one third of the study respondents (39%) had premarital sex.

In the current study, the age at first sexual intercourse of male students ranged from 10 to 25 years. About two-thirds of the respondents who had experienced premarital sex had sex before the age of 19. Seven percent reported that they had sexual intercourse before the age of 15.

Prevalence of premarital sex varied, depending on different settings. Slightly higher proportion of men in the age group of 20 years and above had premarital sex compared to younger men (below 20 yrs). Students who have higher education level reported higher percentage of premarital sexual experience. For example, around one third of men who were studying in intermediate level (35%) and more than two-fifths of students pursuing graduate degree (43%) had premarital sexual experience. Regarding marital status, higher proportion of unmarried men (40%) had premarital sex compared with currently married (33%) respondents. Similarly, level of premarital sexual activities is higher among those students whose permanent residence was outside Kathmandu valley (40%) compared with those who reside in Kathmandu permanently (32%).Regarding living arrangement, the proportion of those students who lived alone had more premarital sex experience compared to others. For example, more than two fifths of those men who lived alone (43%) had premarital sex while the percentage is less than two-fifths for those who live with family (37%).

Similarly, a significantly higher percentage of premarital sex was observed among students who have liberal attitude towards premarital sex compared to those who have conservative attitude towards the same. For example nearly half (46%) of the men who have liberal attitude towards female virginity (disagreed on the following statement: 'women should be virgin at marriage') had engaged in premarital sex. Similar response was found for the attitude towards male virginity.

Prevalence of premarital sex varied according to respondent's religion. For example, higher proportions of Hindu men (40%) were likely to have premarital sex compared to non-Hindu men (20%). It is also found that behavior of peers has positive effect on the prevalence of premarital sex. For instance, prevalence of premarital sex is far higher among those who have close unmarried friends with sexual experience (60% vs. 15) [11]

2.3 Sexuality and condom use in young people in Vietnam

According to the study, “Sexual risk and bridging behaviors among young people in Hai Phong, Vietnam” of Duong CT, Nguyen TH, Hoang TT, Nguyen VV, Do TM, Pham, less than half of all participants (261; 41.4%) reported having had sexual intercourse. This proportion was slightly higher in males (44.1%) than in females (39.4%). The mean age at first sexual intercourse was 22.0 years (21.3 years for males and 22.7 years for females). Among sexually active respondents, premarital sex was reported by 43.3%. Among those reporting sexual experience, premarital sex was reported almost six fold more frequently among males (78.3%) than females (13.5%). In addition, (31%) of those sexually active reported having multiple sex partners (56.7% of males and 9.2% of females). Among those sexually active, only 27.5% of males reported their spouse as their first sexual partner, compared to 83.7% of females. Almost 6% of males reported that their first partner was a CSW, although 30.8% reported having had sex with a sex worker. Among those who were sexually experienced, without considering the factor of condom use, almost 15% (26.7% of males and 5.0% of females) reported sexual bridging behaviors (sex with a high-risk partner such as sex worker or drug user, as well as a low-risk partner), (43.10%) of respondents (64.20% males and 16.30% females reported sexual encounters because of the influence of alcohol use. Nine of those who were sexually active (3.4%) reported having sexual intercourse while under the influence of drugs. [12]

In Vietnam, premarital sexual relations, especially for young women, are social taboos and youth report high levels of perceived stigma associated with engagement in sexual behaviors. Nonetheless, data indicate that premarital sexual relationships have increased in Vietnam over the past decade .Survey research including

adolescents and young adults (18–29years) indicates that among sexually active respondents, about 44% (78% males and 13% females) report engaging in premarital sex and 57% males and 9% females report multiple lifetime sex partners. Among sexually active males, 31% of respondents report having sex with a commercial sex worker [12].

In other research, data suggest rates of sexual activity among young unmarried men (18–24 years) increase significantly after age 20. Among young men (18–20 years), less than 9% report engaging in vaginal, anal, and/or oral sex. However, among young men (21–24 years), these rates increase from approximately 24% to more than 33% [13].

Condom use and use of other contraceptives among unmarried Vietnamese adolescents and young adults are generally inconsistent [13], resulting in increased risks for unwanted pregnancies, sexually Transmitted Infections, and HIV/AIDS [14].

2.4 Review from related concept and theory:

Concepts of knowledge attitude and relationship with practice: Behaviors of human can be measured by using knowledge, attitude and practice (KAP model). The model reveals that human behaviors results from interaction among knowledge, attitude and practice. Individual behavior can result from holistic interaction between knowledge and attitude. Correct practice or behavior is the result of adequate knowledge and possitive attitude.

Variables in this study are based on the concept of knowledge, attitude and practice (KAP model)

Concepts of knowledge : individual learning , searching and experience from past exposure to different situation can lead to be knowledgeable about that exposure according to Crood and Smith, the brain has a process which is concerned with memory, understanding, learning and recognition and they can help adjust and justify the factors and information. [15]

An individual will experience a variety of facts from exposure, learning and experiences from his surrounding, environment and his or her own self. The learnt factors will be transferred from one to another over a period in the brain such as memory

recognition, understanding and ability to assess, synthesize, integrate and apply the learnt factors.

Knowledge can be defined as cognizance, noticing or acknowledging something, especially or generally in a function or condition the need the use of memory. Cognitive domain is divisible into six levels, which can be described as follows: knowledge or recall is the initial step of memory about the process, method and structure used to describe the definition, the details and the truth, according to Crood, Smith and Bloom.

Comprehension

Application

Analysis

Rules and structure

Synthesis

Evaluation

Awareness on having knowledge only cannot guarantee the practice. Adequate knowledge and possitive attitude can favor the use on practice of a certain behavior.

Knowledge measurement : having knowledge about one thing is knowing something with familiarity achieved from experience or association, acquaintance with or understanding of a certain matter, be it science or art , according to Merrian Webster's collegiate dictionary. Knowledge can be measured in a variety of ways such as testing form, the most popular one, interview, observation and demonstration according to Bloom and Somprayoon.

Concepts of attitude: Attitude, according to Kovasint, requires one to understand, belief, thoughts and behavior under the social environment.

Attitude, according to Swan, comes from the way of learning which connect knowledge, feeling and readiness to make response that stimulates individual to react with his social surrounding

Attitude has three components, cognitive, affective and behavioral factors, according to Green walkd, 1968 sited in Suwan, 1983:114.

Positive attitude leads an individual to show or commit a specific behavior.

Attitude is changeable depending on the convincing and influence of the individual's environment, according to Bhiromrut,1978:47, Lahsuwong,1984.

Attitude is also a combination of concepts, information and emotions that create possitive or negative attitude towards specific objects.

According to Green, attitude is relatively constant feeling toward particular objects, human or processes whether they are good, bad, possitive or negative [16]

Measurement of attitude: Measurement of attitude can be made by diverse methods, projective technique and social approaches and scaling techniques by Thurstone, Likert, Osood and Guttman.

Association between knowledge, attitude and practice: knowledge has a vital role in convincing and enabling a certain practice. Correct practice can be achieved only with proper knowledge. Knowledge alone cannot influence an individual to practice a certain behavior although there is a relationship between knowledge and practice, according to Kuncharuska,1984:129-132.

Attitude links between knowledge and practice with stimulating and possitive attitude, one is more likely to practice.

Knowledge attitude and practice has different forms of direct or indirect relationship, according to Nipa Manunpiju.

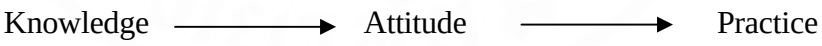

Figure 2.1

Figure 2.1 reveals that the attitude links knowledge and practice

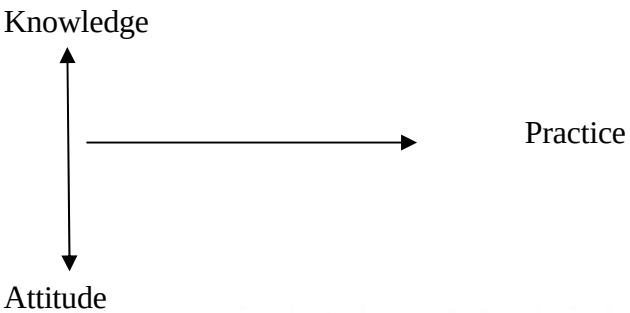

Figure 2.2

Figure 2.2 described that knowledge in relation with attitude has causes delayed practice.

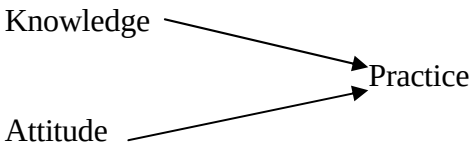

Figure 2.3

There is no relationship between knowledge and attitude, each separately leads to practice according to Figure 2.3.

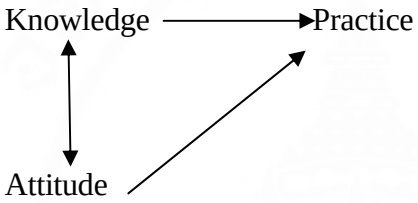

Figure 2.4

Knowledge can cause practice and so can attitude separately. However, knowledge and attitude has relationship as well according to Figure 2.4.

2.5 Factors affecting condoms use

Finding from a study on condom use among young never-married males in Nigeria indicates that the prevalence of condom use at the first sexual intercourse increase with age. The respondents aged 20-24 years use condom at the first sexual intercourse is higher than the respondents aged 15-19 years. the percentage of condom use in these groups are 20% and 11% respectively.

The result also shows that condom usage at the first sexual intercourse is not the same between different region. The respondents living in the southern use condom at the first sexual intercourse more than the respondents in the northern. the young never-married males living in the southwest part of Nigeria were six times more likely to have used condom during their first sexual encounter than those residing in the north-central region. And the analysis also finds out the association between condom use at the first sexual intercourse and level of education and accessibility to mass media. The respondents had higher level of education use condom more than respondents who have lower education. the respondents who reported listening to radio at least once a week

were almost eight times more likely to have used a condom at the first sexual encounter than their counterparts who never listened to radio. [17]

Another study tested a hypothesis that sexual relationships with multiple partners in the 10- to 19-year age group spurs condom use during sex was done in Kigoma, Kilombero, Rufiji and Ulanga districts, Tanzania in 2008. 612 adolescents from a random sample of 1,200 households participated in this study. Of the 612 adolescents interviewed, 23.4% reported being sexually active and 42.0% of these reported having had multiple sexual partners in the last 12 months. The overall prevalence of condom use among them was 39.2%. The proportion using a condom at the last sexual intercourse was higher among those who knew that they could get a condom if they want than those who did not. No evidence of association was found between multiple sexual partners and condom use. No evidence of association was found between multiple sexual partners and condom use among adolescents in the study area. The large proportion of adolescents who engage in sexual activity without using condoms, even those with multiple partners, perpetuates the risk of transmission of HIV infections in the community [18].

In an another study about determinants of consistent condom use among adolescents and young adults attending a tertiary educational institution in Ile-Ife, Nigeria, the authors indicated that in five hundred and thirty-six (89.3%) of the 600 questionnaires were suitable for analysis; 372 (69.4%) had had sexual intercourse. A third reported that they were having sex frequently; 145 (41.7%) had more than one partner while 74 (19.9%) were aware that their partners had other sexual partners. Two-thirds of currently sexually active respondents reported that condoms were readily available and cheap although only 90 (24.2%) reported using condoms consistently. The factors that were statistically significant predictors of consistent condom use among the males were their age; younger respondents were more likely to be consistent users, having more than one sexual partner and ability to refuse sex with a partner who would not want to use condom. Among the females, statistically significant predictors were frequency of sexual intercourse; respondent who had sex frequently were more likely to use condoms consistently and having more than one partner .[19]

2.5.1 Socio-demographic characteristic and condom use

Finding of Mohammad K, Farahani FK, Mohammadi MR, Ali-khani S, Zare M on 'Sexual risk-taking behaviors among boys aged 15-18 years in Tehran'' study showed that the proportion of boys reporting condom use with casual or stable partners and contraceptive use in last intercourse was 11 to 18 percentage points higher than among girls with a highly significant difference (Male: 64.10%; female: 49.00%). As compared to older students, a significantly higher proportion of younger students (10 to 14 years) reported condom use with stable partners (57.9%) while students 15 to 19 reported condom use with stable partners is 50.7%. More elementary students used condoms with stable partners than did secondary students. More students whose mothers had more than eight years of schooling reported safe sex than those whose mothers had less schooling (55.70% and 69.50% with casual partners; 49.50% and 60.60% with stable partners) did but this only reached statistical significance for condom use with casual and stable partners. [20]

In the study, "Lack of knowledge about sexually transmitted infections among women in North rural Vietnam of Lan PT, Lundborg CS, Mogren I, Phuc HD, Chuc NT, the result show that there is the association between the age and condom use. The analysis revealed that younger adolescents (aged 15–16 years) reported significantly less condom use (68%) than older adolescents (aged 17–18 years; 78%). [21]

2.5.2 Knowledge about HIV/AIDS, STDs and condom use

A study on HIV knowledge in Taiwan reflected the poor knowledge on HIV and effectiveness of condom about HIV prevention. The result revealed that 37% of male college students did not know that HIV transmission could be prevented by using condom and 58% were unaware that HIV could be spread through infected semen . 25% of college students indicated that HIV could be transmitted through mosquito bites, swimming pools and sharing of cigarettes. [22]

Knowledge of contraceptive methods among adolescents who reported consistent condom use was significantly greater than those who did not use condoms (4.3 vs. 3.7 for consistent and non-users, respectively;). The mean score of knowledge of condoms was also significantly higher among condom users than non-users. However, knowledge of STI/HIV and reproductive physiology did not differ

significantly by condom use status .About 80% of those who had ever seen a condom reported consistent condom use. About 13% of those who reported consistent condom use did not know that condoms should not be used more than once (not known or incorrect response), whereas 21% of condom non-users did not know this fact. Fewer condom users (26%) were unaware of the efficiency of condom in prevention of STI compared with 54% of condom non-users. Finally, 18% of condom users did not know about the efficacy of condoms in prevention of pregnancy, compared with 38% among condom non-users.

