"SMART BOYS" AND "SWEET GIRLS"SEX EDUCATION NEEDS IN THAI TEENAGERS: A MIXED-METHOD STUDY

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DECLARATION

I, Uraiwan Vuttanont, confirm that the work presented in this thesis is my own. Where
information has been derived from other sources, I confirm that this has been indicated
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ABSTRACT

This study aimed to inform the redesign of sex education policy in Chiang Mai (Thailand) by exploring the knowledge and attitudes of teenagers, parents, teachers, and policy makers and placing these in the wider social, cultural, educational, and economic context of modern-day Thailand. Six selected secondary schools with diverse characteristics in socioeconomic and religious backgrounds and locations were studied. This mixed method study included: semi-structured interviews and narrative interviews with 18 key stakeholders; analysis of 2 key policy documents; a survey of 2301 teenagers; 20 focus groups of 185 teenagers; a survey of 351 parents; one focus group of 8 teachers; and two focus groups of 23 parents. Qualitative and quantitative data were assessed separately with thematic and statistical analysis, respectively, and outcomes were compared, combined and discussed. Results suggested: school-based sex education was biologically focused and inconsistently delivered. Chiang Mai teenagers showed a reasonable knowledge of biological issues around reproduction but were confused and uncertain about how to obtain or use contraception, avoid pregnancy and transmission of STIs, negotiate personal and intimate relationships and find sources of support and advice. Many parents and teachers lacked the knowledge, confidence, and skills to offer meaningful support to their children. Five important influences on Chiang Mai teenagers' sexual attitudes and behaviours were noted in this research: ambiguous social roles leading to confused identity, heightened sexual awareness and curiosity, critical gaps in knowledge and life skills, limited parental input, and an impulsive and volatile approach to intimate encounters. Results of this study suggest several possibility approaches that could be developed to improve sex education.

Key words: Sex education; Teenagers; Adolescents; Knowledge; Attitudes; Values; Behaviours

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CHAPTER ONE

INTRODUCTION

This thesis describes a research study into sexual health education in Chiang Mai, Thailand.

As in many other countries, sexual health problems in Thai adolescents are increasing rapidly (AVERT, 2005; Warakamin & Boonthai, 2005; Agence France Presse. 2003. UNAIDS/WHO, 2002); there are signs of increasing pre-marital and unsafe sexual behaviours among adolescents (Chemnasiri & Plipat, 2005; Riewtong, 2003; Siraprapasiri, 2003). These figures raise concerns about sexual and reproductive health problems among teenagers.

Sex education is expected to be a strategy that can prevent and reduce sexual and reproductive health problems in young people and is at the forefront of public debates about how to address the problem. In Thailand, sex education has been adopted in the school curriculum, but a slow progress has been made (MOPH &WHO, 2003; IPPF, 2001; UNESCO, 2001). When the work for this thesis began, little was known about available sex education in Thai schools, and more understanding about sex education in the country was needed.

This research study, which reports work undertaken between 2003 and 2007, describes the wider social context within which sex education policy is implemented in Thailand; explores and describes detail on exactly what education and other interventions are currently provided, offers an estimate of the knowledge (and misconceptions) of adolescents about sexual health issues; considers the psychological and social factors that influence adolescent sexual behaviour such as attitudes, beliefs and cultural norms; and explores the detailed context of service delivery, in order to provide sexual health policymakers with more information and insights about sexual health education in Chiang Mai, Thailand.

This thesis is divided into 8 chapters. This chapter outlines and explains the main aims of the thesis. It provides details of contents covered in each chapter.

Chapter Two provides general background information on Thailand and a literature review of adolescents and sex education. Global information about adolescents, including information on Thai adolescents, their sexual behaviours, and sexual health problems are presented. It also presents general information about sex education and discusses previously school based sex education as studied by researchers, highlighting the unanswered questions about sex education in developing and transition countries.

Chapter Three describes the methodology of the study. It describes the philosophical basis of the research and a consideration on methods used on researching sensitive issues. It also describes the setting and characteristics of the studied schools, sampling frame, methods of data analysis, and ethics approval and governance in doing the research.

Chapter Four reports a preliminary study of sexual health education in Chiang Mai, Thailand. This chapter describes the sex education policy at the time, the context of sex education delivery, and interventions provided in schools. This chapter also describes a provisional assessment of sex education policy in Thailand. It discusses the existing sex education, and describes the gap between policy and practice. The data sources for this chapter are from reviewing documents, teacher handbooks, leaflets, videotapes, and interview key informants, teachers, and policy makers.

Chapter Five describes an assessment of Thai adolescents' sexual health knowledge based on the results of questionnaires, focus groups, and interviews. It presents an overview picture of schools studied and demographic data on research participants. It also describes the sexual health information available to these pupils, presents information of adolescents' sexual health knowledge, including their sources of information and used of sexual health services.

Chapter Six summarises the information needs for sexual health education of Thai adolescents based on the empirical findings of this study. This discussion includes what

adolescents, parents, teachers, and policy makers' liked/ disliked and what they identified as their key knowledge deficits in relation to sexual health education.

Chapter Seven describes an analysis, based on all the empirical data collected, of what could have influence on Thai adolescents' sexual behaviour. It presents a broader picture of living in transitional culture and describes attitudes, values, and behaviours of adolescents. This chapter also presents teachers', parents', and adolescents' reflections on today adolescents' behaviours and their views and attitudes towards sexual health education.

Chapter Eight offers a summary of the thesis. It gives a reflection on the methods used, presents the main conclusion of the study, and provides suggestions for further sex education research. This chapter also presents recommendations for policy and sex education practices.

CHAPTER TWO

LITERATURE REVIEW

This chapter describes background information and a literature review of adolescents and sex education. Section 2.1 presents general background information on Thailand. This includes demographical information and social issues in relation to adolescents' sexual health and Thailand's reproductive health policy. Section 2.2 describes general global information about adolescents, including adolescents' sexual behaviours. Section 2.3 presents general information about sex education and particularly discuss about school-based sex education. And lastly, section 2.4 discusses about sex education in Thailand.

2.1 General background information on Thailand

2.1.1 Demographical information and social issues

Thailand is a democratic country located on the Indo-Chinese peninsula (IPPF, 2001) in the heart of South-East Asia (UNFPA, 2001a), bordering Lao People's Democratic Republic in the north and northeast; Myanmar (previously Burma) in the north and west; the Andaman Sea in the west; Cambodia and the Gulf of Thailand in the east; and Malaysia in the south. It covers a land area of about 514,000 square kilometres, which is almost double of the land area of the United Kingdom (241,590 square kilometres) (CIA, 2002). Thailand location is shown in Figure 2.1.

Figure 2.1 Thailand location



Source: WorldAtlast.com¹, undated

At the end of 2004 the population of Thailand was 63,465,000 (UNAIDS/WHO, 2005). Approximately 68% of the population lives in rural areas where the majority is farmers with incomes reliant upon subsistence agriculture (IPPF, 2001). The population includes Thai, Chinese Thai, and others (Malay, Khmer, Karen, Indians, Burmese, and Vietnamese). The official language is Thai Siamese; unofficial languages are ethnic and regional dialects; and English is secondary language of the elite (CIA, 2002). The main religion of the country is Buddhist; Christian and Muslim faiths are also followed.

There have been many changes in Thailand over the past decades (MOPH, 2000a). Many parts of Thailand have changed from an agricultural to an industrialized culture, with a shift towards Capitalism and Westernisation. The economic and social transformation has improved the Thais' quality of life (IPPF, 2001). However, it expands a gap between rich people and poor people. Thailand faces severe disparities

² Permission to include this material from http://www.worldatlas.com/webimage/countrys/asia/seasiatm.htm within the electronic version of this thesis has been granted by GraphicMaps.com.

between rich and poor: the income inequalities both within and between regions, and between rich and poor groups are widening. About 8 million people are living in poverty (IPPF, 2001; UNFPA, 2001a). More importantly, social transformation has brought changes into Thai people's life style.

The national development under the capitalistic system that underpins industrial development, including consumerism and materialism has had an impact on Thai social life styles (Warakamin & Boonthai, 2005; IPPF, 2001). There are rural to urban migration, seeking jobs in the industrial and service sector (MOPH, 2000a). The replacement of the extended family by the nuclear family has weakened the sense of community and traditional forms of co-operation and safety nets (IPPF, 2001). Women have more opportunity to work outside their houses. Parents spend more time working outside their homes and have no time to closely take care of children (Duangjan, 2004).

Moreover, the rapid globalisation, widespread availability of information and communication technology has been linked to change in cultural values and Thai sexual life style (UNFPA, 2002). Even though Thais' traditional attitude to sex, which is typically Asian, discreet, and modest is still discernible (McAndrew, 2000); there is also evidence of changed ways of thinking. Today, there is less restriction and independent thinking about sexual relationships, especially in females (Charanasri et al., 2004).

The rise in females' independence and the liberalisation of views on sexual relationships have resulted in more divorces and broken families, which increase the vulnerability of adolescents (Warakamin & Boonthai, 2005; Duangjan, 2004; UNFPA, 2002; IPPF, 2001). Family dynamic and structure changes have brought new values that have probably also influenced adolescents' sexual behaviour. An increase in problems affecting personal health and safety including crime, drugs, and prostitution has been observed (MOPH, 2000a).

2.1.2 Adolescents' reproductive health in Thailand

In modern Thai society, pre-marital sex in teenagers, a factor that is linked to increased sexual health problems among Thai adolescents, is increasing (Siraprapasiri, 2003; Kittisuksatit, 2002). Having sex in teenage years, at school age, and without using preventive methods, increase the risk of unwanted pregnancies, unsafe abortions, HIV/AIDS, and sexually transmitted infections (Duangian, 2004; UNFPA, 2001a).

In Thailand, induced abortion is a crime and there is no official termination service except for treatment. Both the woman and the person who terminates the pregnancy are subject to quite severe penalties. Their sentence may include imprisonment or a monetary fine. However, unsuccessful termination of pregnancy is not punishable and can be treated in hospitals.

According to the Thai criminal code of law, Article 305, induced abortion is legally permitted when it is performed by a physician on a woman under two conditions: when the pregnancy is a risk to woman's health or when the pregnancy is resulted from rape (MOPH & WHO, 2003). Most information concerning abortion reflect this legal situation and refers mainly to cases of complications which are related to hospitals. It reflects the lack of access to safe pregnancy termination but probably distorts the actual distribution of pregnancy termination in the population (UNESCO, 2001).

Having sex at school age may not pose a major threat to health in some countries, but in Thailand, Thai adolescents may encounter a number of difficulties if they have sexual relationship and get pregnant. Thai parents, schools, and society do not expect adolescents to have a sexual relationship at school age, and pregnant students are not permitted to study in school. Furthermore, because abortion is illegal and difficult to obtain, many unwanted pregnancies end up with induced abortions, often performed under unsafe conditions, resulting in serious health complications such as incomplete abortion, bleeding, and infection (UNFPA, 2002).

In Thailand, the teenage pregnancy rate is about 25% of all births (UNFPA, 2001a). There is no doubt that teenagers' abortion rate is high even though the exact statistic is

not available. Available statistics show that abortion performed on women aged 24 years and younger is 54.8% of a total of 300,000-400,000 abortion cases each year (Warakamin & Takrudtong, 1998), which is likely to reflect a high teenage abortion rate.

Even though reliable statistics of HIV/AIDS and STIs of adolescents in Thailand are not available, there is indirect evidence of increasing adolescents' sexual health problems. The Health Ministry in Thailand has noted that the rate of HIV infection among teenagers rose during 2002 from 11% to 17% and only 50% of teenagers reported using a condom; there are signs of increasing unsafe sexual behaviour among young people in Thailand (AVERT, 2005; CIA, 2002; UNAIDS/WHO, 2002). The increase of sexual health problems in adolescents is a source of concern for Thai families, teachers, health personnel, and the government.

2.1.3 Thailand's reproductive health policy and programmes

The Thai government has adopted a reproductive health policy aimed at addressing the broader reproductive health needs of all individuals, male and female, married and unmarried, and Thailand is credited with one of the most successful family planning programmes in the world (UNFPA, 2001a). The Department of Health (DOH) in Thailand's Ministry of Public Health (MOPH) has direct responsibility for policy and programmes on sexual and reproductive health (UNESCO, 2001).

The DOH stated the reproductive health policy: "All Thai citizens at all ages must have good reproductive health throughout their entire lives" (Warakamin & Takrudtong, 1998: 1). From the policy, ten component elements have been announced and scope of reproductive health implementation has been set. The components and scope of reproductive health implementation is shown in Table 2.1, page 20.

