EVALUATION OF KNOWLEDGE, ATTITUDE, AND BEHAVIOR OF SECONDARY SCHOOL STUDENTS IN CHUMPHON PROVINCE, THAILAND ACCORDING TO MINISTRY OF EDUCATION'S GUIDELINES ON SEXUAL EDUCATION

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EVALUATION OF KNOWLEDGE, ATTITUDE, AND BEHAVIOR OF SECONDARY SCHOOL STUDENTS IN CHUMPHON PROVINCE, THAILAND ACCORDING TO MINISTRY OF EDUCATION'S GUIDELINES ON SEXUAL EDUCATION

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ABSTRACT

Sexual problems are of significance among adolescents because they can lead to unwanted pregnancy, sexually transmitted diseases and HIV infection. Sex education can help prevent sexual problems among adolescents.

The objectives of this research were to study knowledge, attitude and sexual behavior of secondary school students compared to the standards set up in the guidelines of educational activities on sexuality by the Ministry of Education, Thailand, 2005. This is descriptive research. The sample group comprises 194 students, who were studying in early secondary school in Chumphon province. Data were colleted by using self-administered questionnaires during 1 to 28 February, 2007. Statistics for data analysis were frequency, percentage, mean and standard deviation.

The results of this study showed that most of students (75.3%) had low knowledge about sex, compared to the standards in the guidelines. Most of them knew little about contraception, sexually transmitted disease and HIV infection. Regarding attitude toward sex of students, only 50.0% of students had an appropriate attitude. Most students (87.1%) agreed that having sex with their girlfriends had less risk of contracting AIDS than sex with commercial sex workers. 58.8% of students felt that masturbation can lead to mental and physical illness. Regarding sexual behavior, most of them (89.7%) were of low risk according to the guidelines. Only 15.5% of them had ever dated with persons met through internet communications.

In conclusion, when guidelines of the Ministry of Education were used as a standard to evaluate knowledge, attitude, and sexual behavior among early secondary school students, it was found that knowledge and attitude toward sex were low, although sexual behavior was of low risk. It is necessary that these guidelines should be put into practice as soon as possible to prevent problems that would occur with these students in the future.

KEY WORDS: SEXUAL BEHAVIOR/ KNOWLEDGE/ ATTITUDE

74 pp.

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การประเมินความรู้ ทัศนคติ และพฤติกรรมของนักเรียนชั้นมัธยมศึกษาตอนต้นในจังหวัดชุมพรตามแนวทางการจัดกิจกรรมการเรียนรู้เพศศึกษา ของกระทรวงศึกษาธิการ(EVALUATION OF KNOWLEDGE, ATTITUDE, AND BEHAVIOR OF SECONDARY SCHOOL STUDENTS IN CHUMPHON PROVINCE, THAILAND ACCORDING TO MINISTRY OF EDUCATION'S GUIDELINES ON SEXUAL EDUCATION)

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บทคัดย่อ

ปัญหาเรื่องเพศเป็นปัญหาที่สำคัญในวัยรุ่น ทำให้เกิดการตั้งครรภ์ที่ไม่พร้อม โรคติดต่อทางเพศสัมพันธ์และโรคเอดส์ การสอนเพศศึกษาสามารถช่วยแก้ปัญหาหรือลดปัญหาเหล่านี้ได้

การศึกษาในครั้งนี้มีวัตถุประสงค์เพื่อศึกษาความรู้ ทัศนคติและพฤติกรรมของนักเรียนชั้นมัธยมศึกษาตอนต้น เปรียบเทียบกับที่กำหนดไว้ในแนวทางการจัดกิจกรรมการเรียนรู้เพศศึกษาของกระทรวงศึกษาธิการ ที่จัดทำขึ้นในปี พ.ศ. 2548 การศึกษานี้เป็นเชิงพรรณนา โดยศึกษานักเรียนมัธยมศึกษาตอนต้น ในจังหวัดชุมพร จำนวน 194 คน เก็บข้อมูลโดยใช้แบบสอบถามและให้กลุ่มตัวอย่างตอบแบบสอบถามด้วยตนเอง ในระหว่างวันที่ 1 ถึง 28 กุมภาพันธ์ พ.ศ. 2550 วิเคราะห์ข้อมูลโดยใช้สถิติเชิงพรรณนา ได้แก่ จำนวน อัตรา ร้อยละ ค่าเฉลี่ย ค่าเบี่ยงเบนมาตรฐาน

ผลการศึกษาพบว่า นักเรียนชั้นมัธยมศึกษาตอนต้น ในจังหวัดชุมพร มีความรู้เกี่ยวกับเรื่องเพศอยู่ในระดับต่ำเมื่อเปรียบเทียบกับแนวทางฯ ส่วนใหญ่ (ร้อยละ 75.3) ยังไม่มีความรู้ในเรื่อง การคุมกำเนิด โรคติดต่อทางเพศสัมพันธ์และโรคเอดส์ สำหรับทัศนคติเรื่องเพศนักเรียนมีทัศนคติเหมาะสมตามแนวทางฯ เพียงร้อยละ 50.0 นักเรียนส่วนใหญ่ (ร้อยละ 87.1) มีทัศนคติว่าการมีเพศสัมพันธ์กับเพื่อนมีโอกาสติดเชื้อเอดส์ได้น้อยกว่าการมีเพศสัมพันธ์กับผู้หญิงขายบริการทางเพศและร้อยละ 58.8 ของนักเรียนมีทัศนคติว่าการสำเร็จความใคร่ด้วยตนเองเป็นสิ่งไม่ดีทำให้เกิดความเจ็บป่วยทางจิตใจและร่างกายได้ สำหรับพฤติกรรมทางเพศพบว่า นักเรียนส่วนใหญ่ (ร้อยละ 89.7) มีพฤติกรรมเสี่ยงต่ำ และร้อยละ 15.5 เคยออกไปเที่ยวตามลำพังกับเพื่อนต่างเพศที่รู้จักกันทางอินเตอร์เน็ต

โดยสรุป เมื่อใช้แนวทางฯ ของกระทรวงศึกษาธิการเป็นบรรทัดฐานในการพิจารณา ความรู้ ทัศนคติและพฤติกรรมของนักเรียนมัธยมศึกษาตอนต้นของจังหวัดชุมพร พบว่า ความรู้และทัศนคติยังอยู่ในระดับต่ำ แต่พฤติกรรมยังมีความเสี่ยงต่ำ ดังนั้นจึงมีความจำเป็นที่ต้องทำให้การเรียนการสอนตามแนวทางฯ ที่กำหนดไว้เกิดขึ้นอย่างทันท่วงที เพื่อป้องกันและลดปัญหาทางเพศที่เกิดขึ้นในกลุ่มนักเรียนเหล่านี้ในอนาคตต่อไป

74 หน้า.

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CHAPTER I
INTRODUCTION

Background and Rationale

Adolescence is an important stage of physiological, psychosocial and intellectual changes. One of the important changes in adolescence is sexual development. Adolescents will begin to have interest in sex, especially create new relationships with the opposite sex due to increasing sex hormone and sex drive. They are also curious about sexual issues, and then search for information through all kind of medias. All these circumstances and social factors including being away from the family make them vulnerable to have sexual relationship before the appropriate time. (1)

Sexual problem of adolescents is one among important social problems which include, for example, premature sex, incorrect values about sex, children and youth growing up in sexual arousing media, being deceived in to risky sexual behavior, irresponsible sexual behavior. (2) The report on Global HIV/AIDS in 2006 stated that up to 39.5 million people were infected with HIV/AIDS, of whom 19.5 million were male, and 17.7 million female. Among these two groups, 2.3 million were children aged < 15 years. In 2006 there were 4.3 million reported HIV infections, of whom 3.8 million were adults and 530,000 were children aged < 15 years; 2.6 million people had died from AIDS. Adolescents are increasingly likely to approve of premarital sexual activity. Most male adolescents however have negative attitude toward sex; for example, they approve having multiple partners and showing affection (hugging and touching) in public places. (3) The study of Areechokchai D. (3) found that adolescents in formal education and non-formal education system had sexual intercourse without use of condom or self-protection. Due to the lack of skills in assessment of risk situation, most of those sexual activities occurred unexpectedly without preparedness and awareness. Some did not even know how to use condom. These problems partly caused by lack of knowledge and understanding about sex education. The study of Punsiri S. (4) which studied in Matthayom suksa 1 students in

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Kanchanaburi Province, west of Bangkok, found that most of the students (91.1%) had low level of knowledge in sexual development and about appropriate sexual hygiene. The study of Isaranurak S. (3) which found that secondary school students had moderate level of knowledge about sex, and had inaccurate knowledge about menstruation, safe period, and contraceptive methods.

Regarding that most people consider sex education as a taboo which is a sensitive issue, not to be discussed openly and teachers are not generally confident about teaching sex education in school. Often policy makers, public opinion leaders and parents believed that withholding information about sexuality and reproduction from young people will dissuade them from becoming sexually active. In fact good quality sex education does not lead to earlier or increased sexual activity among adolescents. Other studies showed that adolescents who received accurate information are more likely to delay sexual activity and have fewer sexual partners; they are also less likely to engage in risky sexual behavior. (5)

Ministry of Education of Thailand was aware about these problems and set up the guidelines of the education activities on sexuality in 2005 with the objectives that the guidelines will guide the teachers about sex education recommend, alert teaching process and activities that provides proper knowledge about sex. This knowledge obtained by using these guidelines should help students understand their own emotional and physical development, and that of the opposite gender, as well as generate understanding, and appropriate attitude and sexual behavior so that the students can live happily in the society.

Unfortunately, the guidelines were still not know or used in most of the school in Thailand. Most of the school still have classes on sexuality on their own standards and some times as an opportunistic education.

Thus, the researcher was interested in studying knowledge, attitude, and sexual behavior of secondary school students who learned about sexuality in the convention way and compared their knowledge, attitude and sexual behavior with the standards which were set in the guidelines.

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Objective of the study

1. To study knowledge of secondary school students compared with the standards set up in the guidelines of the education activities on sexuality by Ministry of Education, 2005.

2. To study attitude of secondary school students compared with the standards set up in the guidelines of the education activities on sexuality by Ministry of Education, 2005.

3. To study sexual behavior of secondary school students compared with the standards set up in the guidelines of the educational activities on sexuality by Ministry of Education, 2005.

Limitation of the Study

This study was conducted with the students who were studying in Matthayom Suksa 3 in secondary school in Chumphon Province.

Operation Definitions

Gender refers to male or female.

Age refers to age of the student in complete year.

Residence refer to the residence or the persons whom the students lived with. It is classified into: with parents, with relative and at the dormitory.

Parents' occupation are defined as the main job that father and mother did to earn the money to support the family.

Parents' education refers to number of full years of highest education of parents according to the Ministry of Education curriculum and Ministry of University Affairs.

Parents' marital status refers to the nuptial of the father and mother of the students whether they were married and separate.

Sexual knowledge refers to whether the students understand the facts about content of the 6 part in the guidelines of educational activities on sexuality by Ministry of Education i.e.

1. Human sexual development
2. Interpersonal Relationships

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3. Social and emotional adjustment skill
4. Sexual behavior
5. Sexual health
6. Influences of environment and culture

Attitude toward sex mean opinions, feeling, and tendencies of the students toward sex according to the standards set up in the guidelines of the education activities on sexuality by Ministry of Education i.e.

2. Interpersonal relationships
3. Social and emotional adjustment skill
4. Sexual behavior
5. Sexual health
6. Influences of environment and culture

Sexual behavior refers to actions, practice of the students according to the standards set up in the guidelines of the education activities on sexuality by Ministry of Education i.e.

2. Interpersonal relationships
3. Social and emotional adjustment skill

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CHAPTER II
LITERATURE REVIEW

In this study, the researcher has studied knowledge, attitude and sexual behaviors of secondary school students in Chumphon Province. The scope of the review of literature and the research relevant has been determined, as follows:

1. Adolescence
2. Adolescents sexual behavior
3. Sex education
4. The guidelines of the education activities on sexuality by Ministry of Education, 2005
5. knowledge and attitude towards sex education
6. Related research

Adolescence

Definition

The word *adolescence* is Latin in origin, derived from verb *adolescere*, which means “to grow into adulthood.” In all societies, adolescence is a time of growing up, of moving from the immaturity of childhood of adulthood. Adolescence is a period of transition: biological, psychological, social, economic. It is an exciting time of life. Individuals become interested in sex and become biologically capable of having children. They become wiser, more sophisticated, and better able to make their own decision.(6)

The World Health Organization (WHO) defines “adolescence” as follow:

1) Physically, changes in the reproductive system occur until it reaches its full development.
2) Mentally, the child develops into an adult.

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3) Socially and economically, children transition from being financially dependent into being financially self-supporting.(7)

The World Health Organization classifies adolescence into stages. Early Adolescence (aged 10-15 years) is a period of a spurt of physical growth. Middle Adolescence (aged 16-19 years) is a stage of experiencing wide mood swings, being influenced by peers, interest in the opposite sex, complete physical changes, and sexual experimentation. The lack of sexual knowledge and self-protection may cause unwanted pregnancies and the contract of sexually transmitted diseases. Late Adolescence (aged 20-24) is the age of perceived gender role, independent living and working, increase interest in sexuality, and acceptance of advice regarding, for example, how to prevent sexual problems.(3)

Steinberg L.(6) classified adolescence into tree stages:

1. Early adolescence which covers the period from about age 11 through age 14.
2. Middle adolescence which covers the period from about age 15 through age18.
3. Late adolescence which covers the period from about age 18 through age 21.

Janaim S. (8) classified adolescence into tree stages:

1. Early adolescence: aged 13 to 15 years.
2. Middle adolescence: aged 15 to 18 years.
3. Late adolescence: aged 18 to 21 years.

Considering age in relation to development, early adolescents are mostly students studying at the early high school level, a compulsory level of education according to the Thai national requirement set by the Ministry of Education, in 1999.(9) Age is the criterion for assigning the level of study. This is use to assign grades until the student attains the age of 15 years, when the child can decide whether he or she wants to continue to study or to leave school. In Thailand, there is a total of twelve years of compulsory education. The education system is divided into tree level: (10)

1. Pre-school Level, for children aged 3-5 years. Institutions for educating children at these ages are arranged as kindergarten, young child center, or preschool center.

2. Elementary School Level, from grade one to grade six for children aged 6-11 years. Some educational institution may accept children up to 14 years old

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depending on the child's capacity or other circumstances. According to Thai law, this level of education is compulsory.