Increased knowledge about condoms was associated with decreased the rate of condom non-use. [21]

A recent study to investigate knowledge of STI among women aged 15 to 49 years in a rural district of Vietnam revealed possible associations between socioeconomic factors and STI knowledge. The result of research was indicated that overall STI knowledge displays the proportions of unmarried and married women answering questions regarding STI knowledge. The most common signs of abnormal vaginal discharge, defined by the respondents, were odor and excessive amount of discharge (35.5% and 24.8% of responses, respectively). Three-fourths of unmarried women did not know the common characteristics of abnormal vaginal discharge. Among suspected symptoms of STI, vaginal itching was the most frequently mentioned by the respondents (16%), followed by abnormal vaginal discharge (9.5%). Only 1.3% women considered urethral discharge in men as a suspected symptom of STI. Similarly, low abdominal pain (in women), and dyspareunia or dysuria was rarely mentioned by the respondents. Seventy eight percent of women (73% married vs. 93% unmarried, did not report knowledge of any symptom of STI. Only five percent of the women knew that possible causes of STI were microorganisms. Bad hygiene and having sex during menstruation or soon after delivery were mentioned as "causes" (based on the respondents' own words) of STI by 11.5% and 2.8% of women, respectively. Two-fifths of the women answered that STI was caused by being unfaithful or having unsafe sex. Half of the respondents did not know any "cause" of STI. The proportions of respondents who correctly answered the question concerning STI transmissibility and the necessity of partner treatment were 76.5% and 55.9%, respectively. Concerning STI curability, 16.30% women considered gonorrhea and/or syphilis as curable diseases.

Twenty one percent of the respondents mentioned HIV/AIDS as incurable while 14% women thought HIV/AIDS could be cured. Concerning sequelae of untreated STI, the correct answer rates were very low, while 59% of the women (54% married vs. 76% unmarried, did not know of any complication. There were significantly more unmarried than married women who were unaware that STI could be prevented. The results also demonstrated significant differences in proportions of unmarried and married women who mentioned ways of STI prevention such as using condoms, avoiding injecting illicit drugs, and keeping good hygiene.[23].

The findings of the study of knowledge, perception and attitude of adolescent girls towards STIs/HIV, safer sex and sex education in India indicated that good awareness about the modes of HIV transmission and prevention among adolescent girls. For example, 77% (n = 193) of girls were aware of the link between high-risk behavior such as multiple sex partner and HIV. Conversely, in a study published conducted by the ICMR (Indian Council of Medical Research) in higher secondary schools in rural areas of 22 districts and 14 states, only 13% of adolescent knew that multiple sex partners increased the risk of HIV infection.

Some areas still needed special attention. Approximately half of the adolescents (46%, n = 111) in this study were not sure if a healthy looking HIV infected person could transmit the HIV infection to others. In a study among schoolchildren in the state of Hariana, 57% believed that persons with HIV/AIDS could be detected by their physical appearance. This is of concern as evidence shows that people with HIV may remain asymptomatic for several months or years before developing AIDS but still transmit the infection. A significant number of respondents in this study (n = 30%, n = 75) also considered AIDS could be cured. Other surveys within India show similar results.

This study also concern on knowledge about STIs other than HIV/AIDS. The findings of this study indicated that knowledge about STIs other than HIV/AIDS was very poor among adolescent girls. The majority (71%) had not heard about Genital Herpes and almost half had not heard about gonorrhea (44%) or Syphilis (43%). This is of particular concern in developing countries like India, as STIs such as Chlamydia, Trichomoniasis, Syphilis and Gonorrhea are second only to maternal morbidity and mortality as the cause of death, illness and 'years of healthy life lost' among women in

their child bearing years . Comparison of findings is difficult as there are no published studies in India investigating the STI knowledge (other than HIV/AIDS) of adolescent schoolgirls. More than one third of student in the present study had no accurate understanding about the signs and symptoms of STIs. The only study with some comparability was conducted by Lal , (2000) in Kerala where college students had 34% awareness of the symptoms of STIs.[24]

According to the study of Christopher LC., it was found that good HIV/AIDS knowledge was one of the significant predictors of condom use behavior [25].

Jonh LP also revealed that one barrier for effective use of condom was lack of knowledge about condom use .[26].

But the study of Sein Hlaing show that there was no significant association between knowledge on HIV/AIDS, condom using and condom use behavior among men having sex with men. [27]

In the qualitative study of Jonh LP , some respondents thought that they might be safe because they assumed that their partners were clean and free from HIV. [26]

2.5.3 Attitude on sexuality and condom use

There is a significant difference in males and females perception of the effectiveness of condom in preventing HIV transmission in heterosexual intercourse. Analysis shows a significant difference in male and female perception of the effectiveness of condom in preventing heterosexual transmission of HIV. In this study, there is an inverse relationship between perception of the effectiveness of condom and its use in heterosexual intercourse. Only 24.3% of the respondents claimed that they use condom regularly in heterosexual intercourse despite the fact that about 97% of the respondents claimed that they are aware of the efficacy of condom in preventing HIV transmission in heterosexual intercourse.

Attitudes, norms and motivational factors are crucial elements in the decision making process of adolescents around engaging in risky behaviors. Interestingly, in a cross sectional survey of urban adolescent school girls in South Delhi, India , almost one quarter of the adolescent respondents (22%, n = 55) had agreed that

there was nothing wrong with unmarried boys and girls having a sexual relationship if they loved each other. This observation is reflected in the increasing incidence of premarital sex in India. When asked if students should have access to condoms, surprisingly, 49% (n = 123) of respondents felt that condom should not be available to youth because it encouraged them to have sex. In a similar study conducted in both India and Kenya, there was also a strong resistance towards the availability of condoms in both countries Though contemporary literature reveals that oral contraceptives are safe for adolescents, in India, less than 10% of adolescents use any form of contraceptive. In the current study 32% (n = 82) of girls thought that girls should not take the contraceptive pill as it should only be taken by married women. Adolescents' attitude towards contraceptives (including condoms) may be based on cultural and other beliefs that need specific educational efforts to change. [24].

From an another study on Attitude of Youths towards the Use of Condom in Heterosexual Intercourse in Ekpoma Nigeria, about 95% of the youths included in this study, were favorably disposed to the use of condom in heterosexual intercourse. The respondents included in this study have high knowledge about the effectiveness of condom in preventing HIV transmission in heterosexual intercourse. In fact, 97.4% of the respondents included in this study, claimed that they are aware of the efficacy of condom in preventing HIV transmission in heterosexual intercourse.[28]

Reported condom use among sexually active youths from a survey about sexual stigma, sexual behaviors, and abstinence among Vietnamese adolescents found out that youths who reported engaging in sexual intercourse (vaginal sex) were asked about use of condoms at last sexual encounter, frequency of condom use, and likelihood of using condoms at next sexual encounter. 18 of 32 youths (56.30%) reported using a condom at last sexual encounter, and 11 of 32 respondents (34.4%) reported “always” using a condom. However, 15 of 32 youths (46.9%) reported “rarely” or “never” using a condom. 14 out of 32 (43.8%) of youths reported that they were “very likely” to use a condom at next sexual encounter, whereas 8 of 32 (25.0%) reported they were “very unlikely” to use a condom. Analysis for using condoms at last sexual encounter shows no significant relation to gender or school status.

There was no significant relationship between using a condom at last sexual encounter (vaginal sex) and sexual stigma. There was also no significant relationship on

those sexual stigma scale between those respondents who reported “never” using a condom and those who reported “always” using a condom .In terms of condom use at last sexual encounter (vaginal sex), there was no significant difference in score on the perceived self-efficacy abstinence scale.

Analysis of the sexual stigma, self-efficacy abstinence, and self-efficacy condom scales indicate significant relationships.[29].

The study of Lau J T F and Jonh LP described that condom took away sexual pleasure and underscores the prevalent barrier of many men having sex with men to sustain safe sex practice.

Another finding of Lau J T, it was that about 15.8% of study population did not use condom because of the fear of affecting relationship with their partner. [26, 30]

Catania JA found that men having sex with men who always use condom had more support from informal sources and more positive expectations for condom from their peers. [31]

One study of Sacco WP revealed receptive partner preference was more influential on condom use decisions more than the insertive partner preference. [32]

In order to summarize previous studies, it can be included that knowledge on HIV/AIDS and condom and attitude on sex and condom were associated with condom use behavior.

2.5.4 Accessibility to condoms

According to the result of previous studies, easy accessibility and availability of condom can be associated with condom use behavior.

The study of Nina TH found that difficult accessibility and lack of availability of condom specifically in homeless shelters and incarcerated settings have strong association with inconsistent condom use behavior. [33]

According to finding of Jonh LP, the cost of condom is one of the predictors for condom use [19]. This was supported by the study of Juan PG, in which the condom price was strongly correlated with condom use. [34]

The finding of Lau JPF was that 26.3% of respondents involved in unprotected intercourse because condom were not readily available for them. [30] A

study of Trevor H, stated that increased likelihood of unprotected receptive and insertive intercourse was associated with the behavior of not carrying condoms. [35]

CHAPTER III
MATERIALS AND METHODS

3.1 Research Design

The study design was a cross-sectional study.

3.2 Research Site

Thai Nguyen University (TNU) is located in Thai Nguyen City, a multi-disciplinary university of the northern mountainous area of Vietnam. TNU was established on 1994 based on the reorganization of a number of universities in Thai Nguyen province (Agriculture & Forestry University, Educational University, Medical University, Industrial Technical University and Industrial Vocational School). It was founded as a part of the new development plan for higher education reform. TNU is known as one of the three regional universities in Vietnam, and a unique university in the Northern Mountainous Area of Vietnam. TNU currently has 1,600 staff, of which there are 1,200 lecturers, the current enrollment of 29,000 students, of which there are about 600 graduate students, 25,000 undergraduate (15,000 full-time and 10,000 part-time) and others are professional vocational students. 24% of the total students are ethnic minority students. The annual application average is from 70-80 thousand applications from various parts of the country, mostly from 16 northern upland provinces of Vietnam.

3.3 Study Population

There are 350 male students in the first and the second year in Thai Nguyen College of Medicine and Pharmacy in Thai Nguyen, Vietnam. Therefore all of them were included into this study.

3.3.1 Inclusion criteria:

Male students who are studying in the first and the second year in Thai Nguyen College of Medicine and Pharmacy in Thai Nguyen, Vietnam academic year 2012.

Male students in the first year and the second year who were willing to participate

3.3.2 Exclusion criteria:

Male students who were absent at the time of data collection

Male students who disagreed to participate

3.3.3 Discontinuation criteria:

If the respondents were unwilling to continue to answer one part or more of the questionnaire they are under discontinuation criteria.

3.4 Research Instruments

The questionnaire includes five parts: general characteristics of the responded students, their knowledge on HIV/AIDS, STDs and condom use, their attitude on sex and condom, accessibility to condoms and their actual condom use.

Part 1: General Characteristics:

This part concerns the age, year of study, ethnicities, religion, present residence, monthly allowance, parents' education, and parents' occupation.

Part 2: Knowledge on HIV/AIDS, STDs and condom use

There were 20 questions in this part.

Measurement of knowledge : "1" score for each correct answer and "0" for others

Level of knowledge:

Good : >=80% of total score

Moderate: 60-79% of total score

Poor : <60% of total score

Part 3: Attitude on sex and condom use

There were 20 questions in this part.

Measurement of the attitude :

Attitude was measured by using a Likert type scale that was the level of attitude was divided into three levels according to rating scale, agree, not sure, disagree. Positive question were given 3, 2, 1 score and negative question were given 1, 2, 3 sore respectively. Range of score was 20-60 for the total question of 20. Attitude was grouped into 2 categories, positive attitude which was equal to or more than mean ± SD and negative attitude which was less than mean ± SD.

Part 4: Accessibility to condoms : 6 questions in this part were use to concern the services of condom and the availability of condom and the way to access to the condom.

Part 5: Condom use : Regarding to using condom at the first sex. The respondents were asked about their sexual experience , their condom use at the first sex and the reasons of using codom as well as the reasons of not using condom.

3.5 Quality of instrument

Questionnaire was developed after consultation with the experienced persons; major adviser and co-adviser. Then, it also had clear operational definition for the entire variables and were categorized into groups, which ensure the validity of the study.

The final questionnaire was translated into Vietnamese language with the same format and meaning.