Even though components and scope of reproductive health implementation are stated clearly, compared to traditional maternal and child health programmes, family planning activities and HIV prevention and management have inadequate coverage (UNFPA, 2001a). The programmes are still in a period of transition and more work has to be done

to improve reproductive health of Thais at all ages especially the younger age group (Warakamin & Takrudtong, 1998).

Table 2.1 Ten components and scope of reproductive health implementation

Component	Scope
1. Family Planning	To promote the ideal family size
2. Maternal and Child Health	To promote proper pre and post natal care
3. AIDS	To control and treat HIV and AIDS
4. Reproductive Tract Infections (RTIs)	To promote prevention and treatment of reproductive tract infections
5. Malignancies of Reproductive Tract Infection	To control malignancies of the reproductive organs
6. Sexuality Education	To promote counselling and dissemination of sex education information
7. Abortion and Its related complication	To decrease the abortion incidence and its resultant complications
8. Adolescent Reproductive Health	To promote and disseminate reproductive health care among youths and adolescents
9. Infertility	To promote counselling among couples facing reproductive health problems
10. Post- reproductive Age and Old Age Care	To promote and provide services for pre- and post menopausal women an old age population

Source: MOPH & WHO (2003: 6)

According to MOPH & WHO (2003), adolescent reproductive health programmes and services have been designed and extended to promote health and meet young people's needs based on three strategies: 1) increasing adolescents' knowledge of reproductive health and building skills in problem-solving, decision-making, and life planning; 2) offering youth-friendly services; and 3) promoting a safe and supportive environment. Measures to help young people to prevent and solve problems for themselves include compulsory sexuality education in schools, life skill education, counselling services, youth friendly health services, and promoting a safe and supportive environment. The organizations involved and their efforts are presented in Table 2.2, page 21.

Table 2.2 Efforts and organizations involved in adolescent reproductive health

Organization	Efforts
	Compulsory sexuality education in schools
MOE	Revised Family Life Education curricula in 2000 based on curricula purposed by the MOPH
МОРН	Developed manual and conducted training to improve teaching skills, youth camps
	Life skill education
MOE & MOPH	Life education has become a major policy for adolescent development.
	Child centre approach is used in teaching life skills. Develop LS manual on AIDS prevention and drug abstinence.
	Trained and set up network of life trainers
	Counselling services
MOE & MOPH	<u>School services</u> : consultation and counselling service in school, Student peers were trained to provide sex education and health information, basic counselling, and set up friend corner club.
МОРН	<u>Hospital services</u> : counselling services on health issues such as family planning, sex, STIs, and mental health are available and accessible for all aged group at public hospitals and some health centres.
	Trained nurses and related health personnel on adolescent counselling, strengthened referral system and related service system between hospital and school
	<u>Hotline services:</u> every public hospital provides counselling through telephone hotlines, health knowledge and information can be easily obtained through toll-free numbers.
	<u>Internet:</u> Public and private sites on health and reproductive health are available and downloadable. Young people can ask questions and raise issues concerning health by using e-mail, bulletin board, or e-help desk.
	Youth friendly health services
МОРН	The "Friend Corner" project is set up to be a place where young people are welcome and served: informal discussions, consultation and counselling are available and basic health care service or necessary referrals are offered. About 50 Friend corners have been serving adolescents in Thailand.
	Promoting a safe and supportive environment
Public & private organizations	Activities such as parent group meetings, parent training courses, family camps, and family rallies are used to help parents communicate with children on important issues, for example, morals, ethics, healthy living, reproductive health and physiology.

Adapt from MOPH & WHO (2003)

In reproductive health policy, sexuality education is provided as a part of health education. And health education is one in ten concepts in "Health Promoting School

concept (HPS)" to create a safe and supportive environment for healthy and well-being of students, staffs and community. In fact, traditionally sexuality education or sex education is provided in schools in relation to health matters rather than within the curriculum on human development. Sex education in schools will be discussed further later in this Chapter, section 2.4.

The next section, adolescents' developments, will be discussed alongside with adolescents' behaviours and sexual health.

2.2 General global information about adolescents

2.2.1 Adolescence and adolescents

Adolescence is the period of transition between childhood and adulthood, in which individuals reach sexual maturity by the onset of puberty. It broadly covers the teenage years. Some authors define adolescence in term of age, which gives slightly different meanings. The age group 10-19 (WHO, 1997), the age group 12-19 (Master, Johnson & Kolodny, 1995), and the teenage years 13-19 (Coleman, 1992) have been selected by different authorities to identify the period of adolescence. Bear in mind that the chronological age may correlate poorly with the individual's stage of physical and mental development, as some may reach puberty earlier than the others, and some may depend on their parents even though they have reached their early twenties (Coleman, 1992). In general, the definitions accept by WHO have been adopted, but in much of literature the terms "adolescents", "teenagers", "youth" and "young people" are used interchangeably (Sherr, 1997).

Adolescents in my study are teenagers (ages 13-19). In Thailand, children aged 10-12 years are too young for a relationship (in adults' opinion, in general); schools will not give permission to researcher to talk about sex and relationship with these children. However, for practical reasons, I used the school year (year of education) for sampling instead of the actual chronological age (See average age and year in education in Chapter Five, page 139).

Adolescence is a crucial stage of life-cycle development (Measor, Tiffin & Miller, 2000). Many differentiations occur during this period. These include biological changes, psychological changes, cognitive changes, and changes in social relations (DiClemente et al., 2001; Master, Johnson & Kolodny, 1995; Coleman, 1992).

Dramatic biological and physiological changes which occur at puberty, including rapid increase in body size, growth of body hair, skin changes, the development of secondary sex characteristics, and hormonal changes, make the differences between girls and boys are more obvious. For example, girls develop breasts, wider pelvis and begin to menstruate; boys develop facial hair, a deeper voice, leaner body, more muscle mass and the ability to ejaculate.

The rise in of sex hormones at puberty contributes to boys and girls' sexual sensations and predispose to their sexual activity (Master, Johnson & Kolodny, 1995). However, the physiological change is only one among various factors that influence adolescents' sexual behaviour (Factors that influence adolescents' sexual behaviour is presented in section 2.2.3, page 33).

Adolescents worry about their body and body image. They develop their personality, deal with their sexual feelings, and learn to cope with their psychological defences in dealing with stress and tensions. They also face new psychosocial demands. They become independent from their parents, develop skills in interacting with peers, cope with their sexuality, learn to deal with their sexual feelings and make decisions whether or not to participate in sexual activity. Living and adapting to those changes can lead adolescents to feel confused, stressed, frustrated, worried, and in emotional pain. However, not all adolescents have problems in this period. The response of adolescence varies by individual, both within and across societies.

2.2.2 Sexuality in adolescents

Sexuality has a broader meaning. It means a dimension of personality and refers to all aspects of being and feeling sexual (Master, Johnson & Kolodny, 1995). It is an intrinsic

part of human behaviour and is one of the most complex and sensitive issues associate with adolescence (Bay-Cheng, 2003; UNFPA, 2001a).

Sexuality has various dimensions. The biological side of sexuality affects our sexual desire, sexual functioning, and sexual satisfaction (Master, Johnson & Kolodny, 1995). In drive reduction model, the biology determines of sexuality prevail other theories. It presents sexuality as "an intense, instinctual drive that is overpowering if left unchecked by civilizing social mediators such as laws and morality" (Bay-Cheng, 2003: 62). Psychoanalytic and other drive reduction theories in this model view that this innate and powerful sexual drive threatens to overwhelm all common and moral sense.

If this model is linked to the traditional view of adolescence as a period of 'stress and storm' in which many teens struggle with pubertal changes and identity concerns (Coleman, 1992), it leads to a depiction of adolescents as hypersexual and their lives as driven by sexual desires and impulses (Lesko, 1996). From this view comes the idea of the infusion of biologically determined hypersexuality into the identity of the adolescent, and hence hypersexuality is constructed as adolescents' identity rather than behaviour that teens are actually engaged in. This model provided the rationale for a fear-based, crisis intervention approach to school-based sexuality education (Bay-Cheng, 2003). (School-based sex education will be discussed in section 2.3.3, page 48).

Others theories view sexuality as more social constructed (Gagnon & Simon, 1973 cited in Bay-Cheng, 2003; Weeks & Holland, 1996; Adkins & Merchant, 1996; Giddens, 1992). Rather than 'natural', 'instinct', or 'commonsense', many social scientists believe that sexual practices, desires, and pattern of behaviours are socially made and shaped by social learning (Adkins & Merchant, 1996; Weeks & Holland, 1996). How we make sense of sexual behaviour depends on the culture in which we live: the stories scripts and attitudes circulating in our society (Measor, Tiffin & Miller, 2000: 56). In fact, there are complex interactions between socio-structural dimensions that the pool of sexual scripts available to particular individuals is determined (Gagnon & Simon, 1973 cited in Bay-Cheng, 2003: 68).

• Sexuality and gender

Gender is not simply based on biological differences between sexes, but it is also socially constructed (Connell, 1987, Foucault, 1979 & Chodorow, 1971 cited in Measor, Tiffin & Miller, 2000). Societies and cultures we live in construe how we give assumptions of 'a man' or 'a woman', define what is appropriate or not appropriate for each gender, which intern, create norms of people in the societies. People in societies define gender based on what they believe: some define by biological means, others by sociostructural means, and some may not worry about gender at all.

Most people have standard beliefs about 'a man' and 'a woman'. The standard beliefs or stereotypical thinking about sexuality based on the nature of masculinity and femininity may lead to incorrect judgements and generalizations because standard beliefs (which are based on inferences people make about what they see and know and affect how people treat one another) can be based on faulty assumptions, oversimplified evidence or uncritical thinking (Kolodny & Kolodny, 1995: 227). In fact, assumptions of male as 'masculine' and female as 'feminine' may be inaccurate.

The assumptions about 'a man' or 'a woman' are changed in modern societies. Some people believe that humans are 'androgynous' and usually combine both feminine and masculine characteristics. If they do not depend on cultural definitions of what men or women can or cannot do; the individual can shift between different forms and styles of masculinity and femininity (Bem, 1993; Morgan, 1992). The person will choose to display different versions of masculinity or femininity in different contexts and under different pressures (Measor, Tiffin & Miller, 2000). He/She can be masculine, being strong, competitive, or aggressive in one situation and be feminine, being sensitive and emotional in another situation. The people who behave in appropriate ways without worrying about or conforming gender roles are displaying 'gender transcendence', which is beyond androgyny (Rebecca, Hefner & Oleshanksy, 1976 cited in Kolodny & Kolodny, 1995).

Adolescents are exposed to processes of gender socialisation and sexual socialisation at the same time, which in tern affect the characteristics and practices of their sexuality (Measor, Tiffin & Miller, 2000). They develop gender identity and communicate to the

social world in assembling and achieving their gender identity. Their performance and activity are symbolised and interpreted for masculinity and femininity; the labels of masculinity and femininity have a powerful influence on what they think, say, and do (ibid.).

Adolescents may have considerable uncertainty and insecurity in developing and communicating their gender identity (Head, 1997). They may not be sure of what it means to be a male or a female, or what is a correct or acceptable performance of adult masculinity and femininity. Boys may struggle defensively to achieve their masculinity by making themselves different things feminine from girls and all (Lees, 1993; Morgan, 1992). Even though girls do not have to achieve their femininity defensively like boys do, they employ symbolic resources to contrive and signal their gender identity (Measor, Tiffin & Miller, 2000).

This insecurity is dealt with in many cases by identifying very strongly with stereotypical heterosexual hypermasculine and hyperfeminine roles and behaviours and by denying and separating from anything perceived as belonging to other gender or to a non-heterosexual orientation (Paechter, 2003). There is a greater recourse to stereotyped behaviour, both for oneself and for one's peers. Boys will blame and disappoint if their peers display feminine characteristics. The boy who exhibits feminine interests or traits may be assumed to be homosexual and may be socially and emotionally at risk within his peers and family groups (Kolodny & Kolodny, 1995). In sum, adolescents are expected to behave and practice gender roles and follow sexual norms of the society they live in.

In the next section, I present gender roles and sexual norms based on two genders, male and female. Bear in mind that some people may define themselves others than male or female, respectively.