3. Secondary School Level, for children aged 12-17 years. This level is divided into two sub-levels: early high school for children aged 12-14, and late high school for children aged 14-17.

Adolescent development

1. Physical development

The early years of adolescence are important because it is the transitional period from childhood into adulthood. Hormones influence physical development. Children at this age often feel hungry and usually eat a large quantity of food. They usually do not pay much attention to the nutritional value of their diet. During this stage, oil glands and sweat glands are functioning at their peak, so there faces are usually oily, and they may develop pimples. Many children start to grow chubbier, taller, and heavier. Hair begins to grow on different parts of their body, such as in the armpits and the pubic area. Girl develop breasts, the hip expand, and the menstruation cycle begins. Boys develop larger and stronger muscles, hair grows on their arms and legs, and they experience a voice change. During early adolescence, boys usually develop an uneven broken voice, which will change to a smooth low voice later. They will also experience wet dreams. During this time, both boys and girls become capable of procreation. Predicting the sequence of changes is difficult, since they do not occur in a uniform pattern.(8,11)

2. Emotional development

Adolescents are easily moved, often obsessed with being socially included, and like to have many friends. They start to feel affection towards the opposite sex, and think about their careers and freedom. Adolescent emotions are violent, full of confidence, quick-thinking, quick decision-making, creativity, and stubbornness; therefore, they often contradict these of their parents and surrounding elders.(8,12)

The adolescent's emotional changes are easy and quick, being influenced by the sexual development. The important role of the family in helping the adolescent is

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that parents must create familiarity, security for their children by giving them love, warmth and constant care in order to secure the children's emotions and help them control they own emotions, resulting in the expression of appropriate behaviors.

3. Intellectual development

Adolescents are at the age when there is advanced intellectual development. When the adolescent period ends, children will have a similar level of competence as adults. However, it would still differ from the adult's level in the dimensions of reflection and experience. (13) The better intellectual development of children depends on many dimensions of the environment, both in the society and in the family. The children in this age group do not like to think carefully, like to do new thinks and use language created among group members, seeing it as trendy.(14)

The adolescents' characteristics of intellectual development (13)

1. The ability to solve problems systematically.
2. The ability to memorize, which is very effective since they can create memorization techniques.
3. The ability to use abstract thinking, leading to the ability to create potential hypotheses for problem-solving.

4. Social development

The children in this age group like to be alone in order to improve their personality and try to remedy their failing. The reason that children prefer not to do things with other family members may be that children in this age group need to be free and independent.(8,14) Children in this age group start to have friends of the opposite gender, with relationships of both friendship and courtship. The important point is not to prevent girls and boys from seeing each other because the pressure from prevention may lead to aberrant behaviors. (8)

5. Sexual development.(8,15)

Children in this age group develop sexual characteristics and roles, which differ for males and females. When male adolescents reach puberty, the testicles,

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which are the male's sexual glands, are stimulated from the pituitary gland to produce reproductive cells and the male hormone, testosterone, causing the sexual organs to grow in size, such as the penis, and the testicles. Semen is produced by the testicles, which may be ejaculated from the body while the male adolescent has a deeper voice, wider chest, hair all over the body, and pubic hair.

As for females approaching the adolescence stage, the ovary, which is the female sexual gland, start working almost at the same time as the male sexual glands. The pituitary gland produces the hormones that stimulate the ovary to produce reproductive cells and female hormones, such as estrogen and progesterone, causing the eggs to mature, and menstruation. This indicates that the girls are ready to reproduce. Furthermore, these hormones also cause widening of the hip, increase in breast size, menstruation, and hair on the body and genital areas.

Sexual desire of adolescents

Sexual desire is natural for everybody. When children approach puberty, they pay more attention towards the opposite sex, along with sexual fantasies. When these sexual fantasies occur, they stimulate various body responses towards sexual feelings, which cause them to need to have sexual relationships (15), resulting in adolescents' attempts to satisfy these needs. These attempts include speaking secretly in a particular group, acquiring information from listening to others, or else, reading about sex in pornographic books, which may give the wrong information.(12,8) These attempts may affect future adolescent behaviors; therefore, when they do feel sexual desire, male and female adolescents should be aware of how to react.(15)

Adolescent sexual behaviors

Adolescence refers to the transitional period from childhood to adulthood. Complete maturity is counted from the time that adolescents have the reproductive capacity to have a baby, starting at the age of 13-15 years until the age of 20-24 years, (16) when they are able to take responsibility for their lives and standby themselves. Adolescents is a most important stage for physical, emotional, intellectual, and social development. Adolescence is the age at which people are eager to know and experience difference things in life, especially sexuality. This is because adolescents

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develop primary sexual characteristics, the maturation of the reproductive system. They tend to develop sexual feelings thought wet dreams or imagination. The developmental changes directly affect adolescents' self-image and their perception toward the world and other people in different respects.(17,18)

Although adolescents value independence, they still need support and guidance from their parents and family. Due to the hormone drive and dramatic physical changes, adolescents have to deal with a preoccupation with themselves and tend to distance themselves from their families. For that reason, they tend to experience difficulties in negotiating relationships with their parents during this period. Due to the onset of puberty and the sexual drive, sexual relationships, values, faith, and peer acceptance become crucial to identity development. They tend to rely on third-party perspectives, such as those of the peer group, partners, and lovers, instead of their parents. (8, 12)

In terms of the sexuality of adolescents, young female adolescents tend to view love and sexual relationships as somewhat romantic and beautiful. They consider the key factors to be warmth, closeness, and trust. Male adolescents, on the other hand, rather view love and sexual relationships are erotic and passionate. They are sensitive to sexual arousal and sexual pleasure, and they tend to seek only sexual activity. For that reason, adolescents tend to accept premarital sex as part of their sexual lifestyle, based on the influence from arousal of the emotion rather than morality or ethics. Although adolescents understand correct and incorrect sexual behaviors, they are vulnerable to premarital sex, due to tree influencing factors, as follows:

1. Physical factors

Early adolescents undergo rapid physical changes, especially the development of both primary and secondary sexual characteristics in terms of the reproductive system and the maturing body. With the onset of puberty, adolescents are influenced by sexual drives due to hormone changes. They are emerging into a stage of sexual curiosity, about what it means to be a man or a woman, and would even like to try sexual intercourse (19, 20) as the means to prove their true love.

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2. Psychological factors

Concerning the sex roles of husbands and wives, they try to develop their sexual relationships as adults do and may try to have sex experiences to affirm their maturity. Adolescents, especially those with family problems such as broken homes, family violence, etc., may tend to have low self-esteem and seek love, warmth, and caring from their parents. Their viewpoint is that “sex” is the way to show love for their parents.

2. Social factors

Society of the key factor regulating the sexual expression of its members. For example, ladies are required not to reveal their sexual desire and maintain their virginity. However, because Western values related to sexuality invaded Thai society, the relationships between males and females have become more flexible and people feel more open to starting sexual relationships. With the sexual values of Western societies and the influence of sexual drive, the new generation like to explore different aspects of their sexuality and tend to accept premarital sex as part of their sexual lifestyle. However, overt sexuality is inhibited and unaccepted in Thai society; people are more likely to avoid taking about sex in public. For that reason, adolescents feel uncomfortable about discussing sexual relationships with their parents or teachers and tend to seek sexual knowledge from the media (phonographic book, VCDs, and DVDs) and their peer. Therefore, adolescents find themselves vulnerable to receiving the wrong information about sex and are actually led into more inappropriate sexual behaviors, with consequent sex-related problems, such as unwanted pregnancies and sexually transmitted disease. Nowadays, education s considered the main factor causing delayed marriage in Thai society. People view marriage as a lifetime commitment and want to ensure their preparedness in term of financial stability and a secure career before their get married. Delaying marriage, therefore, is a major factor influencing premarital sex in Thai society nowadays. Moreover, with the awareness of sexually transmitted disease, people tend to accept premarital sex with the subject to take their parents instead of having sex with commercial sex workers. This phenomenon has generated more social problems among adolescents, such as

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unwanted pregnancy, abortion, loss of educational opportunity, and the risk of infection with STI. (21, 22, 23)

Sex Education

Sex education had been defined, as follow:

Diloksompan J. (15) defined sex education as the educating process that helps an individual learn about every dimension of sex, from growth, structure, function of the genitals, the sexually-relevant physical, mental, emotional, social, personality, inter-sex behaviors and good human relations. It contributes to the comprehension, positive attitude, and correct practice of sex in daily life, resulting in the good order of family life and society.

Somprayoon S. and Somprayoon W. (24) mentioned that sex education is the teaching or giving of sexual information about growth, development, and personality, including the various hygiene rules, to create good comprehension and attitude, in order to create responsibility and good inter-sexual relationships.

Pensri Pichai-sanit and Rawiwan Sangchai (25) defined that it is the provision of correct knowledge and understanding about sex, understand sex difference and how to create good relationship.

The guidelines of educational activities on sexuality by Ministry of Education, 2005.

The Guidelines are organized into six parts, each of which encompasses one essential area of leaning for the students (26). They are:

Part 1: Human sexual development.

This part dealt with sexual growth and development of anatomy, physiology, psychological emotional and society, body image, sexual identity and orientation.

Part 2: Interpersonal Relationships

This part dealt with a build and maintenance of relationship with the same and opposite sex, mate selection, preparation before marriage, and family establishment.

Part 3: Social and emotional adjustment skill

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This part dealt with ability to handle sexually involved situations, such as communicating skill, decision-making and problem solving skills, and emotionally handling skill.

Part 4: Sexual Behavior

This part dealt with the performance of appropriately sexual behavior according to ones gender and age.

Part 5: Sexual Health

This part dealt with proper care for sexual health by ages, prevention of sexually transmitted infection and AIDS, family planning and birth control.

Part 6: Influences of environment and culture

This part dealt with appropriate values of sex in harmony with Thai society and culture.

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Curriculum Contents (26)

Key concept	Objectives	Scope of content
Part 1 Human sexual development	1. To knows and understand about sexual development, physical and psychological changes.	1. Reproductive and Sexual Anatomy and Physiology 2. Factors of development 3.Sexual development
Part 2 Interpersonal Relationships	1. To realize the differences between male and female sexual attitude. 2. - To be able to notice and assess self emotion and property manage it. - To be able to notice and assess other's emotion and property face it. 3. To have skills important for developing and maintaining friendships.	1. Relationship within the family and friendship. 2. Romantic Relationships and Dating 3. Love 4. Families 5. Friendship 6. Effects of premarital sexual

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Key Concept	Objectives	Scope of content
Part 3 Social and emotional adjustment skill	1. To be able to assess sexual risk condition. 2. To be able to analyze and find solution when confronting the crisis. 3. To have the skill of negotiation. 4. To be able to practice appropriately regarding their lifestyles, mental health, and adjustment with the opposite sex.	1. Sexual danger that lead to unforeseen sexual intercourse. 2. Risk assessment skill(to prevent oneself from being in any risk situations) 3. Concept of life skill 3.1 Decision-making skill 3.2Problem solving skill 3.3 Refusal skill 3.4 Negotiation skill 3.5 Ask for help and support 4. Appropriate relationship with other person.
Part 4 Sexual behavior	1. To know and understand about sexual feeling emotion and how to property manage with sexual tension. 2. To realize responsible sexual relation. 3. Analysis and assessment accurate knowledge and attitude toward sex	1.Sexual feeling emotion 2. Delay and release of sexual drives. 3.Effects of unexpected sexual intercourse 4. Incorrect values about sex 5. Self-assurance

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Key Concept	Objectives	Scope of content
Part 5 Sexual health	1. To know and understand sexual health care and sexual hygiene. 2. To know and understand about sexually transmitted disease and AIDS. 3. Things to know about unwanted pregnancy.	1. Sexual health care and sexual hygiene. 2. Health promoting practice and good mental health 3. Concept and methods of contraception. -Condom use -Emergency contraception
Part 6 Influences of environment and culture	1. To realize the danger of sexual media. 2. To realize the important of family planning. 3. To realize the important of supportive gender role. 4. Relationship of thinking, attitudes and sexual behaviors including traditional and cultural factors.	1. Provoking media -Fashions -Premarital sex 2.Family Planning 3. Role of sexes

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Knowledge and Attitude towards Sex Education

Knowledge

Definition of knowledge

Many have tried to define knowledge, as follows:

Suwan P. (27) stated that knowledge is the basic behavior, in which a student could only memorize from sight or sound.

According to Good's dictionary of education (28), knowledge is facts, truth, rules, and details that an individual collects. This is correlated with Edward's dictionary (29), which defined knowledge as facts, rules and structure that originated from research, observations, experiences or from reports.

Cognitive domain

Bloom(30) divided the cognitive domain into the 6 following level:

1. Knowledge is the ability to memorize or recognize perceived events, such as knowledge about definition, facts, theories, rules, structures, problem-solving methods, etc.

2. Comprehension is the ability to give definition, which may be expressed in the form of skill or translation ability, interpretation and extrapolation.

3. Application is the ability to use knowledge to solve problems or situations successfully.

4. Analysis is the ability to consider events by dividing the problem into sub-parts in order to understand the sub-components in detail and see the relationship between these components clearly.

5. Synthesis is the ability to put the components together into a whole event and rearrange the structure into a new and improvised one with greater efficiency.

6. Evaluation is the ability to make decisions using criteria and standards.

Knowledge Evaluation Test

A knowledge evaluation test is the measurement of the brain's capability in memorizing things that have been experienced, known, or seen. There are many types of tools used in the evaluation, in which each type is appropriate with different

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characteristics. The most used tool is the questionnaire, which may be divided into the tree following types. (31)

1. Oral test is the direct verbal test between the tester and the participant. Sometimes it could be referred to as an interview.

2. Written test, which is divided into the following 2 types:

A. Essay, which is the type that requires participants to explain, describe, or criticize events involved with knowledge.

B. Limited answers, which is the type that requires the participants to consider, compare, and interpret statements or details, in which there are 4 formats; true/false questions, fill in the blanks, matching, and multiple choice.

3. Practice test, which is the test that does not want the participants to respond verbally or in writing but emphasizes real action.

Attitude

Definition of attitude

Good (28) defined attitude as the predisposition or tendency to react specifically towards an object, situation, or value, usually accompanied by feelings and emotions.

Webster's Dictionary (32) defined attitude as the manner of acting, feeling, or thinking that shows an opinion and tendency to practice.