3.6 Data collection

Data collection was conducted after receiving the ethical approval from the Research Ethical Committee, Faculty of Public Health Mahidol University. Each participant took about 30 minutes to answer the questionnaire. Duration of data collection period lasted for seven days.

The nature of data collection is self –administered questionnaire. Explaining the purpose of the study and the questionnaire information sheet and informed consent was distributed to each participant. Afterwards, let them read the sheet until they understand clearly. If they agreed to participate in this study, they were to sign in the informed consent form.

During answering the questionnaire, they could ask everything what they did not understand. Instead of the names of the participants , codes were used to identify data collection form. The questionnaire and the informed consent, were kept separately. No one could get access to any information such as answers of the participants apart from the researcher. 350 questionnaires were handed to participants and 321(92%) questionnaires were returned and were able to use for analysis.

Duration of data collection: Data was collected from June 21st to 28th, 2012.

3.7 Data analysis

The data were entered by EpiData 3.1 and analyzed by SPSS 18.0 software, using the following statistics:

Descriptive statistics : mean, median, standard deviation, percentage, minimum and maximum value of respective data set were analyzed.

,ı–ˇßˇı–Ŀ˚#–˚ŀŀ–Ŀ˝¹: Chi square test was used to describe the association between independent variable and dependent variable at 5% significance level.

3.8 Ethical consideration

Before data collection, the Ethical Review Committee for Human Research of Faculty of Public Health, Mahidol University had ethically approved this study with certificate of approval number (MUPH 2012-160) on 14th June 2012.

During the data collection, the researcher explained the objective of the survey and obtained consent from the respondents. If the respondents did not understand they could ask the researcher everything at any time then the researcher

explained more until the respondents understood clearly. The names of respondents were not mentioned in the questionnaire.

In case of any inconvenience during answering the questions , respondents could discontinue the process. All answers of respondents were kept confidential and coding method was used to identify the data collection form. All the questions were kept in the proper place.

After finishing data entry, all the data were destroyed using the cutting machine and, in publishing the report, any information that identifies the respondents was not included.

CHAPTER IV
RESULTS

This research is a cross-sectional study conducted to determine the prevalence of condom use at the first sex among male university students and to determine factors affecting their condom use at the first sex.

Out of the 350 questionnaires handed to the students, 321 were returned. The response rate was 91.2%. The completely answered questionnaires were used for description and analysis of the data.

The associations between the independent and dependent variables were analyzed by using chi–square test. The results were tabulated and presented in number, percent and other important statistical values.

The results of the study for condom use among male university students are presented in different parts as follows:

4.1 Socio-demographic characteristics of the students

4.2 Knowledge of the students on HIV/AIDS,STDs and condom use

4.3 Attitude on sexality and condom use

4.4 Accessibility to condoms

4.5 Condom use at the first sex

4.6 Factors related to condom use at the first sex

4.1 Socio-demographic characteristics of the students

Descriptive statistics was employed to describe the socio-demographic characteristics of 321 students.

These include their age, year of studying, major, place of birth, religion, ethnicity, marital status, type of residence, occupation of parent, educational attainment of parents, and sources of money for tuition fee and monthly expense of the students. The numbers and percents of the different socio-demographic characteristics are shown in Table 4.1.

The respondents aged between 18 and 30 years. They were divided into two groups: those who are 18-20 years and 20-30 years. There are 63.2% of students who were 18-20 year old and 36.8% belonged to the rest.

First year students included 60.7% and the second year students included 39.3%) of the respondents.

Out of many different majors, the study included Medical doctor (87.9%), Dentist (3.4%) and Preventive doctor (5.0%), Bachelor of nursing (3.4%), Pharmacist (0.3%).

Only a few students were born in Thai Nguyen Province (14.0%) and the rest in other provinces (86.0%).

As for the religion, 13.7% of students are Buddhists , 1.6% of them are Christians and 84.7% of the rest did not respond **.**

This study involved eight ethnic groups with Kinh (62.9%), Tay (13.4%), Nung (7.5%), Muong (3.7%), Thai (2.2%), Mong (1.9%), Dao (1.9%) and others (6.5%).

Most of students were still single at that time during their study. Students were living in the rented house included 81.9%, students were living in the university dormitory included 9.3%, and 5.9% students were living with parent, and students who were living with relative are 2.5%. Different occupations of mothers of the respondents were found to be as follows: farmers 48.3%, government officials (28.3%), business (10.3%), laborers (6.9%), private companies (0.6%), and 0.6% of them are grocery seller. The others included 4.0%.

Concerning the occupation of fathers of the respondents, that were found to be as follows: 43.0% of them are farmers, 32.9% of them are government officials, laborers (9.2%), Business (7.9%) and 2.2% of the rest are private companies.

Different educational attainments of mothers of the respondents were found to be as follows: none (2.5%), lower than primary level (0.6%), primary level (7.5%) ,secondary level(23.3%), high school(35.5%), graduate level or higher (26.7%) and the others (3.8%).

Different educational attainments of fathers of the respondents were found to be as follows: None (1.0%), primary level (5.5%), secondary level (22.9%), high school level (36.5%), graduate level or higher level (28.7%), the others (5.5%).

There were 92.7% of students reported that getting money for tuition fee and monthly expense from their parents. 2.6% of them got money from siblings, 2.1% from relatives, and 0.9% from scholarship. And, from part-time working are 0.9%. There were 40.9% of students answered that money for monthly expense was enough but, 51.0% of respondents thought that money was not enough sometime, and 7.5% of them felt that their monthly expense was not enough.

Table 4.1 Characteristics of 321 university students

General characteristics	Number	Percent
Age group(years)		
18-20	203	63.2
21-30	118	36.8
Mean= 20.35 years S.D=1.35 years		
Year of studying		
First	195	60.7
Second	126	39.3
Major		
Medical doctor	282	87.9
Preventive doctor	16	5.0
Dentist	11	3.4
Bachelor of nursing	11	3.4
Pharmacist	1	0.3
Place of birth		
Thai nguyen province	45	14.0
Other provinces	276	86.0

Table 4.1 Characteristics of 321 university students (cont.)

General characteristics	Number	Percent
Religion		
Christian	5	1.6
Buddhism	44	13.7
No response	272	84.7
Ethnicity		
Kinh	202	62.9
Tay	43	13.4
Nung	24	7.5
Muong	12	3.7
Thai	7	2.2
Mong	6	1.9
Dao	6	1.9
No response	21	6.5
Marital status[1]		
Single	308	96.3
Married	2	0.6
Others	10	3.1
Type of residence[1]		
Rent house	263	82.2
University Dormitory	30	9.4
Parent house	19	5.9
Relative house	8	2.5
Occupation of mother		
Farmer	155	48.3
Government official	91	28.3
Business	33	10.3
Laborer	22	6.9
Private company	2	0.6
Grocery seller	2	0.6
State enterprise	1	0.3
Others	13	4.0

[1] 320 valid cases

Table 4.1 Characteristics of 321 university students (cont.)

General characteristics	Number	Percent
Occupation of father [2]		
Farmer	136	43.0
Government official	104	32.9
Laborer	29	9.2
Business	25	7.9
Private company	7	2.2
State enterprise	2	0.6
Others	13	4.1
Educational attainment of mother		
None	8	2.5
Lower than primary level	2	0.6
Primary level	24	7.5
Secondary levell	74	23.3
High school	113	35.5
Graduate level or higher	85	26.7
Others	12	3.8
Missing	3	0.9
Educational attainment of father[1]		
None	3	1.0
Primary level	17	5.5
Secondary level	71	22.9
High school	113	36.5
Graduate level or higher	89	28.7
Others	17	5.5
Sources of money for tuition fee and monthly expense(multiple responses)		
Parent	316	92.7
Sibling	9	2.6
Relative	7	2.1
Scholarship	3	0.9
Part time working	3	0.9
Others	3	0.9
Monthly expenses for living		
Always enough	131	40.9
Some time not enough	165	51.6
Not enough	24	7.5

[1] 320 valid cases [2] 316 valid cases

4.2 Knowledge of the students on HIV/AIDS and STDs

Only 2.5% of the respondents had poor knowledge on STDs and HIV/AIDS. And the remaining with the moderate and good level was 44.5%, 53.0% respectively. Table 4.2 showed that overall knowledge of the students on STDs, HIV/AIDS and proper condom use.

Regarding to knowledge on proper condom use, only 4.4% of students answered correctly steps of proper condom use.

Table 4.2 Level of knowledge on STDs, HIV/AIDS and knowledge of proper condom use

Knowledge on STDs, HIV/AIDS and Condom use	Number	Percent
Level of knowledge on STDs and HIV/AIDS	321	100.0
Poor	8	2.50
Moderate	143	44.5
Good	170	53.0
Knowledge on proper condom use	317	100.0
No	303	95.6
Yes	14	4.4

Out of the total respondents, 94.1% of students answered correctly that sharing needles and syringes could transmit HIV. 93.1% of the total respondents knew that having sexual intercourse without using condom could transmit HIV. That transfusion of untested blood could transmit HIV was answered correctly by 92.8% of students. 89.3% of students knew that HIV could not be transmit by sharing a meal with someone who is infected, and 70.6% of total respondents knew that kissing an infected person cannot be transmit HIV, as well.

For the knowledge on STDs regarding its signs and symptoms in males, 63.6% of students answered correctly that having pus from penis is one of the signs, 39.9% of students knew that pain when passing urine is also a sign of STDs in male and 53.6% of them answered that having wound at sexual organs is the symptom of STDs in male too.

Among the respondents, 46.7% of students answered that having itching at sexual organs is a sign when the male have a STDs.

For knowledge on STDs regarding its signs and symptoms in females, 54.2% of students answered that having white liquids from vagina with different color and smell is a sign of STDs, 38.3% of students thought that pelvic pain when passing urine is a sign of STDs in female, 47.7% of students answered that female would have wound at sexual organ. Among the responding students, and the students who answered that itching at sexual organs is seen as signs and symptoms of STDs included 44.9% respectively.

Regarding HIV and STDs prevention, 53.3% of students did not agree that abstinence from sex could prevent HIV and STDs infection,

Among the respondents, 95.6% of students answered that “always using condom whenever having sexual intercourse” can prevent HIV and STDs transmitted.

53.0% of the respondents answered that cleaning sex organ immediately after sexual intercourse cannot prevent HIV and STDs, and 64.8% of them thought that there is no vaccine for HIV and STDs prevention.

Most of them, with 93.8% answered that using disposable syringes is the good way to prevent HIV and STDs. 95.8% of students thought that condom used can prevent unwanted pregnancy.

Table 4.3 provides the information on the correct knowledge of the students on HIV/AIDS and STDs.

Table 4.3 Knowledge on STDs and HIV/AIDS of 321 university students

Knowledge on HIV/AIDS,STDs	Answered correctly	
	Number	Percent
HIV/AIDS infection		
Sharing needles and syrings	301	94.1
Having sexual intercourse without using condom	298	93.1
Transfusion of untested blood	297	92.8
Sharing a meal with someone who is infected	284	89.3
Kissing an infected person	226	70.6
The signs and symptoms of STDs in male		
Have pus from pennis	204	63.6
Have wound at sexual organs	172	53.6
Itching at sexual organs	150	46.7
Pain when passing urine	128	39.9

Table 4.3 Knowledge on STDs and HIV/AIDS of 321 university students (cont.)

Knowledge on HIV/AIDS,STDs	Answered correctly	
	Number	Percent
The signs and symptoms of STDs in female		
Have white liquids from vagina with different color and smell	174	54.2
Have wound at sexual organ	153	47.7
Itching at sexual organs	144	44.9
Pelvic pain when passing urine	123	38.3
Always using condom whenever having sexual intercourse	307	95.6
Using disposable syringes	301	93.8
Vaccination	208	64.8
Abstinence from sex	171	53.3
Cleaning sex organ immediately after sexual intercourse	170	53.0
Condom used can prevent unwanted pregnancy	300	95.8

This table shows that the number and percent of students who answered correctly following step by step of method of using condom :92.4% of students thought checked the date of expire of condom is the first step of method of using condom and the next steps were answered 91.8% ,85.5% ,78% 77.0% ,67.2% , then 62.8% and 62.5% respectively.

4.3 Attitude on sexuality and condom use

There were 95.3% of students had positive attitude on sex and condom i.e., the rest had negative attitude on sexuality and condom use.

Table 4.4 Level of attitude on sexuality and condom use of 321 university students

Level of attitude on sexuality and condom use	Number	Percent
Negative	15	4.7
Positive	306	95.3

The table 4.5 revealed that the number and percentage of each positive and negative attitude on sexuality and condom use: Only 7.2% of students feel that it is shameful to talk about sex with partner, 68.2% of students disagreed with this opinion. 66.7% of students disagreed that sex education make the teenager to have sex early

and 92.5% of students agreed that sex education helps the teenager on having sex responsibility to the opposite sex. 56.4% of students thought that having premarital sex is normal at present.

49.5% of students, students thought that virginity is important for female before marriage. 92.2% of students agreed that condom must be used to prevent unwanted pregnancy, 85.4% of students disagreed with birth control is responsibility of female only. (77.3%) of students agreed that it is admirable for male and female who has only one partner. About (76.3%) of students agreed that it is normal for male to carry condom.