Gender roles and sexual norms

People are expected to behave in appropriate ways that are suitable for their gender roles and norms of their societies (Varga, 2003; Rivers & Aggleton, 2001; Knodel et al., 1997). Norms of sex and sexual behaviour, which influenced by cultural traditions, religious, family loyalties, and community expectations, assign how adolescents practice their gender roles and behave in relationships (Diamond, Hennink & Cooper, 1999).

Traditional sexual value assigns responsibility for male to being the sexual expert and turns sex into something a male does to the female; the female has little control over how, when, and where sex takes place. The value may compel a male to make sexual advances to prove his masculinity and may reduce the female potential for her sexual pleasure (Rivers & Aggleton, 2001; Kolodny & Kolodny, 1995). This double standard value provides opportunities for a male to have sexual experiences while a female is expected to remain a virgin until marriage and be sexually passive (Connell, 2005; Kolodny & Kolodny, 1995).

Standards have changed and in some places the sexual double standard has been challenged (Thaweesit, 2004; Knodel et al., 1997; Kolodny & Kolodny, 1995). Teenagers of both genders are becoming more sexually active. Ideas about right or wrong sexual behaviours of boys and girls are changed and the boundaries between 'good' and 'bad' girls and boys are less clear (Moore & Rosenthal, 1993). There are more permissive attitudes towards sexuality and greater concern for personal fulfilment (Darling et al., 1984 cited in Moore & Rosenthal, 1993). Unfortunately, boys' concern about girls' fulfilment is viewed positively as love makers, while girls' may be labelled negatively (e.g. as 'sluts') if they are too sexually adventurous or overt about their interest in being sexual (Thorne, 1993). They may become subjects of gossip even if they have responsible sex and show maturity in their relationships. In some social subgroups, girls are becoming more assertive and aggressive in dating and intimacy situations. They do things in a similar way to boys do: having sex, talking about sex, or not being interested in marriage or motherhood (Kolodny & Kolodny, 1995).

In many places, male and female gender roles are changing. Adolescents can practice new gender roles. Girls may go to boys or do many things like boys do, but it may raise a number of questions to adolescents themselves about what do they really want, for what, and why (ibid.). In most part of the world, women are still expected to be passive and submissive in their sexual relationships (Rivers & Aggleton, 2001; WHO, 1998a; Moore & Rosenthal, 1993).

As in other places, economic developments bring about social and culture changes, resulting in changing sexual roles and norms of people in the societies (WHO-West Pacific Region, 2007). In Thailand, boys' and girls' roles have been changed. In the past, girls were expected to be submissive and wait for boys. Today, girls may go for boys and start a relationship. However, Thai social and cultural norms, social expectations and imbalance of power between men and women when related to sexual matters are behind problems, such as sexual crimes, unintended pregnancy, abortions, STIs, and others (MOPH & WHO, 2003).

In Thailand, even though there are many changes, the traditional sexual values and norms still have influences on Thai people's sexual life. Female virginity is still valued highly and there is a social expectation that women should be modest, passive, and submissive in the relationship (Rivers & Aggleton, 2001; Knodel et al., 1997). Thai men still prefer to be the first man for his wife even though virginity is not the first characteristic of ideal wife; women are also expected to be a good housewives and good mothers and to have less power and sexual desires in comparison to men. Men's having sex, having more sexual partners, or even having a sexual relationship outside marriage are viewed as normal, but women who have such behaviours are viewed negatively, become victims of gossips, and may have insecurity in their relationship. While Thai men can make their choices, Thai women have to desire what it means to be 'a woman' between modern choices and social expectations (Thaweesit, 2004).

Varga described gender-related socialization and power relations linked to risky behaviour. She found that the socio-sexual culture of Zulu adolescents is governed by behavioural norms. Their code of conduct and the gender-specific expectations and freedoms inherent within it shapes adolescents' vulnerability to risky sexual behaviour and early childbearing. She found that a dignified and sexually attractive girl was judged according to her physical appearance, educational achievement, diffidence in sexual relations, sexual fidelity, and sometimes by her ability to have more than one partner. A

boy was deemed masculine by being well groomed and well off financially, educated and employed, and by being sexually active and aggressive, as might be judged by his experiencing repeated STIs. She found that adolescents' gender roles and sexual desirability have the potential to increase their risk of pregnancy and leave them to a range of sexual health complications (Varga, 2003). In addition, gender-based ideals can also threaten adolescent sexual and reproductive health. Refusal of paternity – a logical strategy for a boy concerned about safeguarding his status through education and good job prospects – has been linked to an increased likelihood that a teenaged girl would undergo a back-street abortion (Varga, 2002).

The case of Zulu adolescents could explain how gender socialization and social norms can drive adolescents to display risk behaviour. And in society that a compulsory heterosexuality supports a double standard of female passivity and male aggression and dominance, the female can be in danger of such things as sexual violence and coercion, unintended pregnancy, and STIs (UNESCO, 2007; Connell, 2005). Therefore, Thai adolescents may be at risk because they live in a transitional culture with has both modern and traditional standards and values. However, how this plays out in any situation depends on the individuals involved, their personal values, and how they behave.

2.2.3 Adolescent sexual behaviour

Sexual behaviour, a largely private activity, has various aspects and covers wide range of behaviours, emotions, feelings and experiences (Fenton et al., 2001; Master, Johnson & Kolodny, 1995). These include personal behaviours such as masturbation, sexual fantasies, interpersonal sexual behaviours such as premarital sex, unprotected sexual behaviour, coercive sex (O'Byrne et al., 2008; Ramisetty-Mikler et al., 2006; Sadock, 2005), sexual activity with or without intercourse such as kissing, touching, oral sex, and sex within the same gender and/or between genders (Tripp & Viner, 2005; Bacon, 1999).

Sexual activity is a part of sexual learning, which normally continues throughout the life cycle. During adolescence, with the approach of puberty, the upsurge of sex hormones, and the development of secondary sex characteristics, adolescents are physically capable of coitus and orgasm. They have sexual curiosity but are usually inhibited by social restraints and that produced a strong physiological sexual tension that teenagers demand to release (Sadock, 2005). Masturbation is a normal way to reduce this tension and also a way to develop sexual identity through their fantasies. Engaging in sex talk and jokes, kissing, touching genitalia, experimenting with degrees of nudity, and experimenting with different partners or with one partner are part of the process of learning about sexuality. These experiences reinforce the adolescent's sense of being a sexual boy or girl.

Adolescents' sexual activity can be viewed as a normal developmental behaviour. In developmental perspective, risk taking is normal and adaptive in adolescents; Baumrind, a developmental theorist, suggests that risk taking is a means of coping with normal developmental tasks such as autonomy and exploration (cited in Hockaday et al., 2000). But their experimentation may expose them to health risks (WHO, 1998b).

Some behaviour can be potentially dangerous or risky, especially when it related to other risk behaviours such as substance use, violence, unprotected sexual behaviours, and multiple sexual partners (YouthNet, 2004; DiClemente et al, 2001; Hassan & Creatsas, 2000). Studies showed that early age at first coitus was a marker of risky sexual behaviour: it related to more sexual partners and risk to STIs (Edgardh, 2000); frequent intercourse and sexual violence were associated with risk of adolescent pregnancy (Jewkes et al., 2001; Vundule et al., 2001); and coercive sex increased women's vulnerability to sexual and psycho-emotional problems (Heise et al., 1994). Indeed, adolescents are vulnerable to consequences of having sex from various reasons, including a lack of information, and an imbalance of power in sexual relations (Sadock, 2005; Varga, 2003; IPPF, 2001; Rivers & Aggleton, 2001).

However, while many people view adolescents' behaviour as risk taking, adolescents may not view themselves as at risk. Evidence from research has shown that some adolescents see having more partners as a reflection of popularity and having sex without a condom as brave and masculine (Chemnasiri & Plipat, 2005; Varga, 2003;

Kim, 1998). Many adolescents hold the unrealistic view that they are unique and invulnerable; they under-estimate the negative consequences of risk taking (Hockaday et al., 2000).

The numbers of adolescents who engage in sexual relations are increasing. In most of the world, the majority of young people become sexually active during their adolescent years, both in and outside marriage (IPPF, 2001). The proportion of sexually active adolescents is about one-half to two-thirds in Latin American and Caribbean countries, three-quarters or more in much of developed countries and 90% in a number of sub-Saharan African countries. The IPPF report also stated that 38% of women age 19 or younger in sub-Saharan Africa, and 28% in Latin America and the Caribbean, have their first sexual intercourse outside marriage. About 30% of girls age 15-19 in sub-Saharan Africa, and 34% of girls in this age in Asia (excluding China), are married. In the US, 47% of high school students say that they have ever had sexual intercourse and 14% of high school students admit to four or more sex partners (Grunbaum et al., 2004). In Sweden, 64% of 17-year-old student girls have experienced their first intercourse and 16% had this before 15 (Edgardh, 2000).

The age of adolescents who involve in sexual relationship are reducing. In many countries, the age at marriage is increasing while the age at which puberty begins is decreasing (Rivers & Aggleton, 2001; Roque & Gubhaju, 2001; Masters, Johnson & Kolodny, 1995). The current age range for attainment of puberty is 9-14 for boys and 8-13 for girls (Roque & Gubhaju, 2001). This means that young girls are biologically mature enough to engage in sex and become pregnant at an earlier age, although they may not be emotionally and psychologically mature enough to understand the implications. Edgardh found that girls who started coitus early reported menarche at age 11 or earlier more than later starters (Edgardh, 2000). The widening gap between the age puberty begins and the age of marriage increases the possibility of adolescents in engagement of premarital sexual activity (Moore & Rosenthal, 1993; Roque & Gubhaju, 2001).

According to Rivers & Aggleton, in Uganda, almost 50% of young men and nearly 40% of young women reported having sex by the age of 15 years; In Dar es Salaam Tanzania, 60% of 14 year old boys and 35% of girls have reported that they are sexually active; in

Brazilian school-based study, 36% of females reported having had intercourse by the age of 13 years; and in India, recent studies show that about one in four unmarried adolescent boys reported that they are sexually experienced (Rivers & Aggleton, 2001). In developed countries, the US, the modal age for first coitus is 16 years for boys and 17 years for girls (Sadock, 2005).

The relevant data about average age of intercourse and menarche for Thailand is not available. Data from country profiles for population and reproductive health by UNFPA is mean age at marriage, which for males and females has not changed in comparison from 1990 to most recent, which is 26 years for males and 23.5 for females. The median age at first intercourse for females in the past is not available, but recent official reports put this age at 20.5 years (UNFPA & PRB, 2005). This contrasts sharply with data from research studies of adolescents' behaviour. The studies showed that Thai adolescents involved in sexual activity at much younger ages: the age at first intercourse was 11-12 years (Kittisuksatit, 2002) and 14-18 years (Riewtong, 2003). Poddhisita & Pattaravanich found that urban male involved in a sexual relationship before they reached age 17, rural males involved in a relationship after 17, and females involved in a relationship when their age about 18 (Poddhisita & Pattaravanich, 1995). Allen and colleagues studied 832 female vocational students in Chiang Rai Province. She found that 43% of those said that they had had sexual intercourse, beginning on average at the age of 17 (Allen et al., 2003). The presented data have the usual problem of survey data on personal issues – they only reflect what adolescents say they do, not what they actually do (Robson, 2002) but they nevertheless give a broad indication that a substantial proportion of the population embarks on sexual intercourse while still in their mid-teens.

Chemnasiri & Plipat studied sexual behaviour among students in Year 11 in 24 provinces in Thailand in 1996 to 2004. They found that with time, more adolescents engaged in having sex. In 2004, 17.8% of male students had had a sexual experience; the tendency to have sex with their girlfriends, other females, and sex workers were increase; 1.8% of the male students had sex with males; and male students had sex with their girlfriends more than with sex workers. The female students had slightly increased having sexual relationship with the boyfriend, from 3.5% in 1996 to 5% in 2004. In 2004, 5.7% of female students said they had boyfriends, 3.8% of them had sex with their

boyfriends, and 7.5% of them reported exchanging sex for money or a gift (Chemnasiri & Plipat, 2005).

The trend of changing sexual behaviour of Thai adolescents, from having sex with sex workers to having sex within the adolescent group is increasing (Kittisuksatit, 2002; Saisorn, van Griensven & Kilmarx, 2000), which in turn may have an impact on the attitudes and norms of adolescents and their protective behaviours. Chemnasiri & Plipat found that the rates of condom use by adolescents in their initial relationship were low and the use of condom with the girlfriend was lower than the use with sex workers or others (Chemnasiri & Plipat, 2005).