Suwan P. (33) suggested that an attitude is an individual's belief and feeling towards things, such as another individual, things, actions, situations and other things, including the expression of a mental condition towards something. Attitude is abstract and causes expressive action, however, it is neither a motive or drive but is a state of readiness and expresses a person's response to a stimulant.

Component of attitude

Rosenberg and Hovland (34) classified attitude into 3 components:

1.Cognitive component: the perceptual responses and verbal statements of belief.

2.Affective component: sympathetic nervous responses and verbal statements

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of affect.

3.Behavior Component: overt actions and verbal statements concerning behavior.

Characteristics of attitude

1. Attitude results from learning or experience; people are not born with it. When an individual learns, he acquires that learned feeling, which results in attitude.

2. Attitude could change if the environment and the situation changes. The attitude of an individual could change from acceptance to non-acceptance or non-acceptance to acceptance.

3. Attitude determines both introvert and extrovert behaviors. Acceptance or non-acceptance attitudes could be observed through expressed behaviors, which could be either expression or verbal.

4. Attitude is complex because it depends on many factors, such as experience, perception, feeling, opinion, emotion, environment, etc. Therefore, it can vary.

5. Attitude results from imitation and could be passed on to others. If one individual sees that another's behavior is acceptable, he might imitate it.

6. The quality of attitude varies from most satisfies, moderate to unsatisfactory, in which the concentration depends on this scale. As for the direction, there are 2 directions, which are supportive or positive, and against or negative.

7. Attitude may be either a conscious or unconscious result. When an individual learns or experiences something, a complete consciousness is formed since that individual had already observed, thought, considered the reasons, analyzed them. In some cases, attitude could be formed unconsciously as a feeling that originated without any consideration, such as parents' feeling forbidden to talk about sex because of a feeling that talking about sex is rude and embarrassing, causing an automatic unconscious non-acceptance attitude.

8. Attitude is somewhat permanent, since it originates from collected knowledge. Although it can change, it does not mean that it can be changed within a period of a day. Attitude is difficult to change; event if it could, it would take time to change it, depending on the situation, event, or environment.

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9. Each individual would have different attitudes towards the same thing, depending on each person's experience.

Attitude evaluation

Since attitude has 3 important components, it has to be assessed in all 3 components, and also in general, by consideration of actions and response towards many stimulant domains, not only from one action or behavior.(35) Attitude evaluation usually has the following ingredients: (36)

1. The study of attitude is the study of an individual's opinions and feelings that are stable or at least steady over a period.
2. Attitude cannot be directly observed; therefore, attitude evaluation is an indirect measurement from the tendency to action of a person, not just the individual's direct behaviors.
3. The study the individual's attitude does not only focus on its direction, but also on its intensity.

Attitude evaluation concepts

There are 3 basic concepts in the attitude evaluation that need to be understood: (35)

1. Content: attitude evaluation requires stimulants for actions to be expressed. The stimulant in general is the content that needs to be measured, such as the need to measure the attitude towards an individual's decisions on family life. The stimulating content is the situation of making decisions in family life, for example, choice of spouse, age of marriage, the period of having the first-born child and the next one, etc.

2. Direction: attitude evaluation in general determines the direction of the attitude to be straight and continual in the right or positive, or left and negative direction. In other words, the direction would start from mostly agreeable, reduce to indifference, and further to mostly disagreeable. The characteristics of agreement and disagreement are on the same continuous straight line.

3. Intensity: action or feeling expressed towards the stimulant has different qualities. The feelings and actions would be more violent if they are intensified, no matter into which direction, than when they are at moderate intensity.

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Attitude scale

A tool used in attitude evaluation is called the rating scale. The attitude scale is composed of 2 parts (35), which are the attitude statement part and the reply part, which would be similar to making comparisons. There 4 common types of attitude scales, i.e. Thurston-type Scale, Likert Scale, Guttman Scale, and Osgood Scale. Each of these scales has different benefits, limits, and appropriateness for use in assessing attitude. Therefore, the choice of attitude scale depends on the situation and the scope of the research.

Research relevant to sex education

Buga GA, Amoko DH, Ncayiyana (37) studied adolescent sexual behavior, knowledge and attitudes to sexuality among school girl in Transki, South Africa in 1996, using a self – administered questionnaire. Of 1,076 respondents, 74.6 percent were already sexually experienced. The age at first coitus correlate positively with the age of menarche, and the age at first date. Contraceptive use was low, and a third of sexually experienced girl had been pregnant at least once. The knowledge of reproductive biology was generally poor.

In 1999 Abaham L, Kumar KA (38) found that young men with a high level of knowledge about sexuality related issues were the most likely to be sexually experienced. Among 160 young men who had intercourse, 13 percent had a low level of knowledge, 72 percent a moderate level and 15 percent a high level. In particular, one might except that knowledge would lead to the practice of safer sax.

A study of Chamnut C (39) on factors associated with promiscuous behaviors of 1,200 Mathayom Suksa 6 students in 1994 revealed that knowledge of sexuality negatively correlated with promiscuous behaviors. Put another way, the student who were more knowledgeable about sexuality were less likely to have promiscuous behaviors. This offers support to study of Haohan J (42 X who found that students with the least sexual knowledge had the most previous sexual experience (32.1 percent), followed by those who

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had moderate sexual knowledge and high sexual knowledge, accounting for 27.0 and 17.8 percent, respectively.

Thaibundit C (40) compared knowledge and attitudes towards sex of 500 Muthayom suksa 6 student in Bangkok in 1994. The findings of this study revealed that the students generally had little knowledge concerning sexual characteristics of teenagers, solution to sexual problems, conception, venereal disease, and contraceptive. Morever, Fongkham S (49) investigated knowledge and sources of knowledge about sex of Mathayom Suksa 1 – 3 student in Nakhon Rachasima Province in 1999. Of these 692 student who participated in the study, 60 percent of them had general knowledge about sex, and female students had significantly higher knowledge about sex than male students at the 0.01 level, by obtaining knowledge in biology, hygiene, psychology, and social science mostly from their teachers, followed by from television and their mothers.

Attaveelarp O (41) studied sexual behavior and related factors among 426 students of Mathayomsuksa 4-6 in Phuket province. The finding of this study forty seven percent of students had experiences of inapprppriate sexual behavior such as being alone with a date (40.8%), hand holding (35.0%), kissing and petting (18.1%) and intimate sexual affairs (12.7%). Male students showed more proportion of sexual affairs to females students(4.8:1). The study related that progressive step of sexual behavior of those who had gone out together, hand holding, kissing and petting finally had sexual affairs as much as 46.2% for males and 14.9% for females. A majority of respondents (75.0%) had sexual intercourse with their boyfriend or girlfriend and the average age of the first episode was 15 years.

Guruge R. (42) studied adolescent sexual behavior and influencing factors among 305 Technical College students in Wattanakorn District, Sakaeo Province in 2004. Adolescents aged 14-19 years, which consisted of (55.4%) males and (44.6%) females participated in the study. The study revealed that (80.0%) of the students had inappropriate sexual behavior, such as being along with a date (80.0%), holding hands (70.0%), kissing and petting (52.1%) and intimate sexual affairs (35.4%). Overall, (43.7%) the males and (25.0%) the females had intimate sexual affairs. Data analysis was done by descriptive and analytical statistics. In the bivariate analysis age, attitude

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towards sex, family income, parental child-communication, risky behavior of peers, previous visits to entertainment establishments, alcohol consumption and cigarette smoking were significant at the level of p-value 0.05, were re-examined in the multivariate analysis in order to identify the significant factors after controlling for other variables. Previous visits to entertainment establishments and media exposure (pvalue<0.001) remained as the best predictor for the likelihood of having inappropriate sexual behavior among adolescents in Multiple Logistic Regression model.

Zolaiha (43) studied HIV/AIDS prevention behavior among adolescents in high school of Jakarta Indonesia in 2005. The results revealed that a slight majority of the respondents had good knowledge about HIV/AIDS transmission and how to prevent it. More than one half of respondents agreed using condoms during sexual intercourse would greatly reduce sexual gratification for them or their partner. A majority of respondents got information about HIV/AIDS from the cinema. Parents were a personal influence and reminders to respondents about HIV/AIDS prevention behavior.

Mohammadi MR. (44) studied reproductive knowledge, attitude and behavior among adolescent males in Tehran Iran in 2006. A population-based study of 1,385 males aged 15-18 in Tehran was conducted using a self-administered questionnaire. Participants were questioned about their belief and knowledge regarding reproductive health, and asked whether they had engaged in sexual activities. Bivariate and multivariate analyses were perform to identify factor associated with sexual knowledge, attitude and behavior. The results: Twenty-eight percent of the sample reported having in sexual activity. Sexual experience was associated with older age, access to satellite television, alcohol consumption and permissive attitude toward sex. Substantial proportions of respondents held misconception regarding condoms, STI and reproductive physiology. Attitudes toward premarital sex were more permissive among respondents who were older, were not in school, had work experience, had access to the Internet or satellite television, lived separately from their parents, or reported having used alcohol, cigarettes or drug.

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CHAPTER III
MATERIALS AND METHODS

Research Design

This study research is a cross- sectional survey research in which data are collected simultaneously by a method of self administered questionnaire.

Population and Sample

The population of this study are 6,385 male and female adolescents who studying in Matthayom Suksa 3 in secondary school in Chumphon Province during 2006 academic year.

The sample size

The following formula was used for calculating the sample size.

$$n = \frac{n_0}{1 + \frac{n_0}{N}}, \quad n_0 = \left[\frac{z}{d}\right]^2 \pi (1- \pi)$$

n = sample size

N = total population (6,385 male and female adolescents who were studying in secondary schools in Chumphon province during 2006 academic year)

z = standard normal deviation at 0.05 = 1.96

d = allowable error in this studies 10% = 0.07

π = proportion of good level of knowledge about sex education among the students = 0.7

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$$n_0 = \left(\frac{1.96}{0.07}\right)^2 \times 0.7 \times 0.3$$

$$= 164.64$$

N = 6,385

$$n = \frac{164.64}{1 + \frac{164.64}{6385}}$$

$$= 160.50 \simeq 161$$

Therefore, the minimum sample size required is 161 cases. But sometimes the questionnaire was not completed, so that the researcher determined the sample size increased, adding 20% of the students. The total numbers of the students should be 194.

Sampling method

The sample was selected by Two Stage Random Sampling as follow:

Step 1 Simple Random Sampling of 3 schools from 22 secondary schools in Chumphon Province.

Step 2 Cluster Random Sampling of classroom of Matthayom Suksa 3 in each school. We included 2 classes per school.

Validity and Reliability Test

Content validity

Correction and revision of the questionnaires was approved by 3 experts on sex education and research methodology. The questionnaires covered all the aspects of objectives of our study.

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Reliability

The revised questionnaire were used as a pre-test among 30 students which had the same characteristics in the selection population. The reliability of the questionnaire was calculated by using Cronbach Alpha Coefficient which equaled to 0.845

Data Collection

Data were collected by self-administrated questionnaire in Thai language. The steps of data collection were as follow:

1. Submitting the letter of request from Dean of Faculty of Graduate Studies to the Directors of the high schools in Chumphon province to ask for permission for data collection.
2. Contacting the teachers of 3 secondary schools of the General Education Department in Chumphon Province for permission to carry out collection.
3. Collecting data from the students by self-administrated questionnaire.
4. Editing and verifying the results of questionnaires for data analysis.

Research instrument

The instrument use in this study was a set of questionnaires that consisted of 4 parts as follows:

Part 1: Demographic characteristics of students. The variables included;

1.1 Gender: Male/Female

1.2 Age: Age of student in complete year

1.3 Residential status: divided into 2 groups:

1) Living with parents
2) Living with relative/ others

1.4 Parent's Occupation: divided into 4 groups:

1) Government Officer/enterprise
2) Employee
3) Merchant
4) Farmer

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1.5 Parent's Education was divided into 3 groups:

1) Elementary School
2) Secondary School
3) Bechalor's Degree or higher

1.6 Parent's marital status was divided into 4 groups:

1) Married
2) Divorced
3) Separated
4) Widowed

Part 2: Knowledge about sex education

This questionnaires was constructed according to the guidelines of educational activities on sexuality by Ministry of Education, 2005. It consisted of 39 questions divided into 6 part i.e.

Part 1 Human sexual development

Part 2 Interpersonal relationships

Part 3 Social and emotional adjustment skill

Part 4 Sexual behavior

Part 5 Sexual health

Part 6 Influences of environment and culture

Each question of the questionnaires had 4 choices with only one correct answer. The total possible scores for the scale range from 0 to 39. Giving a score to the correct answer, each student would get their scores according to their correct answer of knowledge. The level of knowledge was there categorized into 2 levels of good and poor using the standard criteria of 70%.

Part 1 Human sexual development (9 items, Total scores = 100)

Good > 70%

Poor $\leq$ 70%

Part 2 Interpersonal relationships (6 items, Total scores = 100)

Good > 70%

Poor $\leq$ 70%

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Part 3 Social and emotional adjustment skill (6 items, Total scores = 100)

Good > 70%

Poor ≤ 70%

Part 4 Sexual behavior (6 items, Total scores = 100)

Good > 70%

Poor ≤ 70%

Part 5 Sexual health (8 items, Total scores = 100)

Good > 70%

Poor ≤ 70%

Part 6 Influences of environment and culture (4 items, Total scores = 100)

Good > 70%

Poor ≤ 70%

Overall knowledge was calculated by averaging scores in 6 parts. (Adding scores of 6 parts and divided by six) The level of overall knowledge was there categorized as good > 70% and poor ≤ 70%.

Part 3: Attitude toward sex education

This questionnaires were constructed according to the guidelines of educational activities on sexuality by Ministry of Education, 2005. They consisted of 32 questions divided into 5 part i.e.

Part 2 Interpersonal relationships

Part 3 Social and emotional adjustment skill

Part 4 Sexual behavior

Part 5 Sexual health

Part 6 Influences of environment and culture

The questionnaires contain both positive and negative statements. The answer to appropriate attitude according to guidelines would get scores. For positive statement the scores had 4 levels i.e. totally agree (4 points), agree (3 points), disagree (2 points), and totally disagree (1 point). For negative statement the scores had 4 levels i.e. totally agree (1 point), agree (2 points), disagree (3 points), and totally disagree (4 points). The level of attitude was categories into 2 levels of appropriate and inappropriate using the standard criteria of 70%.