About 68.5% of students believe that HIV/AIDS and STDs can be protected by using condom every time whenever you have sexual intercourse.

As many as 47.4% of students disagreed that a nice looking person is free from HIV/AIDS and STDs.

There were 32.4% of students agreed and 34.3% of students disagreed that changing partner is normal for person in their age.

There were 39.9% of the respondents thought that having sex with one lover is safe from HIV/AIDS and STDs.

Only 15.0% of students thought that abortion is one way to prevent unwanted pregnancy and 69.8% of them disagreed with this. Only (6.2%) of students thought, that carrying condom is shameful for female and 77.6% of them disagreed with this opinion.

Table 4.5 Attitude on sexuality and condom use of 321 university students

Attitude on sex and condom	Agree		Not sure		Disagree	
	Number	Percent	Number	Percent	Number	Percent
It is shameful to talk about sex with partner	23	7.2	79	24.6	219	68.2
Sex education make the teenager to have sex early	38	11.8	69	21.5	214	66.7
Sex education helps the teenager on having sex responsibility to the opposite sex	297	92.5	16	5.0	8	2.5
Having premarital sex is normal at present	181	56.4	90	28.0	50	15.6
Living together without married is normal at present	108	33.6	108	33.6	105	32.7

Table 4.5 Attitude on sexuality and condom of 321 university students (cont.)

Attitude on sex and condom	Agree		Not sure		Disagree	
	Number	Percent	Number	Percent	Number	Percent
Male always have sex for releasing their sexual needs	91	28.3	122	38.0	108	33.6
Female always have sex because of love and obligation	43	13.4	125	38.9	153	47.7
Male doesn't want to obligate and respect female who easily have sex with him	112	34.9	116	36.1	93	29.0
For female,virgin is important before marriage	159	49.5	109	34.0	53	16.5
It is admirable for male and female who has only one partner	248	77.3	47	14.6	26	8.1
Condom must be used to prevent unwanted pregnency	296	92.2	15	4.7	10	3.1
Abortion is one way to prevent unwanted pregnancy	48	15.0	49	15.3	224	69.8
Birth control is responsibility of female only	26	8.1	21	6.5	274	85.4
It is shameful for female to carry condom in her pocket	20	6.2	51	15.9	249	77.6
It is normal for male to carry condom	245	76.3	53	16.5	23	7.2
Having sex with one lover is safe from HIV/AIDS and STDs	128	39.9	107	33.3	86	26.8
HIV/AIDS and STDs can be protected by using condom every time whenever you have sexual intercourse	220	68.5	75	23.4	26	8.1
Using condom will make less sex enjoyable	97	30.2	162	50.5	62	19.3
A nice looking person is free from HIV/AIDS and STDs	51	15.9	118	36.8	152	47.4

4.4 Accessibility to condoms

For getting condom, students getting the condom when having sexual intercourse from pharmacy were the highest 90.9% of respondents.

It is followed by the second highest was from family planning center with 86.8%, by city health/health center was 84.9%, from hospital was 82.0%, by clinics was 77.3%, from bar, guesthouse, hotel and sauna was 68.5%, from friends was 65.6%, and 48.9% of students got condom from shopping center, and others (e.g. market, workplace, relatives and NGO) was 40.4% respectively.

Regarding to services of condom, 69.0% of students answered that the condom services are always available, 66.0% of them said that it is easily to access to condom. 27.4% of students answered that being aware if there is condom service on the campus. 89.1% of students said that they do not have to buy condom when they need them and 75.4% of them think that the condom is cheap.

Table 4.6 Accessibility to condoms of 321 university students

Accessibility to condoms	Number	Percent
Getting the condom from		
Pharmacy	290	90.9
Family planning center	277	86.8
City health/health center	270	84.9
Hospitals	260	82.0
Clinics	245	77.3
Bar. guest house. hotel. Sauna	217	68.5
Friends	208	65.6
Shopping center	155	48.9
Others(e.g. market. workplace.relative.NGO.Sex)	128	40.4
Services of condom		
The condom services are always available	220	69.0
It is easily to access to condom	210	66.0
Be aware if there is condom service on the campus	87	27.4
Respondents do not have to buy condom	285	89.1
The condom is cheap	239	75.4

4.5 Sexual experience

In sexual experience, 24.6% of students have ever had sexual experience. The age at the first sex of students was respectively 44.3% from 15-19 years and 55.7% from 20-22 years. Only 25.3% students who had sexual experience used condom in the first sexual intercourse.

Table 4.7 Sexual experience of 321 university students

Sexual experience	Number	Percent
Sexual experience		
Never had sexual experience	242	75.4
Have ever had sexual experience	79	24.6
Age at the first sex(years)		
15-19	35	44.3
20-22	44	55.7
Mean±S.D=19.4±1.3 years		
Condom use at the first sex among those having sexual experience		
No	59	74.7
Yes	20	25.3

4.5 Condom use at the first sex

For condom use, 85.0% of students used condom at the first sex for pregnancy prevention, 55.0% of them used it for STDs prevention, 35.0% used it for HIV/AIDS prevention and 25.0% of them were requested to use condom by partners.That condom was not available was the highest reason (47.5% of students) who did not use condom in the first sex.39.0% of students did not use condom at the first sex because they trusted their partner, and 23.7% of them did not use condom at the first sex because they did not like it. 5.1% of them answered that their partner objected using condom at the first sex and 3.4% of students could not use condom at that time because of drunk. Students who did not use condom at the first sex because his partner was drunk is 1.7.

Table 4.8 Reasons of using and not using condom use at the first sex

Reasons of using and not using	Number	Percent
Reasons of using(multiple responses) among 20 students		
Pregnancy prevention	17	85.0
STDs prevention	11	55.0
HIV/AIDS prevention	7	35.0
Partner requested	5	25.0
Reasons of not using (multiple responses) among 59 students		
Not available	28	47.5
Trust partner	23	39.0
Don't like them	14	23.7
I am faithful	5	8.5
Partner objected	3	5.1
I was drunk	2	3.4
Partner drunk	1	1.7

4.6 Factors related to condom use at the first sex

4.6.1 Characteristics and condom use at the first sex

25.3% of the total respondents used condom at their first sex. None of the socio-demographic characteristics factors of the respondents such as their ages, years of studying, majors, religions, and types of place they reside associates with condom use at the first sex. Other characteristics were not applicable for using Chi-square analysis of the association. Table 4.10 shows the association between the different socio-demographic characteristics of the respondents and their condom use at the first sex.

Table 4.9 Characteristics of university students and condom use at the first sex

Characteristics		Total respondents	Condom use at the first sex		p-value
			Number	Percent	
Age at present					0.751
	18-20 yrs	34	8	25.5	
	21-30 yrs	45	12	26.7	
Year of studying					0.955
	First	35	9	25.7	
	Second	44	11	25.0	
Major					
	Medical doctor	74	20	27.0	NA
	Dentist/preventive doctor	5	0	0	
Religion					
	Buddhism	9	3	33.3	NA
	Christian	1	0	0	
	Other	69	17	24.6	
Ethinic	Kinh	38	6	15.8	NA
	Tay	14	4	28.6	
	Nung	6	1	16.7	
	Dao	4	2	50	
	Mong	4	0	0	
	Thai	3	3	100	
	Muong	6	1	16.7	
	Other	4	3	75	
Place of resident					0.713
	Parent house	4	1	25	
	Relative house	3	0	0	
	Rent house	60	16	26.7	
	University Dormitory	11	2	18.2	

NA= Not applicable

Table 4.9 Characteristics of university students and condom use at the first sex(cont.)

Characteristics	Total respondents	Condom use at the first sex		p-value
		Number	Percent	
Occupation of mother				
Government official	24	4	16.7	NA
Business	13	3	23.1	
Laborer	6	3	50	
Famer	31	8	25.8	
Other	5	2	40	
Educational attainment of mother				NA
None	4	0	0	
Primary level	3	1	33.3	
Secondary levell	8	7	87.5	
High school	23	6	26.1	
Graduate level or higher	17	6	35.3	
Other	3	0	0	
Occupation of father				NA
Government official	22	8	36.4	
Private company	4	0	0	
Business	15	2	13.3	
Laborer	29	2	6.9	
Famer	23	5	21.7	
Other	3	2	66.7	
Parent				NA
Yes	76	20	26.3	
No	3	0	0	
Relative				NA
Yes	1	0	0	
No	78	20	25.6	
Sibling				NA
Yes	5	1	20	
No	74	19	25.7	

Table 4.9 Characteristics of university students and condom use at the first sex (cont.)

Characteristics	Total respondents	Condom use at the first sex		p-value
		Number	Percent	
Scholarship				NA
Yes	1	1	100	
No	78	19	24.4	
Part time working				NA
Yes	1	0	0	
No	78	20	25.6	
Enough money for living				NA
Always enough	30	9	30	
Some time not enough	42	11	26.2	
Not enough	7	0	0	

NA= Not applicable

In terms of age and condom use at the first sex, the students who had the first sex at the age from 20-22 years old used condom at the first sex higher than the students had the first sex at the age from 15-19 years. That was 29.5% and 20.0% respectively.

Table 4.10 Age and condom use at the first sex

Age at the first sex	Total respondents	Condom use at the first sex		p-value
		Number	Percent	
15-19	35	7	20.0	0.478
20-22	44	13	29.5	

4.6.2 Knowledge on HIV/AIDS. STDs and condom use at the first sex

There was no association between knowledge on HIV/AIDS, STDs, condoms use and condom use at the first sex among male university students studying in Thai Nguyen College of medicine and pharmacy.

Table 4.11 Knowledge on HIV/AIDS, STDs and condom use at the first sex

Level of knowledge	Total respondents	Condom use at the first sex		p-value
		Number	Percent	
Moderate/Poor	31	7	24.6	0.653
Good	48	13	27.1	

4.6.3 Attitude on sexuality and condom use at the first sex

The association between attitude on sexuality and condom use and the actual condom use at the first sex was statistically analyzed by using Chi-square test.

The analysis showed p-value to be 0.254. According to the study, the confidence interval 95% i.e., alpha value is 0.05 and the p-value is 0.254.

Since p-value is less than alpha value, the hypothesis is accepted i.e. there is no association between attitude on sexuality and condom use and the actual condom use at the first sex.

Table 4.12 Attitude on sexuality and condom use at the first sex

Level of attitude	Total respondents	Condom use at the first sex		p-value
		Number	Percent	
Negative attitude	5	1	20.0	0.254
Positive attitude	74	19	25.7	

4.6.4 Accessibility to condoms and condom use at the first sex

Regarding to the accessibility to condoms, there was no association between accessibility to condoms and condom use at the first sex among male university students studying in Thai Nguyen College of medicine and pharmacy, as well.

CHAPTER V
DISCUSSION

As there only few studies on safe sex and condom use among students in Viet Nam. Moreover, there is no known study on sexuality and condom use among students in Thai Nguyen University.

A cross-sectional study was conducted on male university students at Thai Nguyen medicine and Pharmacy College in mountainous area of Viet Nam to assess the status of knowledge and attitude on sex, HIV / AIDS, STDs and their condom use.

Questionnaires were distributed after obtaining an ethical clearance from ethical committee to three hundred and fifty students during the last weeks of June 2012. The response rate was 91.2%.

In this study, not all the independent variables could be analyzed for any association with the dependent variable, the use of condom at the first sexual intercourse among male students in Thai Nguyen Medicine and Pharmacy College.

It is because there were a few respondents i.e., only 79 students answered that they had sexual intercourse and only 20 of them reported that used condom in the first sexual intercourse. The numbers affected the statistical analysis, Chi-square testing.

The followings are discussed concerning the use of condom among male students of the Thai Nguyen medicine and Pharmacy College.

5.1. Prevalence of condom use at the first sexual intercourse among the respondents

5.2. Socio-demographic characteristics of the respondents

5.3. Knowledge on STDs, HIV/AIDS and condom use of the respondents

5.4. Attitude on sexuality and condom use

5.5. Accessibility to condoms

5.1 Prevalence of condom use among male students

Among Vietnamese males, the rate of engagement in non-marital sexual behaviors at 20 years is 9% to over 33% at 24 years. In addition, young men are engaging in casual sexual relations and inconsistent condom use. [5]

After analysis, it came out that the prevalence of condom use at the first sexual intercourse among male university students in Thai Nguyen Medicine and Pharmacy College in this study was 25.3% of respondents who had sex experience

The amount was different from that of previous studies, such as Encyclopedia of the Nations Powered by Jrank," where Millennium Development Goals Indicators" reported prevalence of condom use among males ages 15-24 of Viet Nam is 16.4%. [4] The prevalence of condom use at the first sexual among male student in Thai Nguyen Medicine and Pharmacy College in this study is higher than this study. This was because the respondents in this study were more mature than the previous respondents who were 18-30 years old, therefore they had sex activities more than the younger group. Moreover, that previous study was done a few years before; the proportion of condom use among the young men at that time could be low. Nowadays, with increase in education and knowledge with globalization, the use of condom increases to protect sex-related issues, therefore the youth responds with safe sex behavior more actively.

5.2 Socio-demographic characteristics of the male students

Most of the respondents i.e., (63.2%) were between 18-20 years of age. The ethnicity of Kinh was the majority with (62.9%). Most of students were still single at that time during their study.