Adolescent sexual behaviour varies between continents and countries since it is significantly related to a number of variables, such as the tradition of each country in sexual matters, religion, social contexts and culture (Creatsas, 1997: 86). It would therefore be inappropriate to make generalisations about adolescents' sexual behaviour. In the next section, variables that have influences on adolescents' sexual behaviours will be discussed.

Factors that influence adolescent sexual behaviour

There are a variety of factors that may have influences on adolescent sexual behaviour. These include biological factors such as gender, age, testosterone level, and pubertal timing that are mostly related to sexual activities; social factors such as social norms and gender roles; other social factors such as peer pressures, family situations, economic status, substance misuse; personal factors such as knowledge, beliefs and perceptions; and other factors such as parental input, skills, and awareness (International Women's Health Coalition, 2004; Walker, 2004; Varga, 2003; Wellings et al., 2001; Bacon, 1999; Creatsas, 1997; Kirby & Coyle, 1997; Rossi, 1997; Masters, Johnson & Kolodny, 1995).

The broader social context in which adolescents live plays a significant role in their sexual beliefs and behaviour (Chambers, Wakley & Chambers, 2001; Rosenthal, Smith & de Visser, 1999; Creatsas, 1997). The nature of that context and consequently, its

impact, ranges from the overt and overwhelming world of the adolescents subculture, a world in which teenagers are bombarded by media messages about current mores, to the less obvious influence of societal institutions such as school, religion, and the law (Rosenthal, Smith & de Visser, 1999: 69).

Most parts of the world have been changed because of progression of information and communications technology. With the rising use of computer technology and the Internet, along with the youth culture, 'popular culture' is seen as increasingly globalises (Malcom & Kay, 1999). In 'popular culture', adolescents develop autonomous activities, which contrast with prevailing norms and are distinct from adult culture. Their activities and subcultures are influenced by media messages: the media produces information, provides pictures or representations of how adolescents should behave (Chambers, Wakley & Chambers, 2001).

Adolescents often receive messages, and they interpret and perceive media images as ideal pictures or behaviours. These could be seen from ways they dress, behave, talk, and others. The media may provide distorted information and representations about gender images by presenting women's bodies as objects that must conform to criteria of being thin, spotless and dressed in designer clothing. Some may try to meet an ideal picture, others may feel that they cannot achieve the ideal because they are fat, have acne, and do not have enough money to buy fashionable clothes. These perceptions are not practical in real life and may cause them worry and confusion.

Apart from the unrealistic body image, the media may provide a feminine image that conveys boys as wanting to 'be in love' and have 'romance' with girls, or a competitive masculine style and risk-taking as part of 'being a man'. Again, adolescents may perceive images and adopt such behaviours in developing their identities. Thus, messages about sex that teenagers get from television and the movies such as sexual role models may translate into impulsive, over romanticized views of what sex is all about (MOPH & WHO, 2003; Masters, Johnson & Kolodny, 1995).

However, the media can be a useful resource. Providing information through the media is a way of promoting debate and preventing pregnancy and disease. Adolescents can also learn useful and factual information from the media. Benefits to adolescents' sexual

behaviour arising from the appropriate use of media include lower rate of adolescent pregnancies and abortions, lower incidence of STIs, better contraceptive compliance, improvement in social attitudes, and psychological support (Creatsas, 1997: 90).

Overall, then, the media may have either positive or negative influences on adolescents, since media messages vary by quality, quantity, and types and by how adolescents perceive and interpret those messages.

Apart from the media, the peer group plays a major role with regard to adolescents' sexual behaviour (Sadock, 2005; Chambers, Wakley & Chambers, 2001; Ricer & Gabel, 1995). Many adolescents experiment with a new experience including sexual activity because of peer pressure. Peers have strong influence on adolescents' desire to have sexual relations. Some wish to achieve the transition to adulthood at an earlier age than their peers (Rosenthal, Smith & de Visser, 1999). Others want to have experiences to share with their friends; some feel embarrassed if they do not have sexual experience or remain virgins (Sadock, 2005). However, not all adolescents think and behave the same way. Some pay attention or get involve in having sexual activity, but others do not. It varies by individuals' personal values and beliefs and other associated factors.

There are teenagers who remain virgins regarding to their personal value systems (Paradise et al., 2001; Masters, Johnson & Kolodny, 1995). Paradise et al. studied personal values and sexual decision-making in virginal and sexually experienced urban adolescent girls in Massachusetts. They found that a greater percentage of the virgin girls than the sexually inactive and the sexually active girls cited 'values and beliefs' as the reason for decision about sexual behaviour. The virgins were more likely to cite three specific reasons for not having sex: 'not the right thing for me now', 'waiting until I am older', and 'waiting until I am married' more than other groups (Paradise et al., 2001).

Blinn-Pike labelled three factors for the reasons for abstinence: 1) fear-based postponement, 2) emotionality and confusion, and 3) conservative values (Blinn-Pike, 1999). The label 'fear-based postponement' was used to describe an adolescent who had considered the consequences and did not feel ready for sex because he or she believed it would be unwise due to the risk of pregnancy or disease and reprisal from parents. The

label 'emotionality and confusion' was given to person whose reasons were because of fears surrounding pain, embarrassment, lack of money for birth control and protection, and peer or partner disapproval. This person appeared to allow a mixed set of environmental or contextual factors to determine his or her level of sexual activity, as opposed to a personal decision. The label 'conservative values' was given to the items that dealt with religion and waiting until marriage to have sex. Interestingly, Blinn-Pike found that only one-third of adolescents in the study reported making a conscious decision to delay sexual activity. Fear of pregnancy and AIDS were the most frequent reasons for not having sex. Issues related to the use of birth control and protection, such as cost, embarrassment, and lack of availability, were not important reasons for abstinence. And drinking alcohol was a significant independent variable across all three factors.

There are a number of variables and factors that have influences on adolescents' decision making to have or not to have sex. Apart from factors mentioned above, future expectation and parental monitoring are also reported as factors related to delaying intercourse (Eastman et al., 2005). Studies showed that adolescents who had high educational goals would deliberately delay sexual intercourse and childbearing to pursue those goals (East, 1998); lower academic performance and grade repetition among males were related to early sexual intercourse (Aras et al., 2007); adolescents whose parents monitor them and who feel positively connected to their parents had an increased likelihood of delaying intercourse (Capaldi, Crosby & Stoolmiller, 1996); and less perceived parental monitoring was associated with risk behaviour (DiClemente et al., 2001).

Family context also influences adolescent sexual behaviour. Relationships within the family: parent-parent relationship and parent-child relationships, family socio-economic status, communication between parents and children are related to adolescent behaviours. Family disruption, low socio-economic status of the family, and low level of communication between parents and children have found to relate to adolescents' risk behaviours (DiClemente et al., 2001; Edgardh, 2000; Bacon, 1999).

Communication between parents and children is a way to share values and information between two generations. It is a way that both sides exchange and learn what the other person's attitudes is (Coleman, 1992). Communication and discussion about sexual matters within the family, parental beliefs, knowledge, and values of discomfort with sexual issues convey and have impact on adolescents' attitude and behaviours (Bacon, 1999). Where parents and children do not communicate about sexual matters, this can have a negative impact on adolescent sexual behaviour; adolescents whose parents talk to them about sex are less likely to engage in risky sexual behaviour (Welling et al., 2001; Coleman, 1992).

According to Rosenthal, family and religion have influence on adolescents in three ways: 1) they provide the norms for acceptable sexual behaviour; 2) individuals in powerful roles in these institutions use norms as the basis for informal control; 3) and there are often formal rules which constrain sexual behaviour through fear of institutional sanctions (Rosenthal, Smith & de Visser, 1999). Parents and the older who have more power than children in family institution often provide the norms for acceptable sexual behaviour and use their norms as the basis to form informal rules. Those rules have an impact on adolescents' decision-making and sexual behaviour. Many adolescents fear parental and family sanction and respond to the parent or family rules in different ways. Some adolescents follow the rules, but others do not.

There are still a substantial number of adolescents whose strict religious upbringing keeps them from experimenting with sex (Masters, Johnson & Kolodny, 1995). Paradise, et al. found that religious beliefs, although infrequently cited, was mentioned as a reason for not having sex (Paradise et al., 2001). Sheeran et al. studied religiosity and adolescent' premarital sexual attitudes and behaviours, they found that there was a negative relationship between religiosity and a number of sexual attitudes and behaviours: there was some evidence that Catholic adolescents were more likely to be sexually active than non-Catholics when current religiosity was controlled for, though non-significant relationships in the case of sexual experiences without intercourse suggested the maintenance of a technical virginity to accord with religious precepts (Sheeran et al., 2006). So far, the impact of religion on Thai adolescents' behaviour is not clear. However, an overview about Buddhist, which is the major religion for Thai people, may provide some idea about how religion may have influence on their sexual behaviour.

In general, Thailand is 'Muang Buddha', which means the Buddhist country. The Buddhist has influences on most Thai people way of life. It is fundamental background of Thai cultures including moral and ethical background. The Buddhism teaches about moral conduct in life and society, it concentrates on virtue, peace, happiness, compassion and loving kindness as well as the importance of not taking advantage of others (Blake & Katrak, 2002). For Buddhists, marriage and relationships that avoid sexual misconduct are important as well as not killing or taking the life of others. Terminating pregnancy opposes the precept: it is seen as killing a sentient being. In fact, apart from abortion, activities that do not harm the others and doing under consciousness and responsibility are not against the Buddhist precepts. In my opinion, as a Thai Buddhist, Buddhism construes moral issues and provides fundamental attitudes and values of Thai culture rather than having a direct influence on people's behaviour. Indeed, personal values on religious grounds may relate to adolescents' behaviour.

Even though religion is important in many cultures, it has less obvious influence on adolescents' sexual behaviour (Rosenthal, Smith & de Visser, 1999). This might be because inconsistencies in research findings and problems with methodology and operationalization of variables (Sheeran et al., 2006; Masters, Johnson & Kolodny, 1995). In addition, reliable information of adolescents' sexual behaviour is difficult to collect and large-scale studies of sexual behaviour cannot monitor sexual behaviour (Fenton et al., 2001; Creatsas, 1997).

Information that adolescents have got, whether it is right or wrong, whomever or wherever they received information from, may have an impact on their behaviours. That raises questions about what messages adolescents get, from what sources, and what has influence on them more than the others.

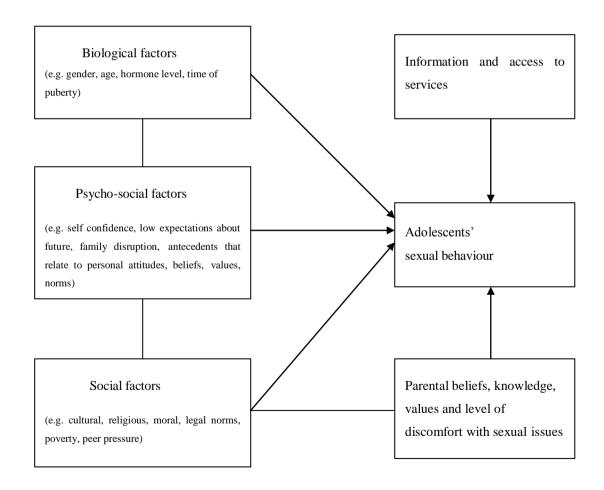
Measor, Tiffin & Miller found that boys and girls received information about sex from different sources and this might affect their preferences for different sources of information (Measor, Tiffin & Miller, 2000). Boys did not gather information from parents or school and teachers or biological textbooks; their major sources of information were their friends and pornography (Measor, 2004). Information and messages they got from those sources could have influence on their attitudes and behaviours. The boys might get messages about how they ought to behave and how

they could expect their partner to behave from the films. However, individuals' behaviour is complex. It is influenced and constructed by a number of factors.

Limited access to information, inadequate access to services and economic constraints in some adolescents are factors and barriers that can lead to sexual risk behaviour in adolescents (Roque & Gubhaju, 2001; WHO, 2000). Many adolescents do not seek advice for contraception until they are sexually active or until they have a pregnancy (Creatsas, 1997).

Factors related to adolescent sexual behaviour could be summarised as shown in Diagram 2.1.

Diagram 2.1 Factors related to adolescent sexual behaviour



Even though sexual behaviour is a part of adolescent development, unprepared and unprotected sexual relationship may lead adolescents to sexual health problems. In the next section, adolescents' sexual health will be discussed.