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Part 2 Interpersonal relationships (11 items, Total scores = 100)

Appropriate > 70%

Inappropriate ≤ 70%

Part 3 Social and emotional adjustment skill (5 items, Total score = 100)

Appropriate > 70%

Inappropriate ≤ 70%

Part 4 Sexual behavior (2 items, Total scores = 100)

Appropriate > 70%

Inappropriate ≤ 70%

Part 5 Sexual health (8 items, Total scores = 100)

Appropriate > 70%

Inappropriate ≤ 70%

Part 6 Influences of environment and culture (6 items, Total scores = 100)

Appropriate > 70%

Inappropriate ≤ 70%

Overall attitude was calculated by averaging scores in 5 parts. (Adding scores of 5 parts and divided by 5) The level of overall attitude was there categorized as appropriate attitude > 70% and inappropriate attitude ≤ 70%.

Part 4 Sexual behaviors

This questionnaires were constructed according to the guidelines of educational activities on sexuality by Ministry of Education, 2005. They consisted of 8 questions divided into 2 part i.e.

Part 2 Interpersonal relationships

Part 3 Social and emotional adjustment skill

The questionnaire had 2 choices that the students could choose. Giving a score to the answer of low risk behavior according to the guidelines, each student would get their scores of 0. The level of sexual behavior was categorizing into 2 levels of high and low risk using the standard criteria of 70%.

Part 2 Interpersonal relationships (3 items, Total scores = 100)

High risk >70%

Low risk ≤ 70%

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Part 3 Social and emotional adjustment skill (5 items, Total scores = 100)

High risk > 70%

Low risk ≤ 70%

Overall level of risk of sexual behavior was calculated by averaging behavior scores in parts both. High risk = scores > 70% and low risk = ≤ 70%.

Method of Data Analysis

The self-administrated questionnaires were coded by using computer.

The statistics used for data analysis are descriptive statistic i.e. frequency, percentage, mean and standard deviation.

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CHAPTER IV
RESULT

In this study, the data were collected from secondary school students in Chumphon province. The total number of completed questionnaires was 194. The result of this study comprised of 4 parts, i.e.:

Part 1 Demographic characteristics of students

Part 2 Knowledge about sex education

Part 3 Attitude toward sex education

Part 4 Sexual behaviors

Part 1 Demographic characteristics of students

The study was conducted among students of secondary school in Chumphon province. A total of 194 students were from Matthayom suksa 3.

Gender: More than half (60.3%) of students were female. (Table 1)

Age: Most of 71.1% age was 15 year old. Average age of the students was 14.75 ± 0.469 years. (Table 1)

Residential status: Most of the students lived with both parents (92.3%).Only 7.7% of students lived with relatives or others. (Table 1)

Occupation of father: The more than one third of students' fathers were merchant (35.6%) and farmer (27.3%). (Table 1)

Occupation of mother: The more than one third of students' mothers were merchant (42.3%) and farmer (28.4%). (Table 1)

Education of father: Most of the father of the students (37.1%) finished elementary school. About 32.0% of them had bechalor's degree or higher. (Table 1)

Education of mother: Most of the mother of the students (44.8%) finished elementary school. About 29.0% of them had bechalor's degree or higher. (Table 1)

Marital status of parents: Most of students' parents were married (78.9%), about 12.0% were divorced or separated and 8.8% were widowed. (Table 1)

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Table 1 Demographic characteristics of students

Demographic Characteristic	Numbers (n= 194)	Percentage (100%)
Gender		
Male	77	39.7
Female	117	60.3
Age (years)	**n = 192**	
14	51	26.3
15	138	71.1
16	3	1.5
Mean ± SD = 14.75± 0.469	Max = 16, Min = 14	
Residential status		
Living with parents	179	92.3
Living with relatives /others	15	7.7
Fathers' occupation		
Government officer/enterprise	26	13.4
Employee	46	23.7
Merchant	69	35.6
Farmer	53	27.3
Mothers' occupation		
Government officer/enterprise	21	10.8
Employee	36	18.6
Merchant	82	42.3
Farmer	55	28.4
Education of Father		
Elementary School	72	37.1
Secondary School	57	29.4
Bechalor's Degree or higher	62	32.0

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Table 1 Demographic characteristics of students (continued)

Demographic Characteristic	Numbers (n= 174)	Percentage (100%)
Education of Mother		
Elementary School	87	44.8
Secondary School	50	25.8
Bechalor's Degree or higher	56	28.9
Marital status of parents		
Married	153	78.9
Divorced	14	7.2
Separated	10	5.2
Widowed	17	8.8

Part 2 Knowledge about sex education

2.1 Items of knowledge

Table 2 showed the knowledge about sex education among students by items according to the guidelines.

Human sexual development: Most of the students had correct knowledge about physical changes during adolescents and the meaning of fertilization (87.6% and 84.5% respectively). They knew less about age of adolescents and growth of females after having menstruation (9.8% and 22.2% respectively). (Table 2)

Interpersonal relationships: Most of the students had correct knowledge about love during school years and selecting marriage partner (88.7% and 88.1% respectively). They knew less about emotional control and appropriate expression of human relationships. (59.8%)

Social and emotional adjustment skill: Most of the students had correct knowledge about the appropriate relationships between male and female and about refusal skill (91.2% and 85.1% respectively). They knew less about how to say no and knew less things to do when they have problems (56.7% and 64.9% respectively). They had fair knowledge about situations which lead to sexual intercourse. (68.0%)

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Sexual behavior: Most of the students had correct knowledge about the effect of premarital sexual intercourse and factors influencing sexual desire (84.5% and 79.9% respectively). They knew less about the best way to relieve sexual desire and adverse effects of adolescent pregnancy (50.0% and 51.5% respectively).

Sexual health: Most of the students had correct knowledge about abnormal vaginal discharge (75.8%). They knew less about signs and symptoms of STI and transmission of HIV (19.6% and 26.3% respectively).

Influences of environment and culture: Most of the students had less knowledge about the influencing factor of having sexual intercourse (61.3%). They also knew less about abnormal sexual behavior, the correct use of condom and preparation before marriage (40.7%, 54.6%, and 56.2% respectively).

Table 2 Knowledge about sex among students.

Question	Number (Percentage) (n= 194)
Part 1 Human sexual development	
1. Physical changes during adolescents.	170(87.6)
2. The meaning of fertilization	164(84.5)
3. Behavior changes of adolescents	148(76.3)
4. Sexual organ that produce sperm	120(61.9)*
5. Endocrine Glands' function on physical development	91(46.9)*
6. Age of having wet dreams	75(38.7)*
7. The most fertile days of women's menstrual cycle.	66(34.0)*
8. Growth of female after having menstruation	43(22.2)*
9. Age of adolescents	19(9.8)*

***** Poor knowledge: correct answer less than 70%

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Table 2 Knowledge about sex among students. (Continued)

Question	Number (Percentage) (n= 194)
Part 2 Interpersonal relationships	
1. Love during school years	172(88.7)
2. Selecting marriage partner	171(88.1)
3. Prevention of sexually transmitted infection and contraception.	168(86.6)
4. Appropriate manners and conduct for boys and girls.	146(75.3)
5. Ways to relieve sexual drive	142(73.2)
6. Emotional control and appropriate expression	116(59.8)*
Part 3 Social and emotional adjustment skill	
1.The appropriate relationship between male and female	177(91.2)
2. Refusal skill	165(85.1)
3. Know that person can be sexually violated.	156(80.4)
4. Situations lead to sexual intercourse	132(68.0)*
5. Things to do when have problems	126(64.9)*
6. How to say no.	110(56.7)*
Part 4 Sexual behavior	
1. The effect of premarital sexual intercourse.	164(84.5)
2. Factors influencing sexual desire	155(79.9)
3. Knowledge of Thalassemia.	144(74.2)
4. Knowledge of genetic disease	139(71.6)
5. Adverse effects of adolescent pregnancy	100(51.5)*
6. Best way to relieve sexual desire.	97(50.0)*

***** Poor knowledge: correct answer less than 70%

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Table 2 Knowledge about sex among students.(Continued)

Question	Number (Percentage) (n= 194)
Part 5 Sexual Health	
1. Abnormal vagina discharge	147(75.8)
2. Risk behavior for HIV infection	120(61.9)*
3. Details of sexually transmitted infection	118(60.8)*
4. The most effective method of preventing pregnancies and the transmission of HIV	114(58.8)*
5. The less effective methods of contraception	77(39.7)*
6. The appropriate relationship between male and female who met though the internet.	73(37.6)*
7. Transmission of HIV	51(26.3)*
8. Small, painful bumps or blisters on the genitals are symptoms of STI	38(19.6)*
Part 6 Influences environment and culture	
1. The influencing factors of having sexual intercourse	119(61.3)*
2. Preparation before marriage.	109(56.2)*
3. The correct use of condom use	106(54.6)*
4. Abnormal sexual behavior	79(40.7)*

***** Poor knowledge: correct answer less than 70%

2.2 Level of knowledge about sex education

When giving a score to the correct answer, each student would get their scores according to their correct answer of knowledge. The level of knowledge was categorized into 2 levels of good and poor using the standard criteria of 70%.

Table 3 showed that only 24.7% of students had good level of overall knowledge about sex education. When each category of knowledge was examined, students had low percentage of good level of knowledge in categories of part 1 human

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sexual development (6.7%) and part 5 sexual health (12.9%). In other parts, the percentage of good level of knowledge was about 40 – 60% i.e. in part 2 interpersonal relationships (66.0%), part 3 social and emotional adjustment skill (56.2%), part 4 sexual behavior (40.2%) and part 6 influences of environment and culture (39.2%).

Table 3 Level of knowledge about sex among students

Level of Knowledge	Number (Percentage) (n= 194)
Overall knowledge (Total score = 100)	
Good (> 70%)	48(24.7)
Poor (≤ 70%)	146(75.3)
Mean ± SD = 62.29± 10.778	Max = 82.64, Min = 19.91
Part 1 Human sexual development (Total score = 100)	
Good (> 70%)	13(6.7)
Poor (≤ 70%)	181 (93.3)
Mean ± SD = 51.317 ± 15.545	Max = 77.78, Min = 11.11
Part 2 Interpersonal relationships (Total score = 100)	
Good (> 70%)	128(66.0)
Poor (≤ 70%)	66(34.0)
Mean ± SD = 78.608 ± 20.409	Max = 100.00, Min = 16.67
Part 3 Social and emotional adjustment skill (Total score = 100)	
Good (> 70%)	109(56.2)
Poor (≤ 70%)	85(43.8)
Mean ± SD = 74.398 ± 20.011	Max = 100.00, Min = 0
Part 4 Sexual behavior (Total score = 100)	
Good (> 70%)	78(40.2)
Poor (≤ 70%)	116(59.8)
Mean ± SD = 68.642± 21.603	Max = 100.00, Min = 0
Part 5 Sexual health (Total score = 100)	
Good (> 70%)	25(12.9)
Poor (≤ 70%)	169(87.1)
Mean ± SD = 47.551± 17.413	Max =87.50, Min = 0

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Table 3 Level of knowledge about sex among students (Continued)

Level of Knowledge	Number(Percentage) (n= 194)
Part 6 Influences environment and culture (Total score = 100)	
Good (> 70%)	76(39.2)
Poor (≤ 70%)	118(60.8)
Mean ± SD = 53.221 ± 24.659	Max = 100.00, Min = 0

Part 3 Attitude toward sex

3.1 Items of attitude

Table 4 showed attitude toward sex by items. The appropriate attitude was defined according to the guidelines.

Interpersonal relationships: Most of the students (87.6%) had appropriate attitude toward premarital screening for genetics disorders and sexually transmitted infection. About 78.4% of the students had inappropriate attitude that friends are the best advisors about sex education.

Social and emotional adjustment skill: Most of the students (88.1%) had appropriate attitude toward the fact that obscene books or magazines might be a source of sexual arousal and lead to sexual intercourse. About 33.5% of students had inappropriate attitude that the size of penis is important to the pleasure of sexual intercourse and 35.1% of them disagreed that touching and kissing can lead sexual intercourse.

Sexual behavior: More than half of the students (58.8%) had inappropriate attitude that masturbation can lead to mental and physical illness, and 64.9% of them agreed that sexual desire are human nature that ones can not control.

Sexual health: Most of students (89.2%) had appropriate attitude that having sex during school year had negative effects on the future, 73.2% of them disagreed with that learning about contraception is not necessary because they can learn when they grew up. Most of students (87.1%) had inappropriate attitude that having sex with their girlfriends had less risk of contract AIDS than with a commercial sex workers,

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sixty three percent of them agreed that it is shameful to carry a condoms, and 32.0% of them agreed that HIV can not be transmitted by a single sexual intercourse.

Influences of environment and culture: Most of the students (80.4%) had appropriate attitude that it is not true that once a woman had sexual intercourse, she will feel free to have relationship with anybody. Nearly 77.0% of the students disagreed that the movies stars are good role models. Most of the students (71.6%) had inappropriate attitude that it is common for men to have extramarital sex but it is not good for woman to have extramarital sex and 54.1% of them agreed that homosexuals are regarded as abnormal.