Majority of the respondent were medical doctor students with 87.9% in amount. About (60.7%) were first year students and the rest were the second year students.

Most respondents (81.9%) resided in the rented house. The students who resided in the rented house have sexual experience higher than others do and the prevalence of condom use at the first sexual intercourse in this group is highest with 26.7%. That was because students who were living in the rented house were not

controlled by parent and school therefore it could be easier for them to have sexual activities as well as to access to condoms services more convenient than students were living with parent or living in University dormitory.

Regarding to religions, majority of the students did not answer the religions part of the questionnaires i.e., (84.7%). This was like that because of the socialist society, Vietnamese people have not followed any religion during long time..

5.2.1 Association between socio-demographic characteristics of the male students and condom use

This study showed that there is no association between condom use at first sex and the respondents' year of studying. This result was not consistent with the study, "Lack of knowledge about sexually transmitted infections among women in North rural Vietnam of Lan PT, Lundborg CS, Mogren I, Phuc HD, Chuc NT, the result show that there was the association between the age and condom use. The analysis revealed that younger adolescents (aged 15–16 years) reported significantly less condom use (68%) than older adolescents (aged 17–18 years; 78%). [21]

Ages of first sex vary from culture to culture and countries to countries. With age, the thinking and general knowledge also vary and the use of condom at first sex may be different from places to places as well as from time to time.

In this study, there are no difference of the prevalence of condom use at the first sexual intercourse among different age group, or ethnic groups and year of study as well.

The result was different from the result of study "Predictors of condom-use among young never-married males in Nigeria". The result of this research indicated that the older respondents used condom at the first sexual intercourse more than younger people (11% of the respondents aged 15-19 years reported condom-use at first sexual intercourse compared to 20% of those aged 20-24 years) [17].

For other characteristics factors, the result revealed that there is no association between socio-demographic characteristics of the respondents such as their ages, years of studying, majors, religions, and types of place they reside.

5.3 Knowledge of the students on HIV/AIDS and STDs

More than ninety percent of students knew that sharing needles and syringes, having sexual intercourse without using condom and transfusion of untested blood could transmit Human Immunodeficiency Virus. It is a positive result, as they are the major route of contracting the virus among the human beings. More than seventy percent of students knew that kissing an infected person and sharing a meal with someone who infected with Human Immunodeficiency Virus. It is also a positive result that non-infectious practice and behavior are known.

More than one third of the respondents knew about the various signs and symptoms of the sexually transmitted infections in human beings. It can be due to the fact the respondents were from the medical college, they revealed correct knowledge about signs and symptoms of sexually transmitted diseases in human beings. Only 2.5% of the respondents had poor knowledge on HIV/AIDS and STDs. The rest possessed moderate or high levels of knowledge on HIV/AIDS and STDs.

However, only a few more than half of the respondents (53.0%) knew that cleaning sex organ immediately after sexual intercourse could not prevent sexually transmitted infections including Human Immunodeficiency Virus and only a few more than half of the respondents (53.3%) did not agree that abstinence from sex could prevent sexually transmitted infections and Human Immunodeficiency Virus. Only (64.8%) thought that there is no vaccine to prevent sexually transmitted infections and Human Immunodeficiency Virus. the result indicates that knowledge on HIV/AIDS and STDs among students in Thai Nguyen College of medicine and pharmacy is quite low. Most of the students (86.%) come from disadvantage mountain areas where conditions of life, health and education are low. They have few opportunities to access media such as internet, TV. Programs of health education including sexuality is still less and not popular here. Moreover, because of the culture of the ethnic minorities, they feel embarrassed to talk and discuss sexual issues to others. This is the barrier for educating and disseminating the knowledge on HIV/STDs and safe sex behaviors to the youth here.

Beside, data had collected during 3 weeks, it is a very short time so although the researcher and staff trained and explained the purpose and content of the study and questionnaire, as well but there was no more time to discuss more deeply

and detail. Therefore, some respondents could misunderstand or confused about some items of the questionnaire.

Percentage of students who knew the signs and symptoms of STDs in male and female is quite low such as only 53.3% of students know that having wound at sexual organs is a symptoms of STDs. 46.7% of students answered correctly that one of signs and symptoms of STDs is itching at sexual organs. And only 39.9% of students know that getting pain when passing urine is also a signs of STDs. Communication on sexual issues is still difficult in Vietnam. Because Vietnamese normally feel shame and not open to talk about sexuality , they dont want to share or discuss about these with others that make the effectiveness of education and communication programs on HIV/AIDS and STDs is low.

Moreover, most of health communication programs generally focus on the knowledge of HIV/AIDS more than training on knowledge of STDs therefore students lack of the knowledge on STDs.

5.3.1 Knowledge on proper condom use

There are only 4.4% of students answered correctly on proper condom use. This rate is very low and unbelievable because the respondents are the medical students therefore they should know well on proper condom use so that to protect themselves as well as training other people to be good on safe sex behavior practice. This was like that because the students might not understand clearly the purpose of this question, thus they confused and answered incorrectly.

5.3.2 Association between knowledge of the students on HIV/AIDS and condom use

The study of Sein Hlaing showing that there was no significant association between knowledge on HIV/AIDS, condom using and condom use behavior among men having sex with men. [27] While the study of Christopher LC Found out that good HIV/AIDS knowledge was one of the significant predictors of condom use behavior.[24] The finding of Jonh LP was that one barrier for effective use of condom was lack of knowledge about condom use.[26].

The results of analysis reveal that the number of using condom in respondents who have good level of knowledge on HIV/STDs and condom use is higher than respondents who have poor and moderate level of knowledge.

The association between knowledge of the students on HIV/AIDS and condom use at the first sex was not found in this study. There were only 79 respondents had sexual experience and just only 20 persons of them used the condom at the first sex. This sample size was very few, thus the chi-square test could not be done. One may be well knowledgeable about the HIV and AIDS and the transmission of sexually transmitted diseases, however, the practice or behavior of the use of preventive measures cannot be expected accordingly and this varies from person to person.

5.4 Attitude on sexuality and condom use

There was no association between attitude of male students on sex and condom use and the actual condom use at their first sex in this study. The result was not consistent with some previous studies; attitude on sex and condom associated with condom use behavior. In this study, the knowledge on STDs ,HIV/AIDS and the attitude on sexuality and condom use of students was reported at the time of study but the condom use at the first sex happened few years ago. Therefore, this affected the result of analysis.

A survey about condom use among sexually active youths from a survey about sexual stigma, sexual behaviors, and abstinence among Vietnamese adolescents the analysis of the sexual stigma, self-efficacy abstinence, and self-efficacy condom scales indicate significant relationships. [29]

The study of Lau J T F and Jonh LP described that condom took away sexual pleasure and underscores the prevalent barrier of many men having sex with men to sustain safe sex practice. Another finding of Lau J T, it was that about 15.8% of study population did not use condom because of the fear of affecting relationship with their partner. [26, 30]

Catania JA found that men having sex with men who always use condom had more support from informal sources and positive expectations for condom from

their peers. [31] One study of Sacco WP revealed receptive partner preference was more influential on condom use decisions more than the insertive partner preference. [32].

The results of analysis reveals that the number of using condom in respondents who have positive attitude on sex and condom use is higher than respondents who have negative attitude. A correct practice or behavior is the result of adequate knowledge and positive attitude(KAP model). Students who have good knowledge on HIV/AIDS, STDs and positive attitude on these they would aware of the need and effectiveness of condom use to protect themselves . Therefore they are more likely to use condom higher than others.

5.5 Accessibility to condoms

The study of Nina TH found that difficult accessibility and lack of availability of condom specifically in homeless shelters and incarcerated settings have strong association with inconsistent condom use behavior. [33] According to finding of Jonh LP, the cost of condom is one of the predictors for condom use. This was supported by the study of Juan PG, in which the condom price was strongly correlated with condom us. [34] The finding of Lau J.P.F was that 26.3% of respondents involved in unprotected intercourse because condom were not readily available for them. [30]

Like knowledge on sex, sexually transmitted diseases and infections, accessibility of condom cannot totally influence the use of condom. The practice or behavior of using condom varies with places to places.

It was found out that there are factors that are associated with condom use in one study but not associated with condom use in other studies. Results vary and differ from countries to countries. It seems like the results supported some studies because of similar association with condom use and results in contrast to other studies. Conclusion cannot be drawn from just the presence or absence of association.

Differences in culture and environment can generate different attitude and beliefs influencing the answers directly and consequently the results of the studies.

The association between accessibility to condoms and condom use among male university students studying in Thai Nguyen College of medicine and pharmacy was not found out in this study.

Most of students get the condom from pharmacy (90.9% of respondents). it is quite easy and convenient for students to buy the condom at the pharmacy because the pharmacy often open for whole day and students are not afraid that they could meet friends or classmate as when they buy it at other service of condom in the college.

Regarding to services of condom, 69.% of students answered that the condom services are always available, 66.% of them said that it is easily to access to condom. The analysis indicates that there was no statistical association between the use accessibility to condoms and condom use at the first sexual intercourse. This rate is still low because the vending machines of condoms is not popular in Vietnam therefore this is a problem for students to buy condom if their living places is not near the pharmacy stores , hospital or shopping centers.

CHAPTER VI

CONCLUSION AND RECOMMENDATION

The objective of the study was to determine the prevalence of condom use and the factors associated with condom use at the first sexual intercourse among male university students studying in Thai Nguyen College of medicine and pharmacy.

Cross sectional study design was used in this study. Data were collected from 20th June to 30th June, 2012 by self-administered questionnaire to respondents. Statistics used in this study were number, percentage, mean,standard deviation, range, chi-square at 5% significant level.

Regarding to the socio-demographic characteristics of respondents, 321 students who are studying in Thai Nguyen College of medicine and pharmacy participated. The respondents aged between 18 and 30 years. There are 63.2% of students who were 18-20 year old and 36.8% belonged to the rest. First year students included 60.7% and the second year students included 39.3%) of the respondents.Out of many different majors, the study included Medical doctor (87.9%), Dentist (3.4%) and Preventive doctor (5%), Bachelor of nursing (3.4%), Pharmacist (0.3%).

This study involved eight ethnic groups with Kinh (62.9%), Tay (13.4%), Nung (7.5%), Muong (3.7%), Thai (2.2%), Mong (1.9%), Dao (1.9%) and others (6.5%). As for the religion, 13.7% of students are Buddhists, 1.6 % of them are Christians and 84.7% of the rest did not respond. Findings from this sutudy reveals that none of the socio-demographic characteristics factors of the respondents such as their ages, years of studying, majors, religions, and types of place they reside associates with condom use at the first sex.

Regarding to the knowledge of the students on HIV/AIDS and condom use of respodents, Only 2.5% of the respondents had poor knowledge on HIV/AIDS. STDs and the remaining with the moderate and good level was 44.5%, 53.0% respectively. And the number respondents who had good level of knowledge on STDs and HIV/AIDS tend to use condom at the first sex more than respondents who have

poor and moderate level of knowledge. But the knowledge on proper condom use was very poor. Only 4.4% of the respondents knew the steps of proper condom use.

For the attitude on sexuality and condom use, there were 95.3% of students had positive attitude on sexuality and condom use. The finding from this study also reveals that the number of using condom in respondents who have positive attitude on sex and condom use is higher than respondents who have negative attitude.

As regard to accessibility to condoms, most of students get the condom from pharmacy (90.9% of respondents). Regarding to services of condom, 69% of students answered that the condom services are always available, 66% of them said that it is easily to access to condom. The analysis indicates that there was no statistical association between accessibility to condoms and condom use at the first sex.

Recommendations

Recommendation for implementation:

1. Health educations or raising awareness about HIV / AIDS, STDs, Including condom use is needed to increase the level of knowledge among respondents such as the understanding of students on signs and symptoms of STDs in male and female as well as make them to have good knowledge on HIV, STDs prevention:

- Organizing education sessions about safe sex in the activities of the students

- Building the team of volunteers willing to share and counseling on safe sex and HIV / AIDS and STDs and condom use.

- Beside providing the knowledge of HIV / AIDS and STDs and condom use for students, the teachers and the volunteers should teach them the way how to use the condom properly.

2. Life skills training strategy for youth are also necessary in HIV/AIDS, STDs prevention such as sharing and training about social and interpersonal skill, cognitive skill and emotional coping skill to become sexuality well prepared youths. The teachers, the of specialist of sexuality should be friendly and open with students and make a comfortable environment in the health talks so that lead the students feel

happy and ready to share their understandings and experiences as well as their feelings and problems on sexual health.

3. Easy availability and accessibility of condom should be ensured, therefore the need to place of vending machine in public places such as toilet, bus-station should be considered as well as the free condom services at the health care centers. In addition, training or education sessions should be provided to condom sellers to create customer friendly thereby reducing the stigma associated with condom buying.

Recommendation for future research:

1. This study was quantitative study and future qualitative study should be done with in-depth interview and focus group discussion in order to explore the much more information regarding the concern and sex behaviors of the student.

2. The study was conducted at the male students. Similar study should be carried out in both male and female students to draw out more representative samples and results.

3. This study just conducts on STDs and HIV/AIDS issues. Thus, the reproductive health and family planning should be mentioned in the study in the future.