2.2.4 Adolescents' sexual health

Adolescents are increasing in sexual activities in many parts of the world, but the incidence of problems is varied. Adolescent pregnancy is increasing in many countries especially in countries where people are married at younger ages and the rate is high in rural areas of those countries (Creatsas, 1997). Similar to teenage pregnancy, problem of STIs and HIV/AIDS vary in different societies and countries (Milton, 2003; WHO, 1997). In industrial countries such as USA, which adolescents' sexual activity is not significantly higher than those in Europe, the adolescent pregnancy rate is significantly higher but abortion rate is similar.

In developing countries, maternal mortality in girls under 18 is five times higher than in women from 18 to 25 (WHO, 1997). Worldwide, more than 10% of all births are to women age 15 to 19. Every year, it is estimated that 20 million abortions occur in the world (IPPF, 2001). According to UNFPA (2001b) & WHO (1997), worldwide, at least 1 in 10 abortions occur in women aged 15 to 19. Between 1 and 4.4 million young women in this age group have an abortion every year, 40 percent of which are performed as unsafe abortions. Everyday, 500,000 young people (1 in 20 young people) are infected with an STI, most in the 20 to 24 years group, followed by those in 15 to 19 years group. Up to 60 percent of HIV infections in young women occur by the age of 20. It is estimated that 50% of all new HIV infections are among young people (about 7000 young people become infected every day), and that 30% of the 40 million people living with HIV/AIDS are in 15-24 year age group (WHO, 2000).

Teenage pregnancy and abortion problems vary between countries. In the Netherlands, for example, there is a low live birth rate to female adolescents (4.1 per 1000 women) and there is low rate of abortion in this country (Kane & Wellings, 1999). This is despite the fact that legal abortion is available and free of charge. The low abortion rate may be

due to the use of emergency contraceptives, to formal sex education, the non-judgemental and positive education on sexuality that is widely available and starts early in primary school, or to open discussion about sexuality between parents and children, open attitude towards talking about sex in the general population and health care providers towards sexuality and contraception (Creatsas, 1997).

In many parts of the world, however, there are limitations in services; abortion is illegal and considered as immoral. It is difficult for adolescents to obtain abortion openly. Some of them obtain abortion illegally ('back street abortion') and as described above, the statistics are not reported formally. Many of them do not go to a clinic because the fear of judgment from staff and others, the feeling of shame, and the lack of funds. Many adolescents avoid going to the clinic by taking medications themselves to treat STIs. In such countries, the problems related to adolescents' sexual risk behaviours are almost certainly under reported.

The onset of sexual behaviour in adolescents generally occurs in conjunction with limited knowledge about sexuality and reproductive health, and therefore carries a high risk of unintended pregnancy, STIs and HIV infection (Edgardh, 2000; Kipke, 2000; Santelli et al., 1999). However, even though adolescence marks the onset of sexual activity in most people, not all adolescents have sexual intercourse with another person. A significant minority in almost all societies maintain abstinence and do not exhibit risk behaviour (Paradise et al., 2001; Blinn-Pike, 1999; Masters, Johnson & Kolodny, 1995). Some adolescents use adequate protection in their sexual relationships from the outset, but some do not. It depends on the individual and their decision-making. This suggests that the behaviour of any adolescents might be positively influenced by appropriate interventions.

Effective interventions could reduce adolescent risk behaviours and sexual health problems as reported in many countries. In the US, the declines in sexual experience and the increases in condom use indicate shifts toward safer and more self-protective behaviours among adolescents (Santelli et al., 2000). In Sweden, easily available oral contraceptives have contributed to a decrease in teenage abortions; free treatment and partner notification for STIs have contributed to the decrease of STI cases (Edgardh, 2000). In Greece, adolescent pregnancy has been reduced partly due to the information

provided to adolescents and the fear of STIs, mainly that of AIDS (Creatsas, 1997). Netherlands, Sweden, France and Germany have an open flexible approach to sex education and have some of the lowest rates of reproductive health problems among adolescents in the Western world (Berne & Huberman, 2000).

Various interventions have been provided with the expectation to reduce adolescent risk behaviours. Some interventions aim directly at influencing adolescents' behaviour, some aim to impact knowledge, some aim to impact attitudes and motivation of adolescents, some aim to promote life skills, and much more. Not only interventions provide to adolescents, but also interventions provided to teachers, parents and health personnel. Often, interventions aim to reduce risk by providing information about problems and diseases without providing understanding about sexuality, supporting their development, or giving details about preventive methods. Even though interventions seem to work well in some places, the problems still occur in most parts of the world. Many things need to be done through a range of channels and sectors (WHO, 2000).

Adolescents' sexual health and their risky sexual behaviours raise concerns for public policy and interventions. One important question to address at the outset is "how we can help adolescents to understand more about their sexuality and how to cope with it, give them appropriate information to decide about sexual behaviour or preventive behaviour, so as to reduce the adverse consequences of unprotected sexual relationships". This is important to help them in making decisions and choose what they want and plan for their future. A strategy that provides adequate, high quality information to improve knowledge, which may itself lead to significant improvements in risk-taking behaviour, is one answer.

To make appropriate decisions and reduce risk-taking behaviour, adolescents must have accurate and practical information to protect themselves from associated problems of unprotected sexual intercourse and must learn that they are responsible for their own sexual behaviour (Hassan & Creatsas, 2000; Commonwealth of Australia, 1999). Therefore, sex education that helps them to understand about sexuality, sexual relationships, and help them make sensible decision in a relationship is necessary. Furthermore, it is a right of an adolescent to access sexual and reproductive health information and education (ACPD, 2001). This important matter is clear from

International Conference on Population and Development in 1994, ICPD Programme of Action, para. 7.41, the government agreed, "Information and services should be made available to adolescents to help them understand their sexuality and protect themselves from unwanted pregnancy, sexually transmitted diseases, and subsequent risk of infertility. This should be combined with the education of young men to respect women's self-determination and to share responsibility with women in matters of sexuality and reproduction" (ACPD, 2001: 1).

Even though sex education is important and is expected to be one strategy that may reduce adolescents' risk behaviour, researches on sex education have shown inconsistent results. Sex education and the variety of sex education programmes will be discussed in the next section.

2.3. General information of sex education

2.3.1 Terms and definition

Various terms are used to refer to different aspects of sex education, or sometimes they are used interchangeably. Terms that have been used are: sex education, sexual and reproductive health education, sexual health education, sex and relationship education, and sexuality education (AVERT, 2005; Aggleton & Crewe, 2005; SIECUS, 2004; Blake & Katrak, 2002; Measor, Tiffin & Miller, 2000; DfEE, 2000; Oakley et al., 1995). Terms used depend on what individuals and agencies want to describe what they do. Somehow, the terms used indicate the scope of work or the information that organisations need to cover.

According to AVERT, sex education is the process of acquiring information and forming attitudes and beliefs about sex, sexual identity, relationships, and intimacy. It is also about developing young people's skills so that they make informed choices about their behaviour, and feel confident and competent about acting on these choices. Sex education seeks both to reduce the risks of potentially negative outcomes from sexual behaviour like unwanted or unplanned pregnancies and infection with sexually

transmitted diseases, and to enhance the quality of relationships. It is also about developing young people's ability to make decisions over their entire lifetime (AVERT, 2005:1).

ACPD use a term "sexuality education". According to ACPD, the goal of sexuality education is to help young people develop the knowledge, anatomy and skills-such as communication, decision-making and negotiation- to make transition to adulthood in good sexual health. Sexuality education includes information about anatomy and physiology, puberty, pregnancy and STIs, including HIV/AIDS. It also addresses the relationships and emotions involved in sexual experience. It approaches sexuality as a natural, integral and positive part of life, and covers all aspects of becoming and being a sexual, gendered person. It promotes gender equality, self esteem and respect for the right of others (ACPD, 2001:1).

The meaning of sex education is changing over time. Traditionally, sex education has been framed in physiological and biological context. But more recently, it has moved on to providing broader information. Information about personal relationships and sexual health and education about sexuality has begun to be offered. In the past ten years, there is increasing consideration of the important role of sex education in socialising (Measor, Tiffin & Miller, 2000). In fact, sex education is a lifelong learning; it includes conveying a wide range of information: physical, moral and emotional development, sexuality, interpersonal relationships, and sexual health and risks (DfEE, 2000; Measor, Tiffin & Miller, 2000; Bacon, 1999).

According to WHO, sexual health is the integration of the somatic, emotional, intellectual, and social aspects of sexual being in ways that are positively enriching and that enhance personality, communication, and love; reproductive health implies that people are able to have responsible, satisfying and safe sex life, and they have the capability to reproduce and the freedom to decide if, when, and how often to do so; and sexual health implies a positive approach to human sexuality and is therefore an essential component of reproductive health (WHO European Regional Office, 2001).

In summary, sex education is a broad term, which covers many aspects of sexual health. It provides information and bodies of knowledge in fields related to "sexual health",

"sexuality", and "reproductive health". It thus covers the somatic, intellectual, and social aspects of sexual being, and aims at enriching and enhancing personality, skills, and reproductive health of young people.

2.3.2 Sex education for adolescents

As adolescents have to face developmental tasks to make the transition to adulthood, they do not know and are not sure what to do (sexuality in adolescent discussed in section 1.2.2), they should have information and services to help them understand their sexuality, make responsible decisions about sex, sexuality and reproduction (Hassan & Creatsas, 2000). They should also know how to protect themselves from unwanted pregnancy, sexually transmitted diseases, and the risk of subsequent infertility (ACPD, 2001; Bacon, 1999). Hence, clear information that can help adolescents to develop understanding of sexuality and knowledge of reproduction and skills are essential.

Reproductive knowledge and skills such as communication skills, decision-making skills, and negotiation skills for protective sex, including being able to recognise pressures from other people and to resist them, deal with and challenge prejudice, seek help from adults, differentiate between accurate and inaccurate information, discuss a range of moral and social issues and perspectives on sex and sexuality, including cultural attitudes and sensitive issues like sexuality, abortion and contraception are necessary (AVERT, 2005; ACPD, 2001). Such knowledge and skills should help them to prevent unprepared or unprotected sexual relationship problems and to make their transition to adulthood in good sexual health.

With an aim to help adolescents to prepare themselves for adulthood, many interventions and programmes in sex education are developed and provided to adolescents in various channels. Information on these different topics may be provided through the education system, in the community, via mass media, and via the Internet (Chambers, Wakley & Chambers, 2001; Mitchell et al., 2001; Hughes & McCauley, 1998). All these sources are important and potentially have an effect on adolescents' learning, knowledge, and perceptions. Some examples of different programmes are shown in Table 2.3.

 Table 2.3 Example of sex education programmes

Programme	Characteristic	Content cover	Results/comments
Community-based HIV.AIDS education in	Community-based IEC HIV/AIDS use	HIV/AIDS	A multi-channel approach may be required to overcome
rural Uganda (Mitchell et al., 2001)	four channels: drama, video,community		weakness inherent in individual channels.
	educators and leaflets		
Heterosexism and homophobia in Scottish	Research-based sex education	Non-heterosexist sex education and	It is possible to deliver sex education that recognizes
school sex education (Buston & Hart, 2001)		providing information about gay and	that not all pupils have a heterosexual identity,
		lesbian	normalizes gay and lesbian identities and sexual
			behavior and provides information of relevance to
			all pupils
Sex education through health education	Sexual health education in school	sexuality, reproduction, pregnancy	This kind of programme was provided in many places,
Intervention	setting and outside school setting	prevention,STIs, HIV/AIDS, and	for example, North America, Finland, UK (Oakley
		sexual health	et al., 1995), including Thailand. The effect of such
			education on adolescents is inconsistency.
			There was problematic in programme evaluation and
			the design of evaluation needs to be improved (ibid.).
Becoming a responsible teen (B.A.R.T.)	Research-based sex education	HIV/AIDS risk reduction, condom used,	The programme had an impact on several sexual risk
(Mississippi, USA)	(group discussions, role play, games and	STIs, life skills	behaviours, including increased use of condoms and a
	video were used)		decrease in the number of sex partners. The proportion
			of students who became sexually active during the
			year following the intervention was significantly
			lower among participants than among a comparison
			group (St. Lawrence et al., 1994).
Youth peer leader network for sexual and	Research-based sex education	Life skills, self-awareness,	Advancing youth leader-trainers through their leadership
reproductive health: youth and adult	(peer leader, parental skills-building	understanding others, gender,	and active participation in empowering and tutoring
partnership (Chiang Mai, Thailand)	through small group discussions)	breast self-examination, condoms,	other youth leaders was one of effective strategies
		contraceptives, pregnancy test, etc.	for the successful development both of themselves
			and their peers, families and communities
			(Fongkaew et al., 2002).