Table 4 Attitude toward sex education

Attitude toward sex education	Appropriate Attitude Number (Percentage)
Part 2 Interpersonal relationships	
1. Premarital screening for genetics disorders and sexually transmitted infection.	170(87.6)
2. Usually consult with parents when having sexual problem.	168(86.6)
3. Love during study is not a true love.	156(80.4)
4. If you do not have a condom, you will avoid having sexual intercourse.	151(77.8)
5. True love needs sexual intercourse.	150(77.3)
6. Boy and girl shouldn't privately stay in area away from other people.	147(75.8)
7. Each student should have a lover.	143(73.3)
8. Premarital sexual intercourse is alright.	125(64.4)*
9. If you have a chance to have sexual intercourse you will not hesitate to have it.	124(63.9)*
10. Sex is a satisfaction of both sides regardless of love.	124(63.9)*
11. Friends are the best advisors about sex education.	42(21.6)*

* Appropriate attitude less than 70%

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Table 4 Attitude toward sex education (Continued)

Attitude toward sex education	Appropriate Attitude Number (Percentage)
Part 3 Social and emotional adjustment skill	
1.Obscene books or magazines might be which a source of sexual arousal lead to sexual intercourse.	171(88.1)
2. When a boy said that “You have a big breasts” the girl should be proud.	155(79.9)
3. Usually healthy looking person showed not have HIV or AIDS.	133(68.6)*
4. Size of penis is important to the pleasure of sexual intercourse.	129(66.5)*
5. Touching and kissing can lead sexual intercourse.	126(64.9)*
Part 4 Sexual behavior	
1 .Masturbation can lead to mental and physical illness.	80(41.2)*
2. Sexual desire are human nature that ones can not control.	68(35.1)*
Part 5 Sexual Health	
1. Having sex while in school lead negative affect on your future.	173(89.2)
2. There is a medical cure for AIDS.	146(75.3)
3. Learning about contraception is not necessary for students because they can learn when they growth up.	142(73.2)
4. Having sex is a sign of manhood.	137(70.6)
5. Induced abortion should be allowed in the case of unplanned pregnancy.	136(70.1)

* Appropriate attitude less than 70%

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Table 4 Attitude toward sex education (Continued)

Attitude toward sex education	Appropriate Attitude Number (Percentage)
Part 5 Sexual Health (Continued)	
6. HIV can not be transmitted by a single sexual intercourse.	132(68.0)*
7. It is shameful to carry a condom.	72(37.1)*
8. Having sex with your girlfriends had less risk of contract AIDS than with a commercial sex workers.	25(12.9)*
Part 6 Influences of environment and culture	
1. Once a woman had sexual intercourse, she will feel free to have relationship with anybody.	156(80.4)
2. The movies stars are good role-models.	149(76.8)
3.The good thing of having multiple sexual partners are that you can choose the most suitable one, have more pleasure, self-esteem and feel being wanted in the society.	148(76.3)
4. Marriage is an obligation after you have sexual intercourse.	145(74.7)
5. Homosexuals are regarded as abnormal.	89(45.9)*
6. It is common for men to have extramarital sex but it is not good for women to have extramarital sex.	55(28.4)*

* Appropriate attitude less than 70%

3.2 Level of attitude toward sex

When giving a score to the answer of appropriate attitude according to guidelines, each student would get their scores according to their answers of attitude. The level of attitude was categorized into 2 levels of appropriate and inappropriate using the standard criteria of 70%.

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Table 5 showed that 50.0% of the students had appropriate attitude toward sex education. The lowest score was 41.19, the highest score was 86.77, mean score was 68.719± 8.222. When categories of attitude toward sex education was examined, the percentage of the students who had appropriate attitude was very in part 4 sexual behavior (25.8%). In other parts the percentage of students who had appropriate attitude was about 40 – 60% i.e. part 2 interpersonal relationships (58.2%), part 3 social emotional adjustment skill (60.8%), part 5 sexual health (46.4%), part 6 influences of environment and culture (52.1%).

Table 5 Level of attitude toward sex education among students

Attitude toward sex education	Number (Percentage) (n =194)
Overall attitude (Total score = 100)	
Appropriate (> 70%)	97(50.0)
Inappropriate (≤ 70%)	97(50.0)
Mean ± SD = 68.719 ± 8.222	Max = 86.77, Min = 41.19
Part 2 Interpersonal relationships (Total score = 100)	
Appropriate (> 70%)	123(63.4)
Inappropriate (≤ 70%)	71(36.6)
Mean ± SD = 73.851 ± 9.681	Max = 95.45, Min = 52.27
Part 3 Social and emotional adjustment skill (Total score = 100)	
Appropriate (> 70%)	106(54.6)
Inappropriate (≤ 70%)	88(45.4)
Mean ± SD = 74.355 ± 12.299	Max = 100.00, Min = 50.00
Part 4 Sexual behavior (Total score = 100)	
Appropriate (> 70%)	50(25.8)
Inappropriate (≤ 70%)	144(74.2)
Mean ± SD = 57.345 ± 17.190	Max = 100.00, Min = 25.00
Part 5 Sexual health (Total score = 100)	
Appropriate (> 70%)	106(54.6)
Inappropriate (≤ 70%)	88(45.4)
Mean ± SD = 69.442 ± 11.277	Max = 96.88, Min = 34.38

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Table 5 Level of attitude toward sex education among students (Continued)

Attitude toward sex education	Number (Percentage) (n =194)
Part 6 Influences of environment and culture (Total score = 100)	
Appropriate (> 70%)	101(52.1)
Inappropriate (≤ 70%)	93(47.9)
Mean ± SD = 68.599 ± 10.798	Max = 95.83, Min = 37.50

Part 4 Sexual behaviors

4.1 Items of behaviors

Table 6 showed sexual behaviors among students by items according to the guidelines.

Interpersonal relationships: About 13.4% of the students ever had homosexual activities.

Social and emotional adjustment skill: About 15.5% of the students ever had date with person known through internet communications. More than half of the students (55.2%) had ever viewed pornographic pictures, books and sexually arousing material. About 45.4% of the students had ever have friends from internet surfing.

Table 6 Sexual behavior of students

Behavior toward sex education	Low risk Number (Percentage)
Part 2 Interpersonal relationships	
1. You ever had homosexual activities.	168(86.6)
2. Someone ever proposed to have sex with you.	165(85.1)
3. You refuse your friend when they persuade you to smoke cigarette or drink alcoholic beverages.	159(82.0)
Part 3 Social and emotional adjustment skill	
1. You have ever had date with person known through internet communications.	164(84.5)
2. You can manage stress by your self.	117(60.3)*
3. You had ever have friends from Internet surfing.	106(54.6)*

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Table 6 Sexual behavior of students (Continued)

Behavior toward sex education	Low risk Number (Percentage)
Part 3 Social and emotional adjustment skill (Continued)	
4. You had ever viewing pornographic pictures, books and sexually arousing material.	87(44.8)*
5. If your friend say bad things to you, you will respond back to them.	57(29.4)*

***** Low risk behavior less than 70%

4.2 Level of risk behavior

When giving a score to the answer of low risk behavior according to the guidelines, each student would get their scores according to their answer behavior of sexual behavior. The level of sexual behavior was categorized into 2 levels of high and low risk using the standards criteria of 70%.

Table 7 showed that most of the students (89.7%) were of low risk, only 10.3% of them were high risk. When categories of sexual behavior were examined according to the guidelines the percentage of students also had high risk behavior was low in every part 2 interpersonal relationships (6.2%), part 3 social and emotional adjustment skill (18.6%).

Table 7 Level of risk behavior

Risk sexual behavior	Number (Percentage) (n = 194)
Overall sexual behavior (Total score = 100)	
High risk (> 70%)	20(10.3)
Low risk (≤ 70%)	174(89.7)
Mean ± SD = 40.807± 19.592	Max =100.00, Min = 10.00

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Table 7 Level of risk behavior (Continued)

Risk sexual behavior	Number (Percentage) (n = 194)
Part 2 Interpersonal relationships (Total score = 100)	
High risk (> 70%)	12(6.2)
Low risk (≤ 70%)	182(93.8)
Mean ± SD = 36.769± 23.006	Max =100.00, Min = 0
Part 3 Social and emotional adjustment skill (Total score = 100)	
High risk (> 70%)	36(18.6)
Low risk (≤ 70%)	158(81.4)
Mean ± SD = 44.845± 26.216	Max =100.00, Min = 0

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CHAPTER V
DISCUSSIONS

The discussion will be presented in 2 parts:

1. Research methodology of this study
2. Results of this study

Part 1: Research Methodology

1. Research design

This is a descriptive study with the objective to study knowledge, attitude and sexual behavior of secondary school students according to the standard set up in the guidelines of educational activities on sexuality by Ministry of Education, 2005. The research was conducted by distributing a structured questionnaires to those students and let them answer all questions in the questionnaires in their classroom. The questionnaires was constructed according to the guidelines. This research evaluated the students' knowledge, attitude and sexual behavior according to the standards in the guidelines. The information obtained from the questionnaires was adequate to meet the objectives of the study.

2. Population and sample

The populations of this study were 6,385 secondary school students, both boy and girls, who were studying in secondary school in Chumphon province and learn about sex education in their schools.

The sample size of this study was 194 students sampling from 6,385 students of Matthayom suksa 3 in Chumphon province by stratified random sampling. The calculation of sample size used Daniel's formula applying that the percentage of good level of knowledge about sex education among students who had education on sexuality should be 70% or more as a passing level. Adding 20% of the students for incomplete data, the sample size was 194 and was enough for the conclusion of the results of the study.

3. Research instrument

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The instrument in this study was questionnaires constructed according to the information in the guidelines published by Ministry of Education. There are 6 parts in the guidelines i.e.

1. Human sexual development
2. Interpersonal relationships
3. Social and emotional adjustment skill
4. Sexual behavior
5. Sexual health
6. Influences of environment and culture

The questionnaires was approved by 3 experts on sex education and research methodology, that they covered all the aspects of sex education.

Part 2: Results of this study

Knowledge in the guidelines was appropriate for the early secondary school students. The guidelines of the education activities on sexuality by Ministry of Education, 2005 was drafted by committee of sex education experts of Ministry of Education in 2005, the objectives of the guidelines were to guide the teachers about sex education, alert teaching process and activities that provides proper knowledge about sex. This knowledge obtained by using these guidelines should help students understand their own emotional and physical development, and that of the opposite gender, as well as generate understanding, and appropriate attitude and sexual behavior so that the students can live happily in the society. The guidelines certainly contain accurate information about growth and development, human reproduction, pregnancy, contraception, sexual response learning males-females roles, HIV/AIDS and other sexually transmitted infections. It also contains of a desirable attitude that would create comprehension of self-values, family and social values, self- love, and respect for the right of other, including responsibility for self-control. The guidelines also recommends that training in classroom is required in personal skills for creating relationships with other, communication, decision-making, refusal negotiation, persuasion, analysis, problem solving, and management of emotion and stress. Responsibility is also emphasized upon in controlling sexual feelings, caring for one's own sexual health, and responsibility for one's sexual behavior.

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However, the success of any sexuality education programme in the school is directly related to the expertise teachers and their willingness to provide instruction. It also depends on the status of the students, including their norm, their family values and peer opinions. The guideline is only a tool to help accomplish their task.

Discussion of the results will be presented according to the objectives:

Objective 1: To study knowledge of secondary school students according to the standards set up in the guidelines of the education activities on sexuality by Ministry of Education, 2005.

Most of the students had poor knowledge about sexuality according to the standards in the guidelines although they already learn about it in school for at least 3 years as the guidelines pointed out that sex education in school may be not uniform and up to the standards. Other plausible explanation was that most people consider sex education as a taboo which is a sensitive issue not to be discussed openly and teachers are not generally confident about teaching sex education in school. May be the teachers do not know what, how or when to teach. Sometimes they may try to avoid teaching sex education to their students. The finding was in accordance with the study of Punsiri S. (4) which studied in Matthayom suksa 1 students and found that most of the students (91.1%) had low level of knowledge in sexual development and appropriate sexual hygiene. The study of Aye NL (45) who studied sexual risk behaviors among Myanmar migrant adolescents in Samut sakorn province and found that most of them (92.6%) had low level of knowledge about sexuality.

When subjects of knowledge were examined, the students knew very little about contraception, sexual transmitted infection, and HIV infection. This was in accordance with the study of Mohammadi MR (44) in Tehran Iran which found that although most of the respondents (95.0%) had heard about STI and HIV/AIDS, but misconceptions were widespread. For example, 37.0% of them did not know that AIDS is not curable, and 23.0% did not know that people infected with HIV can be asymptomatic. Familiarity with the signs and symptoms of STI was poor; relatively small proportion of respondents knew that symptom of STI in men include discharge from the penis (28.0%), pain during urination (34.0%), and ulcers/sores in the genital area (28.0%).

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Aye NL (45) who studied sexual risk behaviors among Myanmar migrant adolescents in Samut sakorn province found that the most percentage incorrect of answer was oral sex cannot transmit HIV/AIDS (76.1%), and abstinence is the best way to prevent HIV/AIDS (27.1%). The findings of Zolaiha (43) from Indonesia who found that slight majority of the respondents had good knowledge about HIV/AIDS transmission and how to prevent it.

Lack of knowledge about contraception, sexual transmitted infection and HIV infection can lead to severe sexual problem such as unwanted pregnancy, criminal abortion, and STI/AIDS. The average age of students was about 14-15 years which is the beginning of reproductive and active sexual life. So it is utmost necessary and urgency in giving appropriate sex education to these students and emphasis on those topics of contraception, sexually transmitted infection, and HIV infection should be done.

Generally students in this study knew rather well about the importance of technique of refusal skill but when ask about conditional situation in social events that need decision- making they tended to be less decisive and reluctant to refuse. Simulation practice on refusal skill should be established learning process of sex education.

Objective 2: To study attitude toward sex of secondary school students according to the standards set up in the guidelines of the education activities on sexuality by Ministry of Education, 2005.

Half of the students had appropriate attitude toward sex. This was in accordance with the study of Attaveelarp O. (41) in which found that 53.3% of the respondents had positive attitude toward sex. The study of Gurage R (42) which found that 57.0% of the respondents had positive attitude toward sex.

When subjects of attitude were examined, most of the students had inappropriate attitude that their agreed that having sex with their girlfriends had less risk of contract AIDS than with a commercial sex workers. This was in accordance with Rugsayoo C. (3) which found that male adolescents believed that having sex with their girlfriends was less risky way to contract AIDS than by having sex with commercial sex workers and they only used condom when having sex with

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commercial sex workers, as they were aware of higher risk to HIV infection than having sex with other partners. The study of Aye NL (45) which also found that 54.8% of the Myanmar migrant adolescents believed that condom is only for man having sex with prostitute. This inappropriate attitude was correlate the percentage of using a condom with a lover or a close friend is low that found only 9.7% of students in Matthayom suksa 5 (3) who ever had sex use a condom with a lover or a close friends in last 12 months.

Students hold inaccurate attitudes, values, and beliefs about sexuality. Sex education to raise awareness and to promote self-protection from STI/AIDS should be urgently undertaken. Students should understand how to correctly use condoms starting from the first sexual intercourse, so they can develop a positive view on condom use.

More than half of the students had inappropriate attitude that masturbation can lead to mental and physical illness. This was in accordance with Mohammadi MR (44) which found 53.0% of respondents declared that masturbation is harmful to human well-being.

Regarding masturbation all modern books clearly state that masturbation is not wrong and that it is normal, but they often put in a statement cautioning against too many masturbation, which opens the door for guilt. Students can benefit by being told what society thinks about masturbation and by being given the know facts, such as commonness, harmlessness, acceptability, pleasure, and advantages. Psychiatrists regard masturbation as normal for adolescent’s development and even necessary for the control and integration of sexual urges and for mastery of one’s sexual capacities. (46)

These misconceptions are in fact preventable if students have factual knowledge about sexuality because knowledge is correlated with attitude since it brings about good attitude.