REFERENCES

1. UNAIDS Report on the global AIDS Epidemic 2010.[Internet] 2010 [cited 2012 April 28] Available from: http://www.unaids.org/globalreport/global_report.htm
2. UNFPA 2008.Young People: The Greatest Hope for Turning the Tide. [Internet] 2010[cited 2012 April 30] Availablefrom: http://www.unfpa.org/hiv/people.htm
3. UNFPA 2010. Comprehensive Condom Programming, A guide for resource mobilization and country programming. [Internet] 2011 [cited 2012 May10]. Availablefrom:http://www.unfpa.org/public/cache/offonce/home/publications/pid/8017;jsessionid=AE60939940CBD091206440A63F35BD68.jahia01
4. WorldStats. Condom use, population ages 15-24, male (% of males ages 15 - 24) – Millennium Development Goals Indicators. [Internet] 2010 [cited 2012 May 9]Availablefrom:http://www.nationsencyclopedia.com/WorldStats/MDI
5. UNAIDS (2011) 'UNAIDS World AIDS Day Report 2011'. [internet 2011] [cited 2012 April 28] Availablefrom: http://www.unaids.org/globalreport/global_report.htm
6. Adams, Susan J ."Vietnam's Health Care System: Paper Prepared for the International Symposium on Health Care Systems in Asia, Hitotsubashi University, Tokyo 2008.
7. Lam NT. Drugs, sex and AIDS: sexual relationships among injecting drug users and their sexual partners in Vietnam. Cult Health Sex 2008. 10 Suppl: 123-37
8. Thanh DC, Hien NT, Tuan NA, Thang BD, Long NT, Fylkesnes K: HIV Risk Behaviours and Determinants Among People Living with HIV/AIDS in Vietnam. *AIDS Behav* 2009. 13(6):1151-9
9. Small D, Love as harm reduction: Fighting AIDS and stigma in Vietnam Harm Reduction Journal 2009; 3; 6:34.

10. Yamamoto K., Cross-sectional study on attitudes toward sex and sexual behavior among Japanese college students. J Physiol Anthropol, 2006. 25(3): p. 221-7.
11. Adhikari R,Tamang. Premarital sexual behavior among male college students of Kathmandu,Nepal. J.BMC Public Health.2009 ;9:241.PMID:19604383[PubMed - indexed for MEDLINE].
12. Duong CT, Nguyen TH, Hoang TT, Nguyen VV, Do TM, Pham VH, Sexual risk and bridging behaviors among young people in Hai Phong, Vietnam DetelsR.AIDS Behav. 2008 (4):643-51. Epub 2007. PMID: 17636375 [PubMed indexed for MEDLINE].
13. Kaljee L, GreenM, ZhanM, Gender, alcohol consumption patterns and engagement in sexual intimate behaviors among adolescents and young adults in Nha Trang Vietnam. Youth Soc. PMC 2011, 43(1): 118-141
14. Oyediran KA, Feyisetan OI, Akpan T ,Predictors of condom-use among young never-married males in Nigeria.. J Health Popul Nutr 2011;29(3):273-285.
15. Bloom BS, David R K,Bej S, Bertram BM. Taxonomy of education objectives the classification of eduaction goals. Handbook 2, affective domain, New York: David Makay Company, 1975.
16. Khine SW. Contraceptive use among Myanmar migrant women in Samut Sakhon province, Thailand, Master of Public Health, Faculty of Public Health, Mahidol University, 2002 .
17. Exavery A, Lutambi AM, Mubyazi GM, Multiple sexual partners and condom use among 10-19 year-olds in four districts in Tanzania: What do we learn? (9 pages, KB) BMC Public Health 2011;11.
18. Onayade AA, Abiona TC, Ugbala C, Alozie G, Adetuyi O, Determinants of consistent condom use among adolescents and young adults attending a tertiary educational institution in Ile-Ife..Niger Postgrad Med J. 2008; 15(3):185-91.PMID: 18923594 [PubMed - indexed for MEDLINE])
19. Viana FJ, Faundes A, de Mello MB ,Factors associated with safe sex among public school students in Minas Gerais, Brazil. Cad Saude Publica 2007; 23(1):43- 51.

20. Mohammad K, Farahani FK, Mohammadi MR, Ali-khani S, Zare M, Tehrani FR. Sexual risk-taking behaviors among boys aged 15-18 years in Tehran. J Adolesc Health. 2007;41(4):407-14.

21. Lan PT, Lundborg CS, Mogren I, Phuc HD, Chuc NT, Lack of knowledge about sexually transmitted infections among women in North rural Vietnam, BMC Infect Dis. 2009 6; (9):85. PMID: 19500402 [PubMed - indexed for MEDLINE]

22. Tung W-C, Ding K, Farmer S. Knowledge, Attitude and Behaviors Related to HIV and AIDS Among College Students in Taiwan. Journal of the Association of Nurses in AIDS care. 2008.199(5):-397-408.

23. McManus A, Dhar L, Study of knowledge, perception and attitude of adolescent girls towards STIs/HIV, safer sex and sex education. BMC Womens Health 2008 ;8:12.PMID:18647417 [PubMed - indexed for MEDLINE].

24. V A Dibua, A O Eromonsele, Attitude of Youths towards the Use of Condom in Heterosexual Intercourse in Ekpoma Nigeria T O Agweda, in New York 2010.

25. Kaljee LM, Green M, Riel R, Lerdboon P, Tho le H, Thoa le TK, et.al, Sexual stigma, sexual behaviours, and abstinence among Vietnamese adolescents: implications for risk and protective behaviors for HIV, sexually transmitted infections, and unwanted pregnancy. BMC Health Services Research 2010, 10:54

26. Christopher Lance Coleman C. Health beliefs and high-risk sexual behaviors among HIV-infected African American men. Appl Nurs Res. 2007;20(3) :110-5.

27. John L P, Roger B, Perception of condom use among African American men culture, health and sexuallity,2003.15(5);409-24.

28. Sein Hlaing, factors related condom use among men who have sex with men Mahidol University 2007. [Internet] 2007. [cited 2012April30]. Availablefrom: http://books.google.co.th/books/about/Factors_Related_to_Condom_Use_Among_Men.html? id=tNpUQwAACAAJ&redir_esc=y

29 . Kaljee LM, Green M, Riel R, Lerdboon P, Tho le H, Thoa le TK, et al , Sexual stigma, behaviors and abstince among Vietnamese adolescents:implications for risk and protective behaviors for HIV , sexually transmitted infections and unwanted pregnancy. J Assoc Nurses AIDS Care 2007; 18 (2) ;48-59.

30. Jahanfar S, Lye MS, Rampal L ,A randomised controlled trial of peer-adult-led intervention on improvement of knowledge, attitudes and behaviour of university students regarding HIV/AIDS in Malaysia. Singapore Med J. 2009. 50(2);173-80. PMID:19296033 [PubMed - indexed for MEDLINE]

31. Lau J T F,Kim J H, Lau M, HIV related behaviors and attitude among Chinese MSMs in Hong Kong: a population based study, Sex.Transm.Inf, 2004. 80; 465

32. Catania JA, Coates TJ, Stall R, Bye L, Kegeles SM, Capell F,et al. Changes in condom use among homosexual men in San Francisco. Health Psychol. 1991. 10(3):190-9

33. Sacco WP, Rickman RL ,AIDS-relevant condom use by gay and bisexual men: the role of person variables and the interpersonal situation. AIDS Educ Prev. 1996. 8(5):430-43

34. Nina TH ,Harawa NT, Williams JK, Ramamurthi HC, Bingham TA, Perceptions towards condom use, sexual activity, and HIV disclosure among HIV-positive African American men who have sex with men: implications for heterosexual transmission. J Urban Health. 2006. 83(4);682-94.

35. Juan PG ,Gutiérrez JP, Molina-Yepez D, Morrison K, Samuels F, Bertozzi SM,Correlates of condom use in a sample of MSM in Ecuador. BMC Public Health. 2006; 12 ;6:152

36. Hart T, John L P, Predictors of risky sexual behavior among young African American men who have sex with men. Am J Public Health. 2004. 94(7) : 1122-4.

APPENDICES

APPENDIX A

QUESTIONNAIRE
CONDOM USE AMONG MALE UNIVERSITY STUDENTS

Part 1: General Characteristics

1. How old are you? ……. Years
2. Year of studying now ❑ First ❑ Second
   Your major ……
3. Where were you from ? ❑ Thai Nguyen province ❑ Others: Specify ……
4. Your religion ❑ Buddhism ❑ Christian ❑ Others: Specify ……...……
5. Ethnic ❑ Kinh ❑ Tay ❑ Nung ❑ Dao ❑ Hmong
   ❑ Others specify …..……...……...…….
6. Marital status ❑ Single ❑ Married ❑ Divorced ❑ Separated
7. Type of place, which you stay at present
   ❑ Parent house ❑ Relative house ❑ Rented house ❑ Rented room
   ❑ Private Dormitory ❑ University Dormitory ❑ Others specify ….
8. What are the occupations of your parent/guardian

Mother	Father	Guardian
❑ Government official	❑ Government official	❑ Government official
❑ State enterprise	❑ State enterprise	❑ State enterprise
❑ Private company	❑ Private company	❑ Private company
❑ Business	❑ Business	❑ Business
❑ Laborer	❑ Laborer	❑ Laborer
❑ Famer	❑ Famer	❑ Famer
❑ Grocery seller	❑ Grocery seller	❑ Grocery seller
❑ Other specify	❑ Other specify	❑ Other specify

9. Educational attainment of parents /guardian

❑ Mother	Father	Guardians
❑ None	❑ None	❑ None
❑ Primary level	❑ Primary level	❑ Primary level
❑ Secondary level	❑ Secondary level	❑ Secondary level
❑ High school	❑ High school	❑ High school
❑ Graduate level or higher	❑ Graduate level or higher	❑ Graduate level or higher
❑ Other specify ……..	❑ Other specify ……..	❑ Other specify ……..

10. Sources of money for tuition fee and your monthly expense.(multiple responses)

❍ Parents ❍ Relative ❍ Sibling ❍ Scholarship ❍ Part time working

❍ Other specify……...……...……...…

11. Do you have enough money for monthly expenses

❑ Always enough ❑ Some time not enough ❑ Not enough

Part 2 Knowledge on HIV/AIDS, STDs and condom use

	Knowledge	True	False	No sure
1.	A Person can get HIV/AIDS infection by			
	1.1 Sharing a meal with someone who is infected	❑	❑	❑
	1.2 Sharing needles and syringes	❑	❑	❑
	1.3 Kissing an infected person	❑	❑	❑
	1.4 Transfusion of untested blood	❑	❑	❑
	1.5 Having sexual intercourse without using condom	❑	❑	❑
2.	What are the signs and symptoms of STDs in male?			
	2.1 Have pus from penis	❑	❑	❑
	2.2 Pain when passing urine	❑	❑	❑
	2.3 Have wound at sexual organs	❑	❑	❑
	2.4 Itching at sexual organs	❑	❑	❑
3.	What are the signs and symptoms of STDs in female			
	3.1 Have white liquids from vagina with different color and smell	❑	❑	❑
	3.2 Pelvic pain when passing urine	❑	❑	❑
	3.3 Have wound at sexual organ	❑	❑	❑
	3.4 Itching at sexual organs	❑	❑	❑
4.	HIV and STDs can be prevented by			
	4.1 Abstinence from sex	❑	❑	❑
	4.2 Always using condom whenever having sexual intercourse	❑	❑	❑
	4.3 Cleaning sex organ immediately after sexual intercourse	❑	❑	❑
	4.4 Vaccination	❑	❑	❑
	4.5 Using disposable syringes	❑	❑	❑
5.	Condom used can prevent unwanted pregnancy	❑	❑	❑

6. Knowledge on condom use

Please rank from 1 to 8 for the steps in using

	Rank
6.1 Check the date of expiration of condom	
6.2 Tear the pack of condom carefully avoids the nail to tear the condom	
6.3 Press the tip of condom to release the air out	
6.4 Put condom on when penis is erected	
6.5 Pull the condom from top to the bottom of the penis	
6.6 Pull the penis out from the vagina and hold at the brim of condom	
6.7 Use the tissue paper wrap around the end of condom then pull the condom out	
6.8 Put the condom after use into the trash bin	

Part 3. Attitude on sexuality and condom use

	Agree	Not sure	Disagree
1. It is shameful to talk about sex with partner	❑	❑	❑
2. Sex education make the teenager to have sex early	❑	❑	❑
3. Sex education helps the teenager on having sex responsibility to the opposite sex	❑	❑	❑
4. Having premarital sex is normal at present	❑	❑	❑
5.Living together without married is normal at present	❑	❑	❑
6. Male always have sex for releasing their sexual needs	❑	❑	❑
7. Female always have sex because of love and obligation	❑	❑	❑
8. Male doesn't want to obligate and respect female who easily have sex with him	❑	❑	❑
9.For female, virgin is important before marriage	❑	❑	❑
10.It is admirable for male and female who has only one partner	❑	❑	❑
11. Condom must be used to prevent unwanted pregnency	❑	❑	❑
12. Abortion is one way to prevent unwanted pregnancy	❑	❑	❑
13. Birth control is responsibility of female only	❑	❑	❑
14. It is shameful for female to carry condom in her pocket	❑	❑	❑
15. It is normal for male to carry condom	❑	❑	❑
16. Changing partner is normal for person in your age	❑	❑	❑
17. Having sex with one lover is safe from HIV/AIDS and STDs	❑	❑	❑
18. HIV/AIDS and STDs can be prevented by using condom every time whenever you have sexual intercourse	❑	❑	❑
19. Using condom will make less sex enjoyable	❑	❑	❑
20. A nice looking person is free from HIV/AIDS and STDs	❑	❑	❑

Part 4. Accessibility to condoms

	Statement	Yes	No
1.	Where can you get a condom?		
	Pharmacy	❑	❑
	Family planning center	❑	❑
	Shopping center	❑	❑
	Clinic	❑	❑
	Friends	❑	❑
	Hospital	❑	❑
	Bar, guest house, hotel, sauna	❑	❑
	City health/health center	❑	❑
	Others (e.g., market, workplace, relative, NGO, sex	❑	❑
2.	Services of condom		
	Are the condom services always available?	❑	❑
	Can you easily access to condom?	❑	❑
	Are you aware if there is condom service on your campus?	❑	❑
3.	You do not have to buy condom?	❑	❑
4.	Is the condom cheap?	❑	❑

Part 5 condom use

5.1 Have you ever had sexual experience?

❑ No ➢ STOP ANSWERING

❑ Yes ➢ 1) How old were you when you first had sexual intercourse? …….. years

2) Did you use condom when you first had sexual intercourse?