Even though sex education has been provided and sex information is available through different channels, researches and studies highlighted adolescents' lack basic reproductive health information (Jejeebhoy, 1998), lack of knowledge and skills in negotiating sexual relationships, and lack of access to affordable, confidential reproductive health services (PATH, 2006; Brandrup-Lukanow, 1999). In addition, messages they have got are mixed messages (Archard, 2000).

Health personnel and sex educators often assume that improved knowledge about sex will influence adolescents' behaviour in a way that will prevent unintended pregnancies and abortion (Creatsas, 1997). Numerous studies have evaluated the impact of sexual and reproductive health education on a range of outcomes including knowledge, self-reported behaviour, life skills, and attitudes. Some studies of educational programmes have demonstrated a significant improvement in knowledge, a positive change in attitudes, and some impact on self-reported preventive behaviour (Donati et al., 2000; University of York, 1997; Mellanby et al., 1995).

Even though evidence from studies shows that the incidence of unintended pregnancy and STIs among young people is lower and the age at first intercourse is later when young people participate in sexuality education programmes that are comprehensive and flexible (Kirby, 1997; UNAIDS, 1997), evidence from other studies shows that there is no significant change in actual risk behaviours (Boyer, Shafer & Tschann, 1997; Morton et al., 1996). Indeed, a systematic reviews of school-based programmes which covered mainly the English speaking literature suggested that there was no overall effect of school-based sex education on either behaviour or pregnancy rate (DiCenso et al., 2002; Kirby, 1995).

However, many of the primary studies described in these overviews gave little detail on the nature of the intervention provided (i.e. exactly what sort of education was given, in what format, by whom, how often, and how effectively?). Furthermore, many studies did not clearly indicate either how the educational intervention was evaluated or how outcomes were assessed. The tentative conclusion from the hundreds of studies already published on sex education throughout the world is that we have not yet identified what, if any, are the 'critical success factors' of educational or life-skills interventions in terms of preventing pregnancy or STIs.

Even though the impact of sex education on adolescents is uncertain, sexual and reproductive health education should arguably be provided to people at all stages of life. Concerns about adolescent sexual risk behaviour and consequent problems suggest to policymakers that sex education should be provided for adolescents both in developed and developing countries (PRB & Advocates for Youth, undated; Rivers & Aggleton, 2001; Hassan & Creatsas, 2000; Hughes & McCauley, 1998). It should be part of comprehensive national adolescent policy that also includes primary and secondary education, vocational training and job opportunities for young people (ACPD, 2001).

Because it has been established that adolescents need accurate and practically oriented information (Commonwealth of Australia, 1999), schools are required to offer a curriculum which promotes their spiritual, moral, mental and physical development at school and in wider society; and to prepare adolescents for the opportunities, responsibilities and experiences of adult life (Hudson, 1999). In the next section, school-based sex education will be discussed.

2.3.3 School-based sex education

Schools are expected to be the places that provide sex education to children with reasons. First, there is no evidence to support that provision of school sex education might hasten the onset of sexual experience; sex education in school does not increase sexual activity or pregnancy rates (University of York, 1997; Wellings et al., 1995). Second, the vast majority of parents and children look to schools to provide the education because schools have the resources, the training, and the commitment to a common curriculum, whereas the home environment may have limited or incorrect information and an unwillingness of parents to talk about sex with children (ACPD, 2001; Archard, 2000). And third, school environments can provide resource-efficient access to large numbers of young people from diverse social backgrounds (Aggleton & Rivers, 1999).

School-based sex education can be an effective way to reach young people and their families with reproductive health education (Birdthistle & Vince-Whitman, 1997). It is

anticipated that improved knowledge about sexual matters will assist improvement of adolescents' behaviour in a way that prevents unintended pregnancies and abortion, especially when linked to access to contraceptive services (AVERT, 2005; Creatsas, 1997). And whilst trust and responsibility are values learnt in the family, the social and school environments are important for adolescents forming personal relationships (Commonwealth of Australia, 1999). Such values influence and inform decisions about sexual relationships. Adolescents who have high respect and responsibility may have sensible sexual relationships and protective behaviour. A boy may make the decision to use a condom because he respects a girl and has responsibility in the relationship while adolescents who lack trust may show less responsibility in the relationship, more partners, and no protective behaviour (Master, Johnson & Kolodny, 1995). Sexual health knowledge, trust and responsibility can thus be learned from sex education in school.

There are various school based sex education programmes (Table 2.4, page 50). The designs and approaches of programmes are different. Some programmes are designed to provide only physical or biological knowledge. Some programmes are designed to provide adolescents with the knowledge, attitudes, and skills to avoid sexual intercourse or to use contraception properly, and to provide reasonable access to effective methods of contraception. Some programmes use a "youth development framework", which is more holistic approaches — not only to keep adolescents problem-free but also prepare adolescents for adult life. These programmes provide mechanisms for youth to fulfil their basic needs, including a sense of safety and structure, a sense of belonging and group membership, a sense of self-worth and contribution, a sense of independence and control over one's life, a sense of closeness and relationships with peers and nurturing adults, and a sense of competence (Kirby & Coyle, 1997). Some programmes, in contrast, have used instruction materials that appear to have been designed to frighten adolescents into remaining abstinent (Donavan, 1998: 190).

Table 2.4 School-based sex education programmes

Sex education	Content cover	Comments
Sexuality education	Anatomy, physiology, and sexual relationship.	Provide useful information, not practical information that adolescents want to know
STIs and/or HIV/AIDS	Information about diseases and prevention.	Concentrate on diseases prevention rather than pregnancy prevention, which is in adolescents' interests.
Comprehensive sexual health Education	Physiological and biological information, human relationships, contraception, safer sex technique, disease prevention, discussion of abstinence, sexual violence and coercion, sexual orientation, and gender roles	This is basic sex education that schools provide. More often that information is mainly on biological information, but less cover about sexual orientation and genders and is not what adolescents really need to know. Information is vary by teacher's ability, training, and comfort with subject matter as well as on the principal's willingness to tolerate controversy (Donavan, 1998).
Abstinence sex education	Delay in starting sexual intercourse.	Fear-based sex education May suitable for adolsecents who are not involved in a relationship and/or not interested in having a relationship, but not practical for others. Although abstinence campaigns may delay young people's first sexual intercourse, they may also increase their risk of having unprotected sex when they do begin having sex (Tripp & Viner, 2005).

The differences in designs and approaches of sex education programmes across schools lead to the controversy of programme effectiveness. Some programmes seem to improve knowledge of adolescent and produce behavioural changes that lead to health benefit (Stanton et al., 1996; Mellanby et al., 1995). In contrast with the studies above, the information provided may improve knowledge and skill related to prevention, but it may not translate to a change in behaviour (Boyer, Shafer & Tschann, 1997; Morton et al., 1996). The studies of effectiveness of school-based programmes to reduce sexual risk behaviours showed inconsistent results.

Effectiveness of the programmes may vary with topic cover. Kirby et al. (1994), reviewed school-based sex education programmes. The study showed that from the review of a specific programme mechanism, abstinence programmes, there was insufficient evidence to determine whether school-based programmes that focus only upon abstinence delay the onset of intercourse or affect other sexual or contraceptive behaviours. From the review of sexuality and AIDS-STIs education programmes, Kirby found that there was no evidence that programmes significantly hastened the onset of intercourse and some programmes could delay the initiation of sexual activity, none of the programmes significantly increased or decreased the frequency of intercourse, and some programmes led to increased contraceptive use, only 2 of 8 programmes increased contraceptive use among sexual experienced adolescents. From the studies that combined education and reproductive health services: reproductive health services were neither hasten the onset of intercourse or increased the frequency, had mixed effect on contraceptive use, and was less critical than the presence of a strong educational component. Some programmes could increase the use of condoms or other contraception and reduced sexual risk behaviours. In relation to the use of contraception, results of the studies were varying: some had positive significant relationships between participation in a sex or AIDS education programme and either contraceptive used or condom used, while the fifth data set revealed a possible indirect effect through greater knowledge.

The wide ranges of topics, designs, and approaches used in sex education programmes have led to uncertainty about programme effectiveness. Bear in mind that methods used to evaluate those programmes, for example survey reports of changes in teenage sexual behaviour may provide unrealistic data and should be interpreted with care (Santelli et

al., 2000). Some programmes may work in some groups but not in others, for example abstinence programmes might be effective with some adolescents who are younger and sexually inexperienced but it would be probably not be realistically effective with the majority of teenagers - many of them already had involved in sexual relationships (Master, Johnson & Kolodny, 1995).

Kirby found that sex education programmes that have been found to be effective include the following characteristics (List 1-9):

- 1) a narrow focus on reducing specific risky behaviour,
- 2) a theoretical grounding in particular theories of change, such as social learning theory, social influence theories, or the theory of reasoned action,
- 3) at least 14 hours of instruction or, if less, instruction in small groups,
- 4) a variety of interactive teaching methods designed to encourage the participants to personalise the information,
- 5) activities to convey the risks of unprotected sex and how to avoid them,
- 6) instruction on social pressures,
- 7) clear reinforcement of individual values and group norms appropriate to the age and experience of the pupils,
- 8) opportunities to practise communication and negotiation skills to increase confidence, and
- 9) effective training for individuals implementing the programme.

(Kirby, 1995: 312)

The characteristics above are found in programmes offered in developed countries, which have different contexts and cultures from developing countries. The characteristics are important as those can be adapted and used as guideline for intervention with carefully tailored applications to suit the context and the culture of the society. However, studies about effective characteristics of programmes in each area should be studied. Findings from studies undertaken in the local area will add important contextual information to inform programme design for each society.

Some programmes that work in developed countries may not be effective in developing countries because in developing countries, there are constraints on financial and human resources and the great size of the youth population (Hughes & MaCauley, 1998). Hughes & McCauley suggest six programming principles to help planners and communities with a wide variety of programming approaches for developing countries. The six programming principles are (List1-6):

- 1) recognise and address the fact that the programme needs of young people differ according to their sexual experience and other key characteristics,
- 2) start with what young people want and with what they are doing already to obtain sexual and reproductive health information and services,
- 3) include building skills (both generic and specific to sexual and reproductive health) as a core intervention,
- 4) engage adults in creating a safer and more supportive environment in which young people can develop and learn to manage their lives, including their sexual and reproductive health,
- 5) use a greater variety of settings and providers both private and public, clinical and nonclinical to provide sexual and reproductive health information and services, and
- 6) make the most of what exists; build upon and link existing programmes and services in new and flexible ways so that they reach many more young people.

(Hughes & MaCauley, 1998)

Again, it is not easy to put principles into programmes and practice for successful delivery, and a lot of work and debate is needed. We have to accept that one programme cannot cover all characteristics and of course, not cover all groups, and again, it varies by the organisation's aims – what information they want to cover.

There are differences of quality and quantity of information from sex education programmes in schools. Even in schools that follow the same national or state policy, the information that adolescents have got in each school and even within the same school may be different because of providers, environments, and adolescents themselves. What

is offered often depends on the teacher's ability, training, and comfort with the subject matter, as well as the principal's willingness to tolerate controversy (Donovan, 1998: 189). In fact, sex education may vary by school contexts, which vary by policies, locations, communities, and cultures.

Indeed, school-based sex education is one expected important solution to decrease sexual risk behaviour and promote appropriate behaviour for health benefit of adolescents. To meet the aim of sexual and reproductive health education, the information should be carried out consistently (Kaldmae et al., 2000) through appropriated approaches, under the awareness of cultural norms, should meet the need of the adolescents, should look at what adolescents concerns and what can have an impact on them, and should take into account the differences in adolescents' level of sexual activity (Durham, 1999; Whaley, 1999; Hughes & McCauley, 1998). It must reach children before sexual initiation and should start as early as primary school (SIECUS, 2004; ACPD, 2001; Hassan & Creatsas, 2000). According to the U.S.-based Sexuality Information and Education Council (SIECUS), sex education should begin when children are 5 to 8 years old and continue through adolescence; trained teachers should teach the course and community involvement is essential (SIECUS, 2004).

Parents, health providers, media, and others in societies should be sex education providers for their children and should provide good environment to support them for sustainable appropriate behaviours (WHO/UNFPA/UNICEF, 1998). The cooperation for quality information might be done by good communication within and between groups and working together with school in all stages of programmes (PATH, 2005).