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Objective 3: To study sexual behavior of secondary school students according to the standards set up in the guidelines of the education activities on sexuality by Ministry of Education, 2005.

Most of the students were of low risk. Only 15.5% of them ever had date with persons know though internet communication. This was in accordance with Aye NL (45) which found the majority of the Myanmar migrant adolescents (91.5%) were low level of sexual behavior. This finding was not consistent with the findings of Gurage R (42) who studied sexual behavior among Technical College adolescents in Wattanakorn district Sakaeo province and found that most of respondents (80.0%) had inappropriate sexual behavior. Based on inappropriate sexual behavior, 80.0% use to go in pairs with opposite sex alone. These elevated figures of sexual behavior among Technical College are mostly because this is a special group of students have more freedom than the secondary school age adolescents. (42)

Though the findings of this study show that most of the students (75.3%) had poor level of knowledge, half of them (50.0%) had appropriate attitude, and only 10.3% of them were high risk. One plausible explanation was the students inaccessible to high risk service. When they do enter relationships there those appear to be a high level of sexual behavior and this could result in risks of unwanted pregnancy and HIV/AIDS. Other studies showed that adolescents who received accurate information are more likely to delay sexual activity and have fewer sexual partners; they are also less likely to engage in risky sexual behavior. (5) So it is necessary that these the guidelines should be put into practice as soon as possible to prevent problems that would occur to these students in the future.

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CHAPTER VI
CONCLUSION

Conclusion

Adolescence is a stage of physiological, psychosocial and intellectual changes. One of the important changes in adolescence is sexual development. Adolescents will interest in sex, especially relationships with the opposite sex due to increasing sex hormone. They are also curious about sexual issues, and then search for information through all kind of medias. All these circumstances and social factors including being away from the family make them vulnerable to have sexual relationship. (1)

Sexual problem of adolescents is one among important social problems which include, for example, premature sex, incorrect values about sex, children and youth growing up in sexual arousing media, being deceived in to risky sexual behavior, irresponsible sexual behavior. (2) These problems partly caused by lack of knowledge and understanding about sex education. The study of Areechokchai D (3) found that adolescents in formal education and non-formal education system had sexual intercourse without condom use or self-protection. Due to the lack of skills in assessment of risk situation, most of those sexual activities occurred unexpectedly without condom use or self-protection. Due to the lack of skills in assessment of risk situation, most of those sexual activities occurred unexpectedly without preparedness and awareness. Some did not know how to use condom.

Sexual problem is important among adolescents because it can lead to unwanted pregnancy, sexual transmitted infection and HIV infection. Sex education can help prevent adolescents from sexual problem.

The objectives of this research were to study knowledge, attitude and sexual behavior of secondary school students compared to the standards set up in the guidelines of educational activities on sexuality by the Ministry of Education, 2005.

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This is descriptive research. The sample group comprises 194 students, who were studying in early secondary school in Chumphon province. Data were colleted by using self-administered questionnaires during 1 to 28 February, 2007. Statistics for data analysis were frequency, percentage, mean and standard deviation.

The results of this study showed that most of students (75.3%) had low knowledge about sex compared to the standards in the guidelines. Most of them knew little about contraception, sexually transmitted infection and HIV infection. Regarding attitude toward sex of students, only 50.0% of students had appropriate attitude. Most students (87.1%) agreed that having sex with their girlfriends had less risk of contracting AIDS than sex with commercial sex workers. 58.8% of students felt that masturbation can lead to mental and physical illness. Regarding sexual behavior, most of them (89.7%) were of low risk according to the guidelines. Only 15.5% of them had ever dated with persons met through internet communications.

Recommendation for application

1. It is necessary that these guidelines should be put into practice as soon as possible to help solve the problems that would occur to these students in the future.

2. Simulation practice on refusal skill should be an established learning process of sex education.

Recommendation for further research

1. Study knowledge, attitude and behavior toward sex of secondary school students at Bangkok

2. Study knowledge, attitude and behavior toward sex of female school students

3. Study knowledge, attitude and behavior toward sex of male school students

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REFERENCES

1. Jantarat K. The Effectiveness of participatory learning on a life skills development program to prevent sexual problems for 8th grad students.[Thesis for the degree of Master of Science (Public Health) in Public Health Nursing]. Bangkok: Faculty of Graduate Studies. Mahidol University; 2004.
2. Department of Health Ministry of Public Health, Thailand. Handbook for teaching sex education in primary school and lower secondary school. Thailand Agricultural cooperative printing; 2003.
3. Department of Mental Health, Ministry of Public Health. Situational review of adolescents sexual behavior, life skills promotion and counseling services. Support by Thailand MOPH-US CDC Collaboration; 2004.
4. Punsiri S. An application of life skill and participatory learning to sex education among seventh grade students in Kanchanaburi province. [Thesis for the degree of Master of Science (Public Health) in Health Education and Behavioral Sciences]. Bangkok: Faculty of Graduate Studies. Mahidol University; 2001.
5. Fengxue Y. Attitudes toward adolescent pregnancy, induce abortion and supporting health services among high school students in Phuttamonthon district, Nakhon pathom province. [Thesis for the degree of Master of Primary health care management]. Bangkok: Faculty of Graduate Studies. Mahidol University; 2003.
6. Steinberg L. Adolescents 3rd ed. New York: Mc Graw-Hill, Inc.;1993.
7. Paxman JM, Zuckerman RJ. Laws and policies affecting adolescent health. Geneva: World Organization; 1987.
8. สุชา จันทร์เอม.จิตวิทยาพัฒนาการ.กรุงเทพมหานคร:บริษัทโรงพิมพ์ไทยวัฒนาพานิช จำกัด ,2542.
9. สำนักงานคณะกรรมการการศึกษาแห่งชาติ สำนักนายกรัฐมนตรีในพระราชบัญญัติการศึกษาแห่งชาติ พ.ศ. 2542. กรุงเทพฯ: พริกหวานกราฟริก จำกัด; 2542.

Copyright by Mahidol University

10. กมล สุดประเสริฐ.รายงานการวิจัย ประกอบการร่างพระราชบัญญัติการศึกษา พ.ศ. ....ประเด็นการศึกษาขั้นพื้นฐาน.กรุงเทพฯ: สำนักงานคณะกรรมการการศึกษาแห่งชาติ; 2541.
11. ศรีเรือน แก้วกังวาล. จิตวิทยาพัฒนาการชีวิตทุกช่วงวัย(เล่ม 2) วัยรุ่น-วัยสูงอายุ. พิมพ์ครั้งที่ 8. กรุงเทพ: สำนักพิมพ์มหาวิทยาลัยธรรมศาสตร์; 2545.
12. สุพัตรา สุภาพ.ปัญหาสังคม.พิมพ์ครั้งที่ 18.กรุงเทพฯ: ไทยวัฒนาพานิช; 2545.
13. โยธิน ศันสนยุทธ และคณะ.จิตวิทยา.กรุงเทพฯ: สำนักงาน ศูนย์ส่งเสริมวิชาการ; 2533.
14. ประสาร ทิพย์ธารา.พัฒนาการเด็กและการอบรมเลี้ยงดู.กรุงเทพฯ: โรงพิมพ์แพร่พิทยา;2533.
15. จันทร์วิภา ดิลกสัมพันธ์. เพศศึกษา.กรุงเทพมหานคร: โสภณการพิมพ์,2543.
16. บุปผา ศิริรัศมี, เบญจา ยอดดำเนิน-แอ๊ตตกจ์ และ Alan Noel Gray. คู่มือการอบรมเชิงปฏิบัติการโครงการพัฒนางานวิจัยด้านเพศภาวะ มิติทางเพศและอนามัยการเจริญพันธุ์.นครปฐม: สถาบันวิจัยประชากรและสังคม มหาวิทยาลัยมหิดล; 2544.
17. Jeejeeboy S. Adolescent Sexual and Reproductive Health. Paper presented at the research workshop on adolescent sexual and reproductive health, Rose garden country resort, Bangkok; 1998.
18. Gray A, Punpuing S. Gender, Sexuality and Reproductive Health in Thailand. IPSR Publication No.232. Nakhorn Pathom: Institute for Population and Social research; 1999.
19. สุพัตรา สุภาพ. สังคมและวัฒนธรรมไทย ค่านิยม ครอบครัว ศาสนา ประเพณีพิมพ์ครั้งที่ 11. กรุงเทพฯ: โรงพิมพ์ไทยวัฒนาพานิช จำกัด; 2543.
20. วินัดดา ปิยะศิลป์. ในครอบครัวกับวัยรุ่นในคณะอนุกรรมการด้านครอบครัว สำนักงานคณะกรรมการส่งเสริมและประสานงานสตรีแห่งชาติ.การพัฒนาครอบครัว. กรุงเทพฯ: บริษัทอมรินทร์พริ้นติ้ง แอนด์ พับลิ่งชิ่ง จำกัด; 2537.
21. Muuss RE. Adolescent behavior and society. 4th Ed. Singapore: Mc Graw-Hill Book Co., 1990.
22. Ford N, Kittisul S. Youth sexuality the sexual Awareness, lifestyles and related health service needs of young, single, factory workers in Thailand. IPSR publication No. 204. Nakhorn Pathom: Institute for population and social Research; 1996.
23. Gray A.Gender, Sexuality and Reproductive Health in Thailand. Institute for population and social research. Mahidol University; 1999.

Copyright by Mahidol University

24. สุชาติโสมประยูร,วรรณี โสมประยูร.เพศศึกษา.กรุงเทพมหานคร:บริษัทโรงพิมพ์ไทยวัฒนาพานิช จำกัด:2541.
25. เพ็ญศรี พิชัยสนิธ,ระวิวรรณ แสงฉาย.ครอบครัวกับเพศศึกษา.ใน: การพัฒนาครอบครัว. กรุงเทพมหานคร:บริษัทอมรินทร์พริ้นติ้ง แอนด์ พับลิ่งชิ่ง จำกัด,2539.
26. สำนักงานคณะกรรมการการศึกษาขั้นพื้นฐาน กระทรวงศึกษาธิการ.แนวทางการจัดกิจกรรมการเรียนรู้ เพศศึกษา ช่วงชั้นที่ 3 ชั้นมัธยมศึกษาปีที่ 1-3. กรุงเทพ, 2005.
27. ประภาเพ็ญ สุวรรณ, สวิง สุวรรณ. พฤติกรรมศาสตร์ พฤติกรรมสุขภาพและสุขศึกษา.กรุงเทพฯ : เจ้าพระยาการพิมพ์; 2536.
28. Good CV. Dictionary of education. New York: Graw-Hill;1956.
29. Edward WS. The Lexican Webster Dictionary Encyclopedia ed. The English Language Institute of America; 1977.
30. Bloom BS (editor).Taxonomy of Education Objective,Handbook: Cognitive Domain. New York; David Makay Co.; 1976.
31. ไพศาล หวังพานิช. การวัดผลการศึกษาพิมพ์ครั้งที่ 1. กรุงเทพฯ: ไทยวัฒนาพานิช จำกัด; 2526.
32. Webster's new world. Stedman's concise medical dictionary.Baltimore: Williams&Wilkins; 1987.
33. ประภาเพ็ญ สุวรรณ. ทัศนคติ การวัดการเปลี่ยนแปลงและพฤติกรรมอนามัย.กรุงเทพฯ: พีระพัธยา; 2526.
34. Fishbein M, Ajzen I. Belief, attitude, intention, and behavior: an introduction to theory and research. Massachusetts: Addison-Wesley; 1975.
35. ชม ภูมิภาค. จิตวิทยาการเรียนการสอน.พิมพ์ครั้งที่ 2. กรุงเทพฯ: ไทยวัฒนาพานิช จำกัด;2523.
36. ชวาล แพรรัตกุล. เทคนิคการวัดผล.กรุงเทพฯ: ไทยวัฒนาพานิช; 2526.
37. Buga GA, Amoko DH, Ncayiyana DJ. Adolescent sexual behavior, knowledge and attitudes to sexuality among school girl in Transkei, South Africa. East Africa Med J 1996;73 (2) : 95 – 100.
38. Abraham L, Kumar KA. Sexual experiences and their correlates among college students in Mumbai City,India. Fam Planning Perspectives 1999 ; 25(3) :139 – 46.

Copyright by Mahidol University

39. ชาติ แจ่มนุช. ปัจจัยที่มีความสัมพันธ์กับค่านิยมสำส่อนทางเพศของเยาวชน.[วิทยานิพนธ์ปริญญาศึกษาศาสตร์ดุษฎีบัณฑิต สาขาประชากรศึกษา].กรุงเทพฯ: บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล; 2538.

40. จันจิรา ไทยบัณฑิตย์.การศึกษาเปรียบเทียบความรู้และทัศนคติในเรื่องเพศศึกษาของนักเรียนชั้นมัธยมศึกษาปีที่ 6โรงเรียนชาย โรงเรียนหญิง และโรงเรียนสหศึกษาในเขตกรุงเทพมหานคร.[วิทยานิพนธ์ปริญญาสังคมสงเคราะห์ศาสตร์มหาบัณฑิต]. กรุงเทพฯ: บัณฑิตวิทยาลัย มหาวิทยาลัยธรรมศาสตร์; 2538.

41. Attaveelarp O. Sexual behavior among adolescents in Phuket province. [Thesis for the degree of Master of Science (Public Health) Major in Family Health]. Bangkok: Faculty of Graduate Studies. Mahidol University; 2001.

42. M.A.S.G. Rathnawardana Guruge. Sexual behavior among Technical College adolescents, in Wattanakorn district Sakaeo province, Thailand. [Thesis for the degree of Master of Primary health care management]. Bangkok: Faculty of Graduate Studies. Mahidol University; 2004.

43. Zolaiha. HIV/AIDS prevention behavior among adolescents in high school of Jakarta, Indonesia. [Thesis for the degree of Master of Primary health care management]. Bangkok: Faculty of Graduate Studies. Mahidol University; 2005.

44. Mohammadi MR. Reproductive knowledge, attitudes and behavior among adolescent males in Tehran, Iran; Int Fam Planning Perspectives. 2006;32(1):35-44.

45. Aye NL. Sexual risk behaviors among Myanmar migrant adolescents in Samut sakorn province, Thailand. [Thesis for the degree of Master of Public Health] Bangkok: Faculty of Public Health. Mahidol University; 2002.

46. Gordon DJ. Adolescent sexuality. In: Benjamin J (editor).The sexual experience. United States of America: The Williams and Wilkins; 1976: 144.