❑ No ➲ *Reasons of not using*

❍ Not available ❍ Too expensive

❍ Partner objected ❍ Don't like them

❍ Trust partner ❍ I am faithful

❍ I was drunk ❍ Partner drunk

❍ Other specify……....

❑ Yes ➲ *Reasons of using*

❍ Pregnancy prevention ❍ STDs prevention

❍ HIV/AIDS prevention ❍ Partner requested

❍ Other specify……

5.2 Are you currently married or living with a partner?

❑ No

❑ Yes ➢ a) Did you use a condom the last time you had sex with your spouse / cohabiting partner?

❑ No

❑ Yes ➲ The last time you used a condom, who made the decision to use it? ❑ Myself ❑ My partner ❑ Both of us

b) Other than your spouse/cohabiting/regular partner, have you had any sexual partners in the last 6 months?

❑ No

❑ Yes

If yes, did you use a condom the last time you had sex with your sexual partners?

❑ No never ➲ *Reasons of not using* ❍ Not available
❍ Too expensive ❍ Partner objected
❍ Don't like them❍ Trust partner
❍ I am faithful ❍ I was drunk
❍ Partner drunk ❍ Other specify……

❑ Yes sometime

❑ Yes always ➲ *Reasons of using*
❍ Pregnancy prevention ❍ STDs prevention
❍ HIV/AIDS prevention ❍ Partner requested
❍ Other specify……

5.3 have you ever gone for commercial sex workers in the last 6 months?

❑ No

❑ Yes ➲ *Did you always use condom whenever you have sex with them?*
❑ No never ❑ Yes sometime ❑ Yes always

APPENDIX B
QUESTIONNAIRES IN VIETNAMESE

BỘ CÂU HỎI VỀ
SỬ DỤNG BAO CAO SU TRONG NAM SINH VIÊN

Các bạn sinh viên thân mến, Tình dục an toàn là vấn đề quan trọng trong phòng chống bệnh đường lây truyền qua đường tình dục. Nghiên cứu này giúp cho việc truyền thông GDSK về tình dục an toàn hiệu quả hơn. Nghiên cứu này không nhằm đánh giá phê phán về phương diện đạo đức sinh viên cho nên rất mong bạn hợp tác. Sự hợp tác tích cực của bạn thể hiện ở chỗ điền các thông tin về bạn một cách trung thực nhất.
Cảm ơn sự hợp tác của bạn.

Phần 1 . Đặc điểm chung:

1. **Bạn bao nhiêu tuổi** ? .

……
……

2**. Bạn đang học năm thứ mấy** 1. Năm thứ nhất 2. Năm thứ 2

3. **Chuyên ngành đang học**: 1. BSĐK 2. BS RHM 3. BS YHDP 4. CNDD
5. CN Dược

4. **Nơi sinh** ? 1. Thai Nguyên 2. Nơi khác

……

5. **Bạn theo tôn giáo nào** 1. Đạo phật 2. Đạo thiên chúa 3. Tôn giáo khác

6**. Bạn là người dân tộc gì**? 1. Kinh 2. Tày 3. Nùng 4. Dao
5. Mông 6. Thái 7. Mường 8. Khác…..

7. Tình trạng hôn nhân 1. Vẫn độc thân 2. Đã kết hôn 3. Khác

8 . Nơi ở hiện nay

1. Nhà cuả bố mẹ đẻ 2. Nhà của họ hàng 3. Nhà trọ
4. Ký túc xá của trường 5. Loại khác

……..

9. Nghề nghiệp của bố/mẹ hoặc người bảo trợ của bạn

9.1 Mẹ	9.2. Bố	9.3. Người bảo trợ
1. Công chức nhà nước	1. Công chức nhà nước	1. Công chức nhà nước
2. Doanh nghiệp nhà nước	2. Doanh nghiệp nhà nước	2. Doanh nghiệp nhà nước
3. Công ty tư nhân	3. Công ty tư nhân	3. Công ty tư nhân
4. Buôn bán	4. Buôn bán	4. Buôn bán
5. Lao động tự do	5. Lao động tự do	5. Lao động tự do
6. Nông dân	6. Nông dân	6. Nông dân
7. Nhân viên bán hàng	7. Nhân viên bán hàng	7. Nhân viên bán hàng
8. Khác	8. Khác	8. Khác

10. Trình độ học vấn của bố/mẹ / người bảo hộ

10.1. Mẹ	10.2. Bố	10.3. Người bảo hộ
1. Mù chữ	1. Mù chữ	1. Mù chữ
2. BĐBV	2. BĐBV	2. BĐBV
3. Tiểu học	3. Tiểu học	3. Tiểu học
4. Trung học cơ sở	4. Trung học cơ sở	4. Trung học cơ sở
5. Phổ thông trung học	5. Phổ thông trung học	5. Phổ thông trung học
6. Đại học hoặc cao hơn	6. Đại học hoặc cao hơn	6. Đại học hoặc cao hơn
7. Khác ……..	7. Khác ……..	7. Khác ……..

11. Nguồn tiền cho học phí và chi phí hàng tháng của bạn được cung cấp từ ai? (có thể chọn nhiều câu trả lời)

1. Bố mẹ 2. Họ hàng 3. Anh chị em ruột 4. Học bổng 5. Công việc làm thêm
6. Nguồn khác (ghi rõ……)

12 .Tiền bạn nhận được hàng tháng có đủ chi phí sinh hoạt không

1. Luôn luôn đủ 2. Đôi khi không đủ 3. Không đủ

Phần 2. Kiến thức về HIV/AIDS, STDs và bao cao su

(*Chỉ lựa chọn 1 cách trả lời, nếu trả lời là đúng thì tích vào ô đúng, nếu trả lời là sai thì tích vào ô sai , nếu bạn thấy không chắc chắn thì tích vào ô không rõ*)

	Kiến thức	Đúng	Sai	Không rõ
1.	**Một người có thể bị nhiễm HIV/AIDS bởi:**			
	1.1 Ăn uống cùng với người đã bị nhiễm HIV/AIDS	❑	❑	❑
	1.2 Dùng chung bơm kim tiêm và các dụng cụ tiêm truyền với người đã bị nhiễm HIV/AIDS	❑	❑	❑
	1.3 Hôn người đã bị nhiễm HIV/AIDS	❑	❑	❑
	1.4 Truyền máu chưa qua kiểm tra sàng lọc	❑	❑	❑
	1.5 Quan hệ tình dục không sử dụng bao cao su	❑	❑	❑
2.	**Các biêu hiện các bệnh lây qua đường tình dục ở nam giới như thế nào?**			
	2.1 Dương vật chảy mủ	❑	❑	❑
	2.2 Dương vật bị đau buốt khi đi tiểu	❑	❑	❑
	2.3 Có tổn thương bộ phận sinh dục	❑	❑	❑
	2.4 Ngứa ở bộ phận sinh dục	❑	❑	❑
3.	**Các biêu hiện các bệnh lây qua đường tình dục ở nữ giới như thế nào?**			
	3.1 Xuất hiện khí hư hoặc dịch âm đạo có màu và mùi khác thường	❑	❑	❑
	3.2 Đau buốt vùng hố chậu khi đi tiểu	❑	❑	❑
	3.3 Có tổn thương cơ quan sinh dục	❑	❑	❑
	3.4 Ngứa bộ phận sinh dục	❑	❑	❑
4.	**HIV và bệnh lây qua đường tình dục có thể được dự phòng bởi các biện pháp:**			
	4.1 Kiêng không quan hệ tình dục	❑	❑	❑

	4.2 Luôn sử dụng bao cao su mỗi khi quan hệ tình dục	❑	❑	❑
	4.3 Vệ sinh cơ quan sinh dục ngay sau khi quan hệ tình dục	❑	❑	❑
	4.4 Tiêm phòng vacxin	❑	❑	❑
	4.5 Chỉ dùng loại bơm kim tiêm sử dụng 1 lần	❑	❑	❑
5.	**Sử dụng bao cao su có thể phòng tránh mang thai ngoài ý muốn**	❑	❑	❑

6. Kiến thức về sử dụng bao cao su

(Từ 6.1 đến 6.8, bạn chọn bước nào trước thì đánh số 1, bước tiếp theo thì đánh số 2…đảm bảo thứ tự các bước từ 1-8)

Các bước	**Chọn**
6.1 Kiểm tra thời hạn sử dụng của bao cao su	
6.2 Xé vỏ bao cao su một cách cẩn thận tránh cho móng tay không làm rách bao cao su	
6.3 Bóp nhẹ vào đầu bao cao su để loại bỏ khí ra khỏi bao cao su	
6.4 Đeo bao cao su vào dương vật khi dương vật đã cương cứng	
6.5 Kéo bao cao su từ đầu đến tận gốc của dương vật	
6.6 Dùng tay giữ chặt phần gốc của bao cao su rồi rút dương vật ra khỏi âm đạo	
6.7 Dùng giấy vệ sinh bọc lấy phần gốc bao cao su rồi rút bao cao su ra	
6.8 Bỏ bao cao su sau khi sử dụng vào thùng rác	

Phần 3 : Thái độ về tình dục và bao cao su

(Chỉ chọn 1 cách trả lời , nếu bạn đồng ý thì tích vào ô đồng ý, nếu bạn không đồng ý thì tích vào ô không đồng ý, nếu bạn không chắc chắn thì tích vào ô không chắc chắn)

Nội dung	Đồng ý	Không chắc chắn	Không đồng ý
1.Thật là đáng xấu hổ để nói về quan hệ tình dục với người yêu hay bạn tình	❑	❑	❑
2. Giáo dục giới tính sẽ làm cho các thiếu niên có quan hệ tình dục sớm	❑	❑	❑
3. Giáo dục giới tính giúp các thanh thiếu niên có cái nhìn đúng đắn về giới tính cũng như quan hệ tình dục	❑	❑	❑
4. Quan hệ tình dục trước hôn nhân là chuyện bình thường hiện nay	❑	❑	❑
5. Sống với nhau mà không kết hôn là chuyện bình thường hiện nay	❑	❑	❑
6. Nam giới luôn luôn có quan hệ tình dục là để thỏa các nhu cầu tình dục của mình	❑	❑	❑
7. Nữ có quan hệ tình dục là vì tình yêu và nghĩa vụ	❑	❑	❑
8.Nam giới không muốn và sẽ không tôn trọng người phụ nữ nào dễ dàng có quan hệ tình dục với anh ta	❑	❑	❑
9.Đối với phụ nữ, trinh tiết là điều quan trọng trước khi kết hôn	❑	❑	❑
10.Sẽ rất tuyệt vời và đáng ngưỡng mộ nếu nam và nữ chỉ có một bạn tình	❑	❑	❑
11.Bao cao su được sử dụng để ngăn ngừa mang thai ngoài ý muốn	❑	❑	❑
12. Phá thai là một cách để ngăn ngừa mang thai ngoài ý muốn	❑	❑	❑
13. Kiểm soát sinh đẻ là trách nhiệm của riêng phụ nữ	❑	❑	❑

14. Phụ nữ mang bao cao su trong túi là điều đáng xấu hổ	❑	❑	❑
15. Nam giới theo mang bao cao su là chuyện bình thường	❑	❑	❑
16. Đối với lứa tuổi của bạn thì thay đổi bạn tình là bình thường	❑	❑	❑
17. Quan hệ tình dục với chỉ một người yêu là an toàn với HIV / AIDS và các bệnh STDs	❑	❑	❑
18. HIV / AIDS và các bệnh STDs có thể được bảo vệ bằng cách sử dụng bao cao su bất cứ khi nào bạn có quan hệ tình dục	❑	❑	❑
19. Sử dụng bao cao su sẽ làm giảm khoái cảm khi quan hệ tình dục	❑	❑	❑
20. Một người được gọi là tốt và đứng đắn nếu họ không bị nhiễm HIV / AIDS và các bệnh STDs	❑	❑	❑

Phần 4. Khả năng tiếp cận bao cao su

	Nội dung	Có	Không
4.1.	Bạn có thế nhận bao cao su từ đâu(mua hoặc được phát miễn phí) ?		
	1. Hiệu thuốc	❑	❑
	2. Trạm y tế xã/phường	❑	❑
	3. Siêu thị , trung tâm mua sắm	❑	❑
	4. Các cơ sở khám chữa bệnh	❑	❑
	5. Bạn bè	❑	❑
	6. Bệnh viện	❑	❑
	7.Quán bar, nhà nghỉ, khách sạn	❑	❑
	8. Các cơ quan y tế khác	❑	❑
	9. Khác (chợ, nơi làm việc….)	❑	❑
4.2	Các dịch vụ cung cấp bao cao su có luôn sẵn có không ?	❑	❑
4.3	Bạn có dễ dàng có được bao cao su khi cần không ?	❑	❑
4.4	Bạn có biết đến dịch vụ cung cấp bao cao su nào ở trong trường của bạn không?	❑	❑
4.5.	Nếu muốn sử dụng bao su bạn có phải mua không?	❑	❑
4.6	Bao cao su có rẻ không ?	❑	❑

Phần 5 . Sử dụng bao cao su. (Bạn trả lời bằng cách khoanh tròn vào các số tương ứng hoặc tích vào các ô tương ứng)

5.1 Bạn đã quan hệ tình dục bao giờ chưa?

1. Không **(kết thúc trả lời ở đây)**
2. Có ➢2.1) **Bạn quan hệ tình dục lần đầu tiên năm bao nhiêu tuổi?**

.....tuổi

2.2**) Trong lần quan hệ tình dục lần đầu tiên đó bạn có dùng bao cao su không**?