In summary, even though sex education has a similar aim, its details and aspects vary within and between societies and cultures. Sex education in Thailand will be discussed in the following section.

2.4 Sex education in Thailand

It is important that sex education should cover various aspects and domains as described in section 2.3.2 and 2.3.3. But in reality, there are reasons why some aspects are omitted from the curriculum or are not provided: whether they fit with societies or cultures depends on a number of factors including religious, personnel, availability of support, and participation in classes (Connell, 2005; Fok, 2005; Measor, 2004; Buston & Wight, 2004; Smith et al., 2003; Rivers & Aggleton, 2001; Tavakol, Torabi & Gibbons, 2003).

According to Thai social and cultural norms in the past, sexuality was a subject not to be discussed in public and too little factual information and guidance were provided (MOPH &WHO, 2003:54). Even though today, sex education has more strength in schools than ever before, sexual problems are showing no tendency to decline.

In Thailand, schools are expected to offer knowledge and important developmental issues for students and people in community. For sex education, the actual interventions provided for such knowledge are limited. Models of sex education that concentrate on physiological, biological, and disease aspects seem to have broader delivery than models that provide information about sex, sexuality, or responsibility. It may be because teachers and health personnel feel more comfortable in providing such information than discussing sensitive issues about sex and sexuality, which in reality is fundamental to self understanding and may help adolescents in developing and making a right choice for themselves. In order to provide broader picture about sex education in Thailand, it may be useful to explain about sex education policy and programmes of the country.

2.4.1 Policy and programmes

The Thai government has adopted sex education in school-based programmes. Sex education has been integrated in school curriculum at primary level and secondary level and has been revised many times (MOPH & WHO, 2003). Various efforts have been made to improve sex education in schools. The efforts and organizations involved adapted from MOPH & WHO (2003) are presented in Table 2.5.

Table 2.5 The efforts and organizations involved in sexuality education

Organizations	Efforts	
MOPH & public & private sectors (in 1994)	Provided accurate information and positive attitudes towards healthy behaviour in schools, enhanced negotiation skills, and developed interactive teaching methods.	
МОРН	Initiated to promote teaching sexuality education in families by developing sexuality education for parents.	
MOPH & MOE (in 2001)	Revised the school curriculum on sexuality education, organized training courses for sexuality educators by MOPH	
GO & NGOs	Designed and organized short courses on sexuality and reproductive health to reach young people in summer camps, youth clubs, and young people in and out of school	
Public & private sectors	Reproductive health counselling: telephone hot line, health columns in newspaper, magazines and internet	
Chulalongkorn University	Graduate and postgraduate programme on sexuality education. Set up model for Muslim adolescent group to increase knowledge and awareness on sexuality education and reproductive health. Using information technology to promote active communication through the sites.	

There is no consistent of sex education programme in schools. This might be because the sex education policy of the country is not clear, even though the guideline for sex education implementation in schools is clearly identified (UNESCO, 2001). The guideline for sex education implementation is presented in Box 2.1.

Box 2.1 Guideline for implementation of sex education

- 1. Raising public awareness about the importance of teaching sexuality education to children and youth.
- 2. Setting the trend in society to have positive attitude toward teaching sexuality education, as well as having proper sexual values and behaviours.
 - 3. Promoting teaching sexuality education in families, school, and society.

Source: MOPH & WHO, 2003: 54

Policy reflexes politics and the views of politician towards sex education. Some countries have clear sex education policy, such as many developed countries in Europe, the US, and Australia, but many countries still struggle to develop clear sex education policy, and Thailand is included in this group.

Many politicians in Thailand still have negative attitudes to sex education. Some politicians believe that it is inappropriate to teach children about sexuality (UNESCO, 2001). Concern about societies' reaction and political supports may be a cause of politicians' reluctance. Politicians acted to approve a proposal of sex education course very slowly and argued about who could teach the sex education course (ibid.).

There is progression of providing sex education in school since Thailand faced HIV/AIDS problems (MOPH & WHO, 2003). More information about sexual and reproductive health is provided to the general public than has been the case in the past (UNESCO, 2001). This might be because HIV/AIDS prevention was a major concern. Like other countries in Africa, many interventions aimed to reduce the problem. Information about condom, for example, might concentrate on HIV/AIDS prevention rather than pregnancy prevention (Whaley, 1999). However, many aspects of sexual and reproductive health are not covered at all by the media and official information sources (UNESCO, 2001).

Apart from unclear policy and uncertainty of sex education programmes from politics and politicians that make sex education in Thailand slow progress, there are also practical obstacles to providing sexual health information. Teachers neither have the skills nor the training to teach about sex (Havanon, 1996 cited in UNESCO, 1999a). Many of them are reluctant to teach this topic because they lack of knowledge and skill in providing or discussing sensitive topics (Smith et al., 2003). Teachers are also concerned about the reaction of parents and societies, because there is a norm that sexuality is not a subject to be discussed in public. Poor knowledge of teachers and attitudes towards sex discourage sex education learning (Duangjan, 2004; MOPH &WHO, 2003; UNESCO, 2001). In fact, there are various factors that have made sex education in Thailand a slow progress. These include unclear sex education policy, uncertainty of sex education programmes, lack political support, and reluctant of teachers in providing and discussing sexual related matters.

As mentioned earlier in section 2.3.3, in many countries parents are seen as sex education providers and supporters of sex education in schools. However, Duangjan found that Thai parents were uncomfortable to discuss sex with their children, they were short of knowledge about sexual health matters, and they were unsure about the impact of sex education and could not communicate with their children (Duangjan, 2004). In Thailand, society and families argue that sex education will arouse young people's curiosity and encourage sexual activity (MOPH & WHO, 2003).

Another possible reason why Thai parents have less discussion about sexual matters with their children is their beliefs and norms about sex and sex education. Rivers & Aggleton mentioned a traditional belief that women should remain poorly informed about sex and reproduction in Thailand (Rivers & Aggleton, 2001). Such beliefs and norms in the parents may have an influence on attitudes towards sex education and reduce the opportunity of discussing sex between parents and children.

A number of studies have been undertaken on sexual and reproductive health education in Thailand. Most of these were quantitative surveys on sexual knowledge and self-reported sexual practices. For example, Bebena (1998) undertook a survey of the level of knowledge of adolescent reproductive health and sexual behaviours among female high school students in Nakhon Pathom province. 150 female high school students were interviewed with a self-administered questionnaire, which revealed that the distribution of students by high and low level of knowledge was more or less equal, and there was no significant association between knowledge and sexual behaviours.

Another survey by Diloksambandh (1995) used self-administered questionnaires to study the perceived effectiveness of a health education programme among female undergraduate students in Bangkok. This quasi-experimental study showed changes in risk perception, expectations, sexual intentions, and improvement in preventive behaviour among students in the experimental group. However, there was no control of other sources of information and no long-term evaluation. But despite the availability of such quantitative surveys, we still have almost no knowledge about the nature or scope of sex education in Thailand, especially for adolescents.

There are few studies about sex education and reproductive health services for adolescents. One example is Suparb and her colleagues' study. They studied about opinions on sex education and reproductive health services of factory workers in Pathum Thani Province. Total number of 323 electronic factory workers, aged 15-24, in one factory were studied by using a self-administered questionnaire. They found that adolescents received sex education mostly from their teachers but most valid information was obtained from doctors and nurses; adolescents thought that they had some knowledge about sex (but the detail about what knowledge adolescents had is not available); and about reproductive health services, adolescents would like to have family life counselling centre, telephone counselling, and out of office hour adolescent clinic. They concluded that sex education in school was important and co-operation with other personnel was necessary. They also suggested that services should be available, easy to access, and serve what adolescents' needs (Suparb, Srisorachartara & Sunthawaja, 1996).

In conclusion, in Thailand, even though sex education is integrated in the school curriculum, slow progress has been made. More effective sex education programmes are needed for Thai adolescents (Shuaytong et al., 1998; Chindapol, 1996). For planning effective sex education strategies and programmes for adolescents, in depth understanding about sex education provision to adolescents is essential. From the review of the literature about sex education in Thailand, it seems that little is known about what is really going on in sex education in school. A study that provides more information about sex education in schools; information provision; and factors related to the delivery of information and intervention, is needed.

This chapter has described the general background information on Thailand. Information of adolescents and sex education literatures, both globally and on Thailand, was also presented. I concluded by arguing that there is a need for more in depth study of sex education in schools, of which this study was one. In the next chapter, I shall discuss methodology and methods used in this study.

CHAPTER THREE

RESEARCH METHODOLOGY

This chapter describes the methodology of the study and the methods used. Section 3.1 presents the philosophical basis of research and reviews the different research designs that have been used in sexual health research, exploring the strengths and weaknesses of each. Section 3.2 discusses theoretical and methodological challenges of researching sensitive issues in teenagers and adults. Section 3.3 describes the methods used in the study in general. Section 3.4 provides ethics approval and governance in doing the research. Section 3.5 presents the methods in the preliminary study. Section 3.6 describes the methods used and sampling frame in the definitive study. Lastly, section 3.7 explains methods of data analysis.

3.1 Philosophical and methodological considerations

There are various sources of information and many people involved in providing sexual health information to adolescents. People who are involved have their own concepts, perceptions, beliefs, and desires. They are individually, uniquely, and different from others. Not only can adolescents get information from school, they can get information from friends, parents, books, Internet, and others. To understand sexual health education provided to adolescents, we needed to understand the context of sexual health education as well as the information provided.

There are various factors that influence individual's decision making in relation to sexual behaviour. Studying sexual health information without its context could not provide a clear understanding about sexual health education and its delivery. Methods used should provide a wider understanding about sexual health education and its context rather than focus narrowly sexual health information on its own.

Sexual health education, the information itself and its context, is a complex matter. The social context of sexual health education is completely different from the physical context of substances in a laboratory. In reality, there are interactions between individuals and people in response to interaction with others; thus, the researcher cannot be detached from the observed (Toon & Greenhalgh, 2005).

There is no clear distinction between subjectivity and objectivity in doing research in the real world. 'Researchers always view through their lens. There are no objective observations, only observation socially situated in the worlds of the observer and the observed. Subjects, or individuals, are seldom able to give full explanations of their actions or intensions. All they can offer are accounts, or stories, about what they did and why' (Denzin & Lincoln, 1994: 12). I can create my understanding by asking questions, observing, and interpreting what I hear and see. However, my own beliefs, values, and experiences might affect my knowing in some way.

I, as a researcher, have my own values and beliefs. They cannot be completely separate and detached from me in doing the research. I would provide information I found, not what I thought I would find. My values, perspectives, and experiences should not have much influence on providing translation as an interpretation of the findings. Heidegger (1962) stated that

'Whenever something is interpreted as something, the interpretation will be found essentially upon fore having, foresight and fore-conception. An interpretation is never a presupposition less apprehending of something presented to us.'

(cited in Brechin & Sidell, 2000: 14).

I attempted to understand evidences of providing sexual health education and meanings adolescents and people gave in relation to sexual health education as far as possible. I am concerned with developing understanding of the participants' subjective meanings, actions, and social contexts. I searched for methods that allowed me to uncover the meanings that respondents bring to their lives. I minimised my subjective contamination by being reflexively aware of my own perspective and having concern about participants in all processes of doing research, and I would consider whenever my subjective feelings might affect information in my thesis.

Sexual health education and its delivery context are complex, have multi-dimensions, and involve many people. Its social aspect is unique and varies from place to place. I considered using various methods in my study and methods should be flexible, as methods used to study social phenomena may vary and depend on the resources available and the nature of the social phenomenon (Malcolm & Tim, 1996).

I sought descriptive rather than statistical accounts, to provide more understanding, not to predict or explain the connection between variables, or try to make generalisation from research findings. Questions I asked and observations I made were open-ended and relied upon what respondents answered. Even though I set some structured questions; I was flexible in my ways of asking and responding to answers.

I believe that we cannot understand the world if we do not look at the whole world. The world is complex and has many things behind it that we may not know. If we assume that sexual health education is a world, then, is that enough to call that information they say they provide, sexual health education? Knowledge about information provided or adolescents' knowledge is not enough to help us understand what is going on about sexual health education. If I want to understand sexual health education in Thailand, I have to study it in its context by using an appropriate design and appropriate methods to help me get information for more understanding.

Quantitative, qualitative, and mixed methods designs are main designs used in sexual health research. These designs have some strengths and weaknesses that will be discussed in the following section.