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APPENDIX

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แบบสอบถาม

เรื่อง

เปรียบเทียบหลักสูตรเพศศึกษากับความรู้ ทัศนคติ และพฤติกรรมของนักเรียนมัธยมศึกษาตอนต้น ในจังหวัดชุมพร

<u>คำชี้แจงในการตอบแบบสอบถาม</u>

1. แบบสอบถามชุดนี้แบ่งออกเป็น 4 ส่วน ดังนี้
   ตอนที่ 1 ข้อมูลทั่วไปของผู้ตอบแบบสอบถาม
   ตอนที่ 2 แบบสอบถามความรู้เรื่องเพศศึกษา
   ตอนที่ 3 ทัศนคติเกี่ยวกับเรื่องเพศศึกษา
   ตอนที่ 4 พฤติกรรมเกี่ยวกับเรื่องเพศศึกษา
2. การวิจัยครั้งนี้ เป็นการทำวิทยานิพนธ์ของนักศึกษาปริญญาโท สาขาการเจริญพันธุ์และวางแผนประชากร คณะแพทยศาสตร์ โรงพยาบาลรามาธิบดี มหาวิทยาลัยมหิดล คำตอบที่ได้จะเก็บไว้เป็นความลับ และไม่มีผลเสียต่อนักเรียนประการใด (นักเรียนไม่ต้องเขียนชื่อ-นามสกุล ในแบบสอบถาม) ข้อมูลที่รวบรวมได้จะนำไปใช้ในการพัฒนา ปรับปรุงการเรียนการสอนเพศศึกษาเพื่อให้มีประสิทธิภาพมากยิ่งขึ้น
3. ให้นักเรียน อ่านคำชี้แจงของแต่ละตอนในแบบสอบถามก่อนลงมือทำ และกรุณาตอบคำถามทุกข้อตามความเป็นจริง เพราะถ้าคำตอบไม่ครบทุกข้อจะทำให้แบบสอบถามชุดนี้ไม่สามารถวิเคราะห์ผลการวิจัยได้

ขอขอบคุณนักเรียนทุกท่านที่ให้ความร่วมมือ

นางสาวปัญญาวดี ทองแก้ว
นักศึกษาปริญญาโท สาขาการเจริญพันธุ์และวางแผนประชากร คณะแพทยศาสตร์
โรงพยาบาลรามาธิบดี มหาวิทยาลัยมหิดล

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แบบสอบถาม

เรื่อง เปรียบเทียบหลักสูตรเพศศึกษากับความรู้ ทัศนคติ และพฤติกรรมของนักเรียนชั้นมัธยมศึกษาตอนต้น ในจังหวัดชุมพร

ตอนที่ 1 ข้อมูลทั่วไปของผู้ตอบแบบสอบถาม

คำชี้แจง โปรดเขียนเครื่องหมาย √ ลงใน ( ) หน้าที่ตรงกับความเป็นจริงของท่าน

1. เพศ ( )1.ชาย ( )2.หญิง

2. อายุ..... ปี

3. อาชีพของบิดา

( ) 1.รับราชการ/ รัฐวิสาหกิจ

( ) 2.รับจ้างทั่วไป/เอกชน

( ) 3. ค้าขาย

( ) 4.เกษตร

( ) 5.อื่นๆ ระบุ.....

4.อาชีพของมารดา

( ) 1.รับราชการ/รัฐวิสาหกิจ

( ) 2.รับจ้างทั่วไป/เอกชน

( ) 3.ธุรกิจส่วนตัว/ค้าขาย

( ) 4.เกษตร

( ) 5.อื่นๆ ระบุ.....

5. สถานภาพสมรสของบิดามารดา

( ) 1.พ่อแม่อยู่ด้วยกัน ( ) 2.แยกกันอยู่

( ) 3.หย่า ( ) 4.พ่อ หรือ/และ แม่เสียชีวิต

( ) 5.อื่นๆ ระบุ.....

6.ระดับการศึกษาของบิดา

( ) ประถมศึกษา

( ) มัธยมศึกษา

( ) ปริญญาตรี

( ) ปริญญาโท

( ) อื่นๆ ระบุ.....

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7.ระดับการศึกษาของมารดา

( ) ประถมศึกษา

( ) มัธยมศึกษา

( ) ปริญญาตรี

( ) ปริญญาโท

( ) อื่นๆ ระบุ.....

8. สถานที่อยู่อาศัย

( ) 1.พักกับผู้ปกครอง ( ) 2.พักกับญาติ

( ) 3.พักที่บ้านเพื่อน ( ) 4.พักที่บ้านเช่า

( ) 5.พักที่หอพัก

ตอนที่ 2 แบบสอบถามความรู้เรื่องเพศศึกษา

คำชี้แจง กรุณาทำเครื่องหมาย √ ใน ( ) ที่ท่านเห็นว่าเป็นคำตอบที่ถูกต้องที่สุดเพียงข้อเดียว และกรุณาทำทุกข้อ

1.การเปลี่ยนแปลงทางร่างกายในข้อใด ถือเป็นการเปลี่ยนแปลงที่พบได้ในวัยรุ่น

( ) มีกลิ่นตัว มีเหงื่อมากขึ้น

( ) ความสูงเพิ่มขึ้นอย่างรวดเร็วจนดูเก้งก้าง

( ) มีขนในที่ลับ รักแร้

( ) ถูกทุกข้อ

2. ต่อมใดในร่างกายที่ทำหน้าที่หลั่งฮอร์โมนที่ควบคุมการเจริญเติบโต

( ) ต่อมเพศ

( ) ต่อมหมวกไต

( ) ต่อมใต้สมอง

( ) ต่อมลูกหมาก

3. ผู้ชายจะเข้าสู่วัยรุ่นอายุประมาณเท่าใด

( ) 9-10 ปี

( ) 11-12 ปี

( ) 13-14 ปี

( ) 15-16 ปี

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4. ตัวอสุจิสร้างจากอวัยวะใด

( ) ต่อมลูกหมาก

( ) ถุงผลิตน้ำเลี้ยงอสุจิ

( ) ท่อเก็บตัวอสุจิ

( ) อัณฑะ

5.หลังจากมีประจำเดือนครั้งแรกเด็กหญิงจะสูงขึ้นได้อีกกี่ปี

( ) 1-2 ปี

( ) 3-4 ปี

( ) 5-6 ปี

( ) สูงขึ้นอีกเรื่อย

6. เมื่อเด็กเข้าสู่วัยรุ่นจะมีพฤติกรรมใดบ้าง

( ) ทำตัวเป็นจุดสนใจของเพศตรงข้าม

( ) อยากรู้ อยากลอง อยากเห็นสิ่งแปลกใหม่

( ) ถูกทั้งหมด

( ) ไม่ทราบ

7. การปฏิสนธิคืออะไร

( ) รังไข่ผลิตไข่เพื่อรอการผสมพันธุ์

( ) อสุจิเข้าผสมกับไข่

( ) อสุจิฝังตัวในมดลูก

( ) ไข่เริ่มแบ่งตัวเพื่อสร้างตัวทารก

8. การร่วมเพศที่มีโอกาสตั้งครรภ์ได้มากที่สุดจะอยู่ในช่วงเวลาใด

( ) ก่อนมีระดู 7 วัน

( ) ก่อนมีระดู 14 วัน

( ) หลังมีระดู 7 วัน

( ) มีโอกาสตั้งครรภ์ได้เท่ากันทุกช่วงเวลา

9. วัยรุ่นชายจะเริ่มฝันเปียกเมื่ออายุประมาณเท่าใด

( ) 11-13 ปี

( ) 14-16 ปี

( ) 17-18 ปี

( ) ไม่แน่นอน

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10.แนวทางในการควบคุมอารมณ์เพื่อให้เป็นคนอารมณ์ดี คือ ยกเว้น ข้อใด

( ) พยายามฝึกสำรวจอารมณ์ตนเอง

( ) พยายามควบคุมอารมณ์ตนเองด้วยการหันเหไปทำสิ่งอื่น

( ) พยายามหลีกเลี่ยงสถานการณ์ที่เร้าอารมณ์ให้เกิดความเศร้า ตกใจและกลัว

( ) พยายามเก็บกดอารมณ์ต่างๆ เอาไว้

11.การปฏิบัติตัวตามข้อใดจะทำให้วัยรุ่นสามารถปรับตัวทางสังคมและสติปัญญาได้ดี

( ) เป็นตัวของตัวเองให้มากที่สุด

( ) สังเกตการปฏิบัติตัวทางสังคม กิริยามารยาทจากผู้อื่นหรือผู้ใหญ่ที่เป็นแบบอย่างอันดีงาม

( ) ศึกษาหาความรู้เฉพาะเรื่องที่ตนสนใจ

( ) เลือกคบเพื่อนที่มีระดับเท่าเทียมกัน

12.หากท่านต้องมีเพศสัมพันธ์อย่างหลีกเลี่ยงไม่ได้ ท่านควรทำอย่างไรเพื่อป้องกันการติดโรคติดต่อทางเพศสัมพันธ์และการตั้งครรภ์ที่ไม่พึงประสงค์

( ) ใช้วิธีหลั่งภายนอก

( ) ใช้ถุงยางอนามัย

( ) รับประทานยาคุมฉุกเฉินภายหลังจากร่วมเพศแล้ว

( ) ไม่ต้องทำอะไร รอไปตรวจหากประจำเดือนไม่มา

13.หากมีความต้องการทางเพศท่านควรทำอย่างไร

( ) หาเพื่อนที่จะยอมมีเพศสัมพันธ์ด้วยได้

( ) ออกไปหากิจกรรมอื่น ๆ ทำ

( ) สำเร็จความใคร่ด้วยตนเอง

( ) ถูกทุกข้อ

14. ข้อใดเป็นข้อดีของการมีแฟนในวัยเรียน

( ) มีแฟนเอาไว้อวดเพื่อน

( ) จะได้ชวนกันเรียน เป็นที่ปรึกษาเรื่องเรียน

( ) มีไว้เป็นเพื่อนเที่ยว

( ) มีไว้ให้ทำการบ้านให้

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15. หากในอนาคตท่านมีโอกาสเลือกคู่ครอง ท่านควรเลือกคนที่มีลักษณะอย่างไร

( ) ต้องเป็นบุคคลที่มีพื้นฐานการศึกษาไม่แตกต่างกันมาก

( ) เลือกคนที่สามารถปรับตัวเข้ากับครอบครัวของท่านได้

( ) เลือกคนที่ไม่เห็นแก่ตัว

( ) ถูกทุกข้อ

16.สถานการณ์ใดที่อาจนำไปสู่การมีเพศสัมพันธ์ได้ มากที่สุด

( ) อยู่ในที่ลับกับเพื่อนต่างเพศสองต่อสอง

( ) การที่ผู้ชายเกิดอารมณ์ทางเพศ

( ) การดูสื่อลามกต่างๆ

( ) การที่ผู้ชายบอกรักผู้หญิง

17.ผู้หญิงควรวางตัวกับผู้ชายอย่างไรเพื่อป้องกันการมีเพศสัมพันธ์ที่ไม่พึงประสงค์

( ) ไม่ใกล้ชิดและไม่อยู่ตามลำพังในที่ลับตา

( ) แต่งกายไม่ให้ทันสมัย

( ) ไม่รับประทานอาหารร่วมวงเดียวกัน

( ) ไม่พูดจากับผู้ชายโดยไม่จำเป็น

18.การกระทำของใครต่อไปนี้ ไม่ถือ ว่าเป็นการล่วงละเมิดทางเพศ

( ) ก้องจ้องมองปออย่างกรุ้มกริ่ม

( ) เก่งเล่าเรื่องตลกลามกสองแง่สองง่าม

( ) เกมโทรศัพท์หาบัวทุกวัน

( ) กล้าจับก้นหน่อย

19.หากมีคนมาชวนท่านมีเพศสัมพันธ์ ท่านควรมีหลักการปฏิเสธอย่างไร

( ) ปฏิเสธอย่างจริงจังเพื่อแสดงความตั้งใจอย่างชัดเจนที่จะขอปฏิเสธอย่างชัดเจน

( ) การต่อรองโดยหากิจกรรมอื่นที่ดีกว่ามาทดแทน

( ) การผลัดผ่อนขอยืดเวลาออกไปเพื่อให้ผู้ชวนเปลี่ยนความตั้งใจ

( ) ถูกทุกข้อ

20. ปัจจัยสำคัญที่ทำให้การปฏิเสธประสบความสำเร็จคือข้อใด

( ) ระงับอารมณ์โกรธ

( ) ใช้ถ้อยคำสุภาพ

( ) ต้องควบคุมตนเองให้ได้และตั้งในแน่วแน่

( ) ถูกทุกข้อ

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21.เมื่อเกิดความเครียดท่านจะมีวิธีจัดการกับความเครียดอย่างไร

( ) ปรึกษาเพื่อน

( ) คิดแก้ปัญหาด้วยตนเอง

( ) หนีเรียนไปเที่ยวกับเพื่อน

( ) ปรึกษาผู้ใหญ่ให้ช่วยแก้ปัญหาให้

22.ปัจจัยที่ก่อให้เกิดอารมณ์ทางเพศคือ ยกเว้น ข้อใด

( ) ฮอร์โมนเพศในร่างกาย

( ) การที่มีสิ่งเร้าอารมณ์มากระตุ้น เช่น ภาพโป๊ เปลือย

( ) การอยู่สองต่อสองกับเพื่อนต่างเพศในที่ลับตาคน

( ) การออกกำลังกายมากๆ

23.ถ้าวัยรุ่นเกิดอารมณ์เพศ สิ่งที่ควรทำมากที่สุดคือ

( ) สำเร็จความใคร่ด้วยตนเอง

( ) ออกกำลังกายทันทีและหาเวลาออกกำลังกายมากขึ้น

( ) ทำเฉยๆ เดี๋ยวอารมณ์เพศก็หายไปเอง

( ) ไม่อยู่คนเดียว เข้าไปอยู่ในกลุ่มเพื่อนหรือกลุ่มคนเพื่อหากิจกรรมทำ

24.ข้อใดไม่ใช่โรคติดต่อทางพันธุกรรม

( ) ตาบอดสี

( ) เบาหวาน

( ) ธาลัสซีเมีย

( ) โรคไต

25. คนที่เป็นโรคธาลัสซีเมียสามารถมีลูกได้หรือไม่

( ) ได้ เพราะโรคธาลัสซีเมียไม่ติดต่อทางพันธุกรรม

( ) ได้ เพราะโรคธาลัสซีเมียไม่ถ่ายทอดไปสู่ลูก

( ) ไม่ได้ เพราะลูกออกมาจะเป็นธาลัสซีเมียแน่นอน

( ) ต้องตรวจคู่สมรสด้วยจึงจะทราบว่ามีได้หรือไม่

26. การตั้งครรภ์ในวัยรุ่นมีผลเสียอย่างไร

( ) แม่วัยรุ่นคลอดยากเพราะร่างกายยังเจริญเติบโตไม่เต็มที่

( ) ทารกที่คลอดออกมาจากแม่วัยรุ่น มักมีน้ำหนักตัวน้อย

( ) ถูกทุกข้อ

( ) ไม่ทราบ

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27.ข้อใดเป็นผลกระทบจากการมีเพศสัมพันธ์ก่อนสมรส