1. Không ➲ ***Lý do không dùng*** ❍ Không có sẵn ❍ Quá đắt
❍ Bạn tình không muốn ❍ Không thích
❍ Tin tưởng bạn tình ❍ Bạn là người chung thuy
❍ Bạn say rượu ❍ Bạn tình say rượu

❍ Lý do khác……..

2. Có ➲ ***Lý do có dùng***

❍ Tránh thai ❍ Phòng các bệnh lây qua đường tình dục

❍ Phòng lây nhiễm HIV/AIDS

❍ Bạn tình đề nghị dùng

❍ Lý do khác……..

5.2 .Bạn đã kết hôn hoặc đang sống cùng bạn tình?

1. Không

2. Có

5.3 .Trong lần quan hệ tình dục gần đây nhất bạn có dùng bao cao su không?

1. Không

2. Có ➲**Lần sử dụng bao cao su gần đây nhất ai là người quyết định**

❑ Bạn ❑ Bạn tinh của bạn ❑ Cả hai

5.4 .Ngoài bạn tình hiện nay, bạn có thêm bạn tình nào khác nữa trong vòng 6 tháng qua không?

1.Không

2. Có ➲**trong lần quan hệ tình dục gần đây nhất với những người này bạn có dùng bao cao su không**?

❑ Không bao giờ ➲ *Lý do không dùng*

❍ Không có sẵn

❍ Quá đắt ❍ Bạn tình từ chối

❍ Không thích ❍ Tin tưởng bạn tình

❍ Chung thủy ❍ Bạn say rượu

❍ Bạn tình say rượu ❍ Lý do khác…..

❑ Thỉnh thoảng

❑ Luôn dùng ➲ *Lý do dùng*

❍ Tránh thai

❍ Phòng các bệnh lây qua đường tình dục

❍ Phòng lây nhiễm HIV/AIDS

❍ Bạn tình yêu cầu ❍ Lý do khác……

5.5 Bạn có quan hệ tình dục với gái mại dâm trong vòng 3 tháng qua không ?

1. Không
2. Có ➲ ***Bạn có dùng bao cao su mỗi khi quan hệ tình dục với họ không?***

❑ Không bao giờ ❑ Thỉnh thoảng ❑ Luôn dùng

Xin trân thành cảm ơn sự hợp tác của Bạn

APPENDIX C

INFORMATION SHEET

EC-3 Form

1. Title of project:

Condom use among male university students in Viet Nam

2. Study site:

Thai Nguyen College of Medicine and Pharmacy in Thai Nguyen, Vietnam

3. This project is conducted by:

Dr. Nguyen Thai Chi

Under supervision of Major Advisor as follows:

Assoc. Prof. Dr. Oranut Pacheun, Dr.P.H.

4. Brief Background, Rationale

In Asia, AIDS is an epidemic; with an estimated 4.9 million people were living with HIV in 2009, about the same as five years earlier.

Most national HIV epidemics appear to have stabilized. No country in the region has a generalized epidemic. Thailand is the only country in this region in which the prevalence is close to 1%, and its epidemic appears to be stable overall. A resurgent epidemic in the late 1990s (when up to 60 000 people were becoming newly infected annually) has since receded. The adult HIV prevalence was 1.3% in 2009, and the HIV incidence had slowed to 0.1% . In Cambodia, the adult HIV prevalence declined to 0.5% in 2009, down from 1.2% in 2001. However, the HIV prevalence is increasing in such low prevalence countries as Bangladesh, Pakistan (where drug injecting is the main mode of HIV transmission), and the Philippines.

Viet Nam has an estimated total population in 2010 of 89,571,130 people. The number of people living with HIV/AIDS, end 2009 estimated is 280,000 people. The adult HIV prevalence at the end of 2009 is 0.4%. Among Vietnamese males, the rate of engagement in non-marital sexual behaviours at 20 years is 9% to over

33% at 24 years. In addition, young men are engaging in casual and transactional sexual relations and inconsistent condom use. Therefore, male university students are among high-risk group of getting HIV/AIDS. Assessment of knowledge and attitude on sex, HIV / AIDS, STDs and condom use will be baseline information to formulate proper preventive program for this group.

5. Objectives:

To determine the prevalence of and factors associated with condom use among male university students studying in Thai Nguyen college of medicine and pharmacy

6. You are invited to be a volunteer/subject to participate in the project

You are one of the first and second year male students of Thai Nguyen College of Medicine and Pharmacy in Thai Nguyen, Vietnam, you are invited to participate in our study by answering the self - administered questionnaires.

7. Research activities which involving you when you volunteer to participate in this research project will be as following: (focus on the parts that involve volunteers/subjects)

If you are willing to participate in this study, we would like you to read the informed consent form and sign in it after you realize the purpose and process of the study. Then you will get the questionnaire which need to answer about your general characteristics, your knowledge on HIV/AIDS, STDs and condom use, your attitude on sex and condom, your accessibility to condoms, and your condom use.

8. Period of time that you will be involved in this research activities (Treatment/data collection):

The whole process will take about 20 minutes.

9. Expected benefits of the project to you and to others:

There is no direct benefit to you, but your contribution will help to find out the association between the factors associated with condom use among male university students studying in Thai Nguyen college of medicine and pharmacy. Information from this study will be useful in planning program for prevention of HIV/AIDS and STDs in Vietnam.

10. Risks or any undesirable that may occur to you caused by this research and measure or prevention and risk reclusion method which will be provided during participation in the project.

Some questions in the questionnaire mention the private life. Therefore, you may feel uncomfortable and then you can stop participating or not answering exactly. Therefore, before starting the data collection, the researcher will explain clearly the purpose of study to you. Your information in the answer is very useful for this study and it will be kept secretly. And, the result of this study will not be mentioned to anyone. When you feel inconvenient or uneasy to answer, you can ask the researcher any problem encountered, at any time.

11. How can you securely store the data and keep them confidential? (Such as how to take care data, where are data storage who will access, and how to destroy data and when)

All data collected from you and your individual information will confidentially be ensured and stored in a locked cabinet. Code will be used to identify data collection form. Only the researcher has an access to the data. In any part of the report that might have been published, the researcher will not include any information that makes it possible to identify you.

12. The right of the subject (he/she) to withdraw from the project.

You have right to refuse to answer the questions or withdraw at anytime if you feel uncomfortable with answering the questions. You can also ask any unclear points to the researcher at anytime.

13. Contact address of authorized persons in case of emergency.

Dr. Nguyen Thai Chi
Student ID: 5437436-PHMP/M
MPH International Program
Faculty of Public Health, Mahidol University
Bangkok 10400, Thailand.
Address in Vietnam:
Dr. Nguyen Thai Chi
Faculty of Public Health, Thai Nguyen College of Medicine and Pharmacy in Thai Nguyen , Vietnam

This research project will be approved by: the Ethical Review Committee for Human Research, Faculty of Public Health, Mahidol University. Office address at Building 1, 4th Floor, 420/1 Rajvithi Road, Rajthevi, Bangkok 10400, Telephone: 0-2354-8543-9 Ext. 1127, 7404 Fax: 0-2640-9854

APPENDIX D
INFORMED CONSENT FORM

Project Title:

Condom use among male university students in Viet Nam

Responsible person(s) and institute:

Dr. Nguyen Thai Chi
Student ID: 5437436 PHMP/M
MPH International Program
Faculty of Public Health, Mahidol University
Bangkok 10400, Thailand.

Date …… (day/month/year)

I (Mr./Mrs./Ms.)……..…….……..……...……

Home address……..…….Street…….Village number……..……

Sub district……. District…...…….. Province……..…….. Postal code…..……..

I have read and understood all statements in the **information sheet**. I have also been explained the objectives and methods of the study, as well as possible risks and benefits that may happen to myself upon the participation in the study. I understand that the information will be kept confidential and my name will not be declared in any case. I shall be given a copy of the signed **informed consent form**.

I have the right to withdraw from the project at any time without any adverse effects upon myself.

Signature…..…… (Respondent/informant)

(…….……..)

Signature…… (Researcher)

(Dr. Nguyen Thai Chi)

Signature…….……...… (Witness)

(…….……..)

APPENDIX E
INFORMED CONSENT FORM (VIETNAMESE)

Mẫu EC-4

Tên nghiên cứu:
Sử bao cao su trong nam sinh viên đại học tại Việt Nam

Ngườichịu trách nhiệm: Bác sĩ Nguyễn Thái Chi
Sinh viên ID: 5437436 PHMP / M
Chương trình Thạc sĩ y tế công cộng (khóa quốc tế)
Khoa Y tế Công cộng, Đại học Mahidol, Bangkok 10400, Thái Lan.

Ngày ... ... (ngày / tháng / năm
Tôi……..
Địa chỉ nhà: Xóm: ... ... Làng/Bản……. ... ..
Xã ... ... Huyện ... ... Tỉnh Hòa Bình
Tôi đã đọc và hiểu tất cả các thông tin trong báo cáo. Tôi cũng đã được giải thích về mục tiêu và phương pháp nghiên cứu, cũng như nguy cơ có thể và lợi ích có thể xảy ra với bản thân mình khi tham gia vào nghiên cứu. Tôi hiểu rằng thông tin sẽ được giữ bí mật và tên của tôi sẽ không được tuyên bố trong bất kỳ trường hợp nào. Tôi sẽ nhận được bản sao của các hình thức thông báo đồng ý ký kết. Tôi có quyền rút khỏi nghiên cứu tại bất kỳ thời điểm nào mà không chịu bất kỳ tác động nào đến bản thân.

Chữ ký ... . (Đơn vị/ cung cấp thông tin)
(... ... ...)
Chữ ký ... ... (nghiên cứu viên)
(Bác sĩ Nguyễn Thái Chi)
Chữ ký ... ... (Người tham gia)
(... ... ...)

APPENDIX F

Certificate of Approval
Ethical Review Committee for Human Research
Faculty of Public Health, Mahidol University

COA. No. MUPH 2012-160

Protocol Title :	CONDOM USE AMONG MALE UNIVERSITY STUDENTS IN VIET NAM
Protocol No. :	141/2555
Principal Investigator :	Dr. Nguyen Thai Chi
Affiliation :	Master of Public Health (International Program) Faculty of Public Health, Mahidol University
Approval Includes :	1. Project proposal 2. Information sheet 3. Informed consent form 4. Data collection form/Program or Activity plan
Date of Approval :	14 June 2012
Date of Expiration :	13 June 2013

The aforementioned project have been reviewed and approved according to the Declaration of Helsinki by Ethical Review Committee for Human Research, Faculty of Public Health, Mahidol University.

S. Nanthamongkolchai

(Assoc. Prof. Sutham Nanthamongkolchai)
Chairman of Ethical Review Committee for Human Research

Phitaya Charupoonphol

(Assoc. Prof. Phitaya Charupoonphol)
Dean of Faculty of Public Health

420/1 Rajvithi Road, Bangkok, Thailand 10400.
Tel. (662) 3548543-9 ext. 1127, 7404 Fax. (662) 6409854

BIOGRAPHY

NAME	Nguyen Thai Chi
DATE OF BIRTH	31st March 1983
PLACE OF BIRTH	Lang Son province , Vietnam.
INSTITUTIONS ATTEND	Thai Nguyen University of Medicine and Pharmacy (2003-2009) Mahidol University(2011-2012) Master of Public Health.
HOME ADDRESS	To Huu Street, Quyet Thang District, Thai Nguyen City, Vietnam Tel :+842803746708 Email : thaichi.public@gmail.com