( ) เกิดปัญหาครอบครัว

( ) เกิดปัญหาสังคมเช่นเด็กถูกทอดทิ้ง

( ) เกิดปัญหาความพร้อมทางเศรษฐกิจ

( ) ถูกทุกข้อ

28.การคุมกำเนิดวิธีการใดที่ช่วยป้องกันการตั้งครรภ์และป้องกันการติดเชื้อเอดส์ได้ หากใช้อย่างถูกวิธี

( ) ถุงยางอนามัย

( ) ยาเม็ดคุมกำเนิด

( ) ยาเม็ดคุมกำเนิดชนิดฉุกเฉิน

( ) ถูกทุกข้อ

29.การคุมกำเนิดด้วยวิธีการใดที่เสี่ยงต่อการตั้งครรภ์มากที่สุด

( ) ยาเม็ดคุมกำเนิด

( ) ถุงยางอนามัย

( ) ยาฝังคุมกำเนิด

( ) ยาเม็ดคุมกำเนิดชนิดฉุกเฉิน

30.สถานการณ์ใดต่อไปนี้เสี่ยงต่อการติดเชื้อเอดส์ได้มากที่สุด

( ) การสัมผัสแผล เลือด น้ำเหลืองของผู้ติดเชื้อ

( ) การมีเพศสัมพันธ์โดยไม่ใช้ถุงยางอนามัย

( ) การใช้สิ่งของร่วมกับผู้ป่วยเอดส์

( ) การจับมือโอบกอดกัน

31.เกี่ยวกับเชื้อเอชไอวี ข้อใดถูกต้องที่สุด

( ) เชื้อเอชไอวีอยู่ในสารคัดหลั่งทุกชนิดในร่างกายของคนที่มีเชื้อเอชไอวี

( ) เชื้อเอชไอวีไม่สามารถมีชีวิตอยู่นอกร่างกายได้

( ) เชื้อเอชไอวีสามารถติดต่อได้โดยการใช้เข็มฉีดยาร่วมกันเท่านั้น

( ) สัตว์สามารถเป็นพาหะในการนำเชื้อเอชไอวีสู่คนได้

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32.มีอาการตุ่มน้ำพองใส ปวดแสบปวดร้อน คันบริเวณอวัยวะเพศ มีไข้ ครั่นเนื้อครั่นตัว เป็นได้ทั้งชายและหญิง เป็นลักษณะอาการของโรคติดต่อทางเพศสัมพันธ์ใด

( ) ท่อปัสสาวะอักเสบ

( ) ซิฟิลิส

( ) เริมที่อวัยวะเพศ

( ) หนองใน

33.มีตกขาวเป็นหนองสีเขียวอมเทา กลิ่นเหม็น คันในช่องคลอด เป็นลักษณะอาการของโรคติดต่อทางเพศสัมพันธ์ ใด

( ) ท่อปัสสาวะอักเสบ

( ) ซิฟิลิส

( ) เริมที่อวัยวะเพศ

( ) ช่องคลอดอักเสบจากแบคทีเรีย

34.หากมีการนัดพบเพื่อนที่สนทนากันทางอินเตอร์เน็ตควรปฏิบัติอย่างไร

( ) นัดพบที่ห้างสรรพสินค้า

( ) ไม่ไปพบเพราะอาจมีอันตรายได้

( ) ชวนเพื่อนไปด้วยอีก 1 คน

( ) บอกให้เพื่อนทราบว่าจะไปพบใคร ที่ไหน

35.เกี่ยวกับโรคติดต่อทางเพศสัมพันธ์ข้อใดถูกต้อง

( ) มีสาเหตุมาจากเชื้อไวรัสเท่านั้น

( ) รักษาให้หายได้และจะไม่กลับมาเป็นซ้ำอีก

( ) เป็นโรคติดเชื้อของอวัยวะสืบพันธุ์ที่ติดต่อกันโดยการมีเพศสัมพันธ์กับผู้ที่มีเชื้อโรคอยู่

( ) การใช้ถุงยางอนามัยสามารถป้องกันโรคติดต่อทางเพศสัมพันธ์ได้ทุกชนิด

36.ข้อใดต่อไปนี้ <u>ไม่ถือ</u> ว่าเป็นความผิดปกติทางเพศ

( ) การชอบอวดอวัยวะเพศ

( ) พวกถ้ำมอง

( ) เกิดอารมณ์ด้วยการพูดลามกทางโทรศัพท์

( ) รักร่วมเพศ

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37.เกี่ยวกับ ถุงยางอนามัย ข้อใดถูกต้อง

( ) สามารถป้องโรคเอดส์และการตั้งครรภ์ได้

( ) ควรเลือกใช้กับเฉพาะบางคนและบางสถานการณ์เท่านั้น

( ) ทำให้ความต้องการทางเพศลดลง

( ) ถูกทุกข้อ

38.สาเหตุใดต่อไปนี้ทำให้เกิดเพศสัมพันธ์ที่ไม่พึงประสงค์ในวัยรุ่น ยกเว้น ข้อใด

( ) ความอยากรู้อยากลอง

( ) สถานการณ์ที่เอื้ออำนวย

( ) ฮอร์โมนเพศ

( ) การเรียนเพศศึกษา

39.ข้อต่อไปนี้แสดงถึงความพร้อมในการมีครอบครัว ยกเว้น ข้อใด

( ) มีอาชีพ การงานมั่นคง

( ) มีอายุและวุฒิภาวะทางอารมณ์พร้อม

( ) มีความรับผิดชอบที่จะอยู่ร่วมกัน มีการวางแผนชีวิตครอบครัวในเรื่องต่างๆ

( ) มีความรัก

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ตอนที่ 3 ทัศนคติเกี่ยวกับเรื่องเพศศึกษา

คำชี้แจง กรุณาทำเครื่องหมาย √ ลงในช่องที่ตรงกับความคิดเห็นของท่านมากที่สุดเพียงหนึ่งช่องต่อข้อคำถามดังนี้

เห็นด้วยอย่างยิ่ง มีคะแนนเท่ากับ 4
เห็นด้วย มีคะแนนเท่ากับ 3
ไม่เห็นด้วย มีคะแนนเท่ากับ 2
ไม่เห็นด้วยอย่างยิ่ง มีคะแนนเท่ากับ 1

ข้อคำถาม	เห็นด้วยอย่างยิ่ง	เห็นด้วย	ไม่เห็นด้วย	ไม่เห็นด้วยอย่างยิ่ง
1.ความรักของเด็กวัยรุ่นมักเป็นความรักที่ต้องการเป็นฝ่ายรับมากกว่าเป็นผู้ให้ เป็นรักเทียมมากกว่ารักแท้				
2.ความใกล้ชิดและการสัมผัสเนื้อตัวกันมักลงเอยด้วยการมีเพศสัมพันธ์				
3.การดูสื่อยั่วยุ เช่น หนังสือโป๊ การ์ตูนโป๊ อินเตอร์เน็ตที่มีภาพลามก คลิปวีดีโอโป๊ อาจนำไปสู่การมีเพศสัมพันธ์ได้				
4.เมื่อมีความต้องการทางเพศเกิดขึ้นแล้ว เป็นการยากที่จะปฏิเสธการมีเพศสัมพันธ์				
5.การมีเพศสัมพันธ์ในวัยเรียนจะทำให้เกิดความเดือดร้อนตามมา				

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ข้อคำถาม	เห็นด้วยอย่างยิ่ง	เห็นด้วย	ไม่เห็นด้วย	ไม่เห็นด้วยอย่างยิ่ง
6.การมีเพศสัมพันธ์เพียงครั้งเดียวไม่สามารถทำให้ติดเชื้อเอดส์ได้				
7.การมีเพศสัมพันธ์กับหญิงขายบริการมีโอกาสเสี่ยงต่อการติดเอดส์มากกว่าแฟนหรือคนรัก				
8.โรคเอดส์เป็นโรคที่ไม่น่ากลัวสำหรับท่านเพราะปัจจุบันมียารักษาที่มีประสิทธิภาพ				
9.นักเรียนไม่จำเป็นต้องเรียนรู้เรื่องการคุมกำเนิดเพราะโตขึ้นก็จะรู้เอง				
10.เมื่อมีเพศสัมพันธ์กับแฟนก็ต้องรับผิดชอบด้วยการแต่งงาน				
11.การมีเพศสัมพันธ์นอกสมรสของผู้ชายเป็นเรื่องธรรมดา แต่หญิงทำไม่ได้ถือว่าเป็นเรื่องน่าละอายอย่างมาก				
12.การสำเร็จความใคร่ด้วยตนเองเมื่อมีความต้องการทางเพศเป็นเรื่องที่ไม่ควรปฏิบัติทำให้เกิดความเจ็บป่วย				
13.การไปอยู่ในที่ลับสองต่อสองกับเพศตรงข้ามอาจนำไปสู่การล่วงละเมิดทางเพศได้				
14.การที่เพศตรงข้ามพูดจาส่อทางเพศ เช่น “น้องสาวหน้าอกโตจัง” เป็นการที่เขาชื่นชมในตัวเรา				

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ข้อคำถาม	เห็นด้วยอย่างยิ่ง	เห็นด้วย	ไม่เห็นด้วย	ไม่เห็นด้วยอย่างยิ่ง
15.คนที่มีพฤติกรรมรักร่วมเพศถือว่าเป็นพวกที่มีความผิดปกติทางเพศทุกคน				
16.หากผู้หญิงคนใดเสียความบริสุทธิ์แล้วก็ไม่จำเป็นต้องรักนวลสงวนตัวอีก				
17.การที่วัยรุ่นชายหญิงเพิ่งรู้จักกันและมีเพศสัมพันธ์ด้วยความเต็มใจทั้งสองฝ่ายถือเป็นเรื่องปกติ				
18.การแสดงถึงความรักที่แท้จริง คือ การมีเพศสัมพันธ์				
19.ท่านรู้สึกอายหากเพื่อนหรือคนอื่นทราบว่าท่านพกถุงยางอนามัย				
20.ไม่ควรอยู่กับแฟนตามลำพังในที่ลับตาเพราะจะทำให้เกิดอารมณ์เพศได้				
21. ก่อนแต่งงานควรพาคู่รักของตนไปตรวจโรคติดต่อทางเพศสัมพันธ์หรือโรคทางพันธุกรรมเสียก่อน				
22.หากเพื่อนของท่านให้คำแนะนำเกี่ยวกับการคบแฟนในวัยเรียน ท่านควรจะรับฟังสิ่งที่เพื่อนบอกหรือเตือน				
23.หากท่านมีปัญหาเกี่ยวกับแฟนควรปรึกษาผู้ใหญ่				

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ข้อคำถาม	เห็นด้วยอย่างยิ่ง	เห็นด้วย	ไม่เห็นด้วย	ไม่เห็นด้วยอย่างยิ่ง
24.หากท่านมีโอกาสที่จะมีเพศสัมพันธ์ ท่านก็จะมีเพศสัมพันธ์อย่างไม่หลีกเลี่ยง				
25. หากจะมีเพศสัมพันธ์แต่ท่านไม่มีถุงยางอนามัย ท่านควรเลี่ยงการมีเพศสัมพันธ์				
26.นักเรียนทุกคนควรมีแฟนในวัยเรียน				
27. มีเพศสัมพันธ์กับผู้ที่ดูสะอาดสะอ้านผิวพรรณดีจะไม่ทำให้ติดโรค				
28.การเพิ่มขนาดของอวัยวะเพศชายทำให้ผู้หญิงเกิดความสุขทางเพศ				
29.ท่านเห็นด้วยว่าหากตั้งครรภ์โดยที่ยังไม่พร้อมควรทำแท้งเป็นอย่างยิ่ง				
30.ท่านคิดว่าการมีแฟนหลายคนหรือการเปลี่ยนแฟนบ่อยๆเป็นเรื่องดี				
31.ท่านคิดว่าการกระทำต่าง ๆ ของดาราล้วนเป็นแบบอย่างที่ดีทุกเรื่อง				
32.การมีประสบการณ์ทางเพศสัมพันธ์แสดงถึงความเป็นชายชาตรี				

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ตอนที่ 4 พฤติกรรมเกี่ยวกับเรื่องเพศศึกษา

คำชี้แจง กรุณาทำเครื่องหมาย √ ลงในช่องที่ตรงกับความเป็นจริงของท่านมากที่สุดเพียงหนึ่งช่องต่อข้อคำถาม

ข้อคำถาม	ใช่	ไม่ใช่
1.ท่านมักจะปฏิเสธเสมอเมื่อเพื่อนคะยั้นคะยอให้ดื่มเหล้าหรือสูบบุหรี่		
2.ถ้าเพื่อนด่าและว่ากล่าวท่านด้วยคำพูดหยาบคายท่านก็จะด่าและว่ากล่าวเพื่อนด้วยเช่นกัน		
3.ท่านเคยดูสื่อลามกต่างๆ เช่น หนังสือโป๊ การ์ตูนโป๊ ภาพปลุกเร้าอารมณ์จากอินเตอร์เน็ต คลิปวีดีโอต่างๆ ซีดี วีซีดี ที่เป็นการปลุกเร้าอารมณ์		
4.ท่านมีเพื่อนต่างเพศที่รู้จักกันโดยการสนทนาทางอินเตอร์เน็ต		
5.ท่านเคยออกไปพบเพื่อนที่รู้จักกันโดยการสนทนาทางอินเตอร์เน็ต		
6.ท่านเคยมีกิจกรรมทางเพศกับเพศเดียวกัน		
7.เคยมีคนที่ท่านเพิ่งรู้จักครั้งแรกชวนท่านไปมีเพศสัมพันธ์ด้วย		
8.เมื่อเกิดความเครียด นักเรียนเคยจัดการกับความเครียดด้วยตนเองเพียงลำพัง		

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