A quantitative research design, using for example questionnaire survey, is traditionally popular in researching sexual health. This research design was used to survey about information teachers provided (see Landry, Singh & Darroch, 2000), to study characteristics of health education (see Grunbaum et al., 2000), to explore the relation between sex education and experience at first intercourse (see Wellings et al., 1995), and to study adolescents' perceptions of parental communication about sexuality (see Rosenthal & Feldman, 1999). Some researchers used the questionnaire method to study beliefs and attitudes to HIV/AIDS and sexual relationship (Gańczak et al., 2005). Shrier

et al. (2001), Markham et al. (2000), and O'Donnell et al. (1999) used a quantitative controlled trial study for programme evaluation.

There are a number of strengths in using quantitative research design. It is useful in collecting structured and broader information, in the form of numerical data. It allows researchers to measure and compare variations between cases (Seale, 2004). It allows researchers to feel confident about the representativeness of a sample for broader inferences by using a statistical sampling procedure (Silverman, 2005). From these strengths, surveys continue to be widely used and experiments are widely viewed as the 'gold standard' for doing research (Robson, 2002).

Doing research in a laboratory is different from doing research in the real world. In the field, situations are more complex and relatively poorly controlled (Robson, 2002). Even though the experimental quantitative design is a gold standard for doing certain types of research; researchers could not control individuals and external influences when doing research in the real world.

Information gathered from quantitative designs is broad rather than deep. Information gathered using quantitative methods do not explain why things happen. It is unlikely to reveal the depth of views or experiences of cases by using questionnaires alone (Clough & Nutbrown, 2002) and individuals' values and attitudes cannot necessarily be observed or accommodated in a formal questionnaire (Byrne, 2004). Using a pure quantitative design could not provide me with in-depth data.

In addition, a quantitative design is a fixed design strategy. It calls for a tight prespecification before the researcher reaches the main data stage (Robson, 2002). I could not pre-specify the strategy of my research. A fixed design strategy might not be practical and might not help me to explore all the different aspects of the problem. I looked for a flexible research design strategy and methods to gather more in-depth information.

Qualitative research design provides an opportunity for researchers to search for more in-depth understanding about variables and explanations as to why things happened. A qualitative design is flexible and allows researchers to get more information by asking

questions for clarification. Questions can develop and modify in the field. Researchers may set topics that must be covered, though the exact order in which questions are asked and the word of questions can vary (Bloch, 2004). This design is more practical for doing research in the field, especially when researching sensitive topics.

Qualitative interviews allow researcher to get more in-depth data because it allows the perspectives and priorities of individuals to be revealed without imposition of the preconceptions of researcher (Seale, 2004). The researcher may start with open natural discussion and end up with interviewing for clarification on the information respondent provided. The researcher can get more information and understand the respondent's points of view.

Qualitative interviews are more flexible and useful for adding insight to the results obtained from quantitative methods. Qualitative interviews give an opportunity to the researcher to encourage the respondent to speak, to probe for more information and clarify meaning, and observe non-verbal behaviour to assess the validity of the respondent's answer (Seale, 2004; Bailey, 1994). The researcher can modify, re-arrange questions, and ask for information in different ways. The researcher can ask questions to confirm that his/her understanding is correct. The researcher can see the respondents' non-verbal behaviour. For example, if the respondent does not make eye contact while answering a question, does not want to talk, laughs or looks angry while talking about something. Using qualitative interviews can reveal some information that the researcher does not ask in the questionnaire. Answers from interviewing can be added, expanded and explain or confirm results from the questionnaire.

Qualitative interviews, which range from one to one interviewing to group interviewing, such as focus group discussion, provide an opportunity for the researcher to inform the respondent about topics to discuss and use techniques to make the respondent feel more comfortable to talk. This provides a great chance for the researcher to approach the respondent, minimise false understanding, and encourage the respondent to involve in the research. In addition, researcher can use skills, techniques, and tools in the interviewing process.

Apart from unstructured interview and semi-structured interview, Biographic-Narrative Interpretive Method (BNIM) using Singer Question Aimed at Inducing Narrative (SQUIN) is another useful method. It is useful and suitable to use in researching sensitive topics. Raising sensitive issues in ways that make interviewees still feel comfortable is important (Robson, 2002). It is easier for the interviewee talking about his/her life story in a way he/she wants rather than answering the interviewer's questions. Narrative question helps the interviewee to talk about their life history. The individual's history is expected to show the working of particular social mechanisms in a given culture and particular ways of thinking, feeling, and doing of the individual (Wengraf, 2002). The individual's life history of key persons should help me to understand social mechanisms that are involved in ways of thinking, feeling, and doing when they were involved in sex education delivery.

There are a number of sexual health studies that used a qualitative design. For example, Rosenthal, Feldman & Edwards (1998) used a qualitative research design, semi-structured interview, to study mothers' perspectives on communication about sexuality with adolescents; Kirkman, Rosenthal & Feldman (2005) studied the meaning of openness in family communication about sexuality, using in-depth open-ended interviews; Izugbara (2004) used interviews and focus group discussions to investigate notions of sex, sexuality, and relationships; Pluhar & Kuriloff (2004) observed family sexuality communication; and Orgocka (2004) explored how immigrant girls' communication and education about sexuality was mediated through their mothers and school-based sexuality education classes, using focus groups and semi-structured interviews. Those studies used flexible methods in a qualitative design to gather in-depth information. All these studies enriched the understanding of "why" questions in sexual health.

I needed a flexible design for my research. A qualitative design was my choice for my main study. However, quantitative data about topics that had been taught and adolescents' sexual health knowledge could tell me about interventions that had been done in school. Thus, I believed, some numeric data would be useful. I looked for another research design that could help me get both qualitative and quantitative data.

Mixed quantitative and qualitative methods design is another design that has been used in sexual health studies. The methods in mixed methods design can provide both broad and in-depth data. Oshi & Nakalema (2005) studied the role of teachers in sex education and the prevention control of HIV/AIDS in Nigeria using structured and semi-structured questionnaires and supplemented by focus group discussions and key informant interviews. Extended and triangulated findings from various methods were discussed. This design can provide both numeric data and expanded information for more understanding. Hence, I chose this design for my study.

Mixed methods design has been used in sexual health studies, more often with one group of respondents. The study of Oshi & Nakalema, I mentioned above, studied in teacher group. But in my study, I wanted information from various groups of people who are involved in sexual health education, not only knowledge information from adolescents. My mixed method study is different from others by using various methods and various groups of respondents.

To explore sexual health education in Thailand, a case study is more appropriate to present a more in-depth study than using questionnaire or interviews alone. With a case study approach to study about sex education in Thailand, it provided me an opportunity to apply methods for gathering in-depth data. An exploratory study in one place should provide more understanding about sex education in that particular socio-cultural context even though it could not represent sexual health education for the whole country. I explored sex education in Chiang Mai, Thailand rather than studied sex education of the whole country.

3.2 Researching sensitive issues

Many people feel uncomfortable when asked to talk about or discuss sexually related matters with others. Sex and sexual health are often described as 'embarrassing', 'immoral', and 'private' though the degree of reluctance varies between individuals, communities, and cultures.

In some cultures, notably contemporary Western Europe and North America, many people feel comfortable discussing sexual related topics, but in others this is not the case. In Thailand, talking about sex is still in shadow. Many Thais feel embarrassed and unconfident to talk about sexual matters. From my own experiences and as a Thai, I know that even talking about genital physiology, is not easy for them. I was initially concerned that some of them might not want to be involved in the study because of these cultural reservations.

I was also concerned that I might get a normative answer instead of an honest answer. Respondents might give a normative answer to questions about sensitive topics such as sex (Bailey, 1994). Even though my main aim of doing this study was not to question people about their own sexual behaviour, some of the questions in my protocol might be interpreted in this vein. Participants might feel that there was a 'right' answer. There was therefore a risk that I might get an answer that the respondents thought they should give, not what they actually thought or felt.

When researching sensitive issues, it is better to help the respondent feel more relaxed and comfortable to talk. The researcher can apply techniques for an opportunity to get more of a real answer than a normative answer. One technique that was found useful is projection (Greenhalgh, Helman & Chowdhury, 1998). It has been developed to explore highly sensitive topics. In this approach, respondents are asked to comment on the experience or views of a fictional person who has been chosen to be like them in key characteristics (such as age and gender). Thus, for example, a 15-year-old girl would not be asked direct questions about her own sexual attitudes, motives or behaviours but would be told a story about a 15-year-old girl and invited to comment on how this character 'would feel' and what she 'would do'. Because projection techniques describe and discuss other people's attitudes and behaviour, respondents are less likely to provide what they see as expected responses.

To gather data for such sensitive research, I needed appropriate methods that were flexible and sensitive; so as to allow me to explore and expand the information gained using my own judgement of the situation in hand. Finding out where my respondents were coming from, and matching my research design to this context was essential. Hence, I did a preliminary study to find what I called a 'gateway', to build rapport with

people such as sexual health policymakers and school head teachers, and pilot different methods to gain the information I sought. Having completed my preliminary study, I concluded that a) methods should be flexible and b) more than one method was needed to gather data in the main study. These methods will be discussed in the following section.

3.3 Methods

Mixed quantitative and qualitative methods were used to collect data from different groups. I used a specific method with a specific group. Methods' strengths, data I wanted, and practical uses were considered.

Knowledge questionnaire and focus groups were used in adolescents. Semi-structured interviews were used in key informants: teachers, policy makers, and key stakeholders; biographical narrative interviews were used instead of semi-structured interviews in some cases. Focus groups were used to collect data from teachers and parents. As I stated above, anything could happen in doing research in the field. I had to modify my plan by adapting methods of collecting data in some groups. I will discuss this later.

There are advantages of using questionnaire. Questionnaire provides broad information, is easier to administer, and covers a large group. The way of asking is more standardized and the researcher does not need to be present. The same questions are asked in the same order. Questionnaire provides a numeric data that can be calculated, compared, and statistically tested. Self-completion questionnaire reduces bias by characteristics of interviewer and variability in interviewer's skill and it can increase the reliability of responses when the topic of the research is sensitive (Bloch, 2004). From these advantages, self-completion knowledge questionnaire is appropriate for collecting information about adolescents' sexual health knowledge.

A knowledge questionnaire from WHO (see Cleland, Ingham & Stone, 2000) was reviewed, modified, piloted, and used to collect data from adolescents in sample schools. The WHO questionnaire, designed by Cleland, focuses on documenting knowledge,

beliefs, behaviour and self reported outcomes in the areas of sexual and reproductive health, and thereby outline the needs and concerns of young people. It has been used in several countries. However, the author suggested, "this instrument is intended to be no more than a point of departure for investigators wishing to study the sexual and reproductive health of young people. It should always be adapted to local circumstances and priorities and, wherever possible, be used in conjunction with qualitative methods of investigation." This questionnaire needed to be modified, if it were to even to attempt to get appropriate questions for Thai adolescents (culture, intervention provided, service available, and study permission considerations). Some questions of the original version were omitted and some were modified.

There are disadvantages of using questionnaires. Data from questionnaires are affected by the characteristics of respondents such as their memory, knowledge, experience, motivation, and personality. There is likely to be a social desirability bias - people responding in the way that shows them in a good light (Robson, 2002: 233). I could get their answers but I could not know for sure what they really think or do. I could not know their insight views, attitudes and values. I could not see or observe their verbal and nonverbal behaviours. I might miss some important information when I do not ask, or give them a choice to choose; and I could not get in-depth information by using questionnaire.

Focus group is a highly efficient technique to collect a wide range of data from several people at the same time (Robson, 2002). Focus group is concerned with accounts that emerge through interaction. Group interaction can provide insights into participants' opinions and experiences; the comparisons that participants make among each other's experiences and opinions are a valuable sought of insights into complex behaviours and motivations (Morgan, 1997). Data from focus groups may be enhanced by group dynamics that aid recall and elaboration; and may overlook or minimize views that are sensitive or held by a minority within a particular group (Buston et al., 1998). It is useful when exploring sensitive issues, with population where people are more likely to feel comfortable talking with others who share similar experiences (Fossey et al., 2002).

I wanted to get insight views, attitudes, values, and norms of adolescents about sexual relationships and sexual health education. Focus group stimulates participants to talk and

discuss about sensitive topics. Such information is not easy to obtain by individual interviewing. And by nature of adolescents, they gather with friends, share experiences, attitudes, and norms. A study of adolescents in social context using focus group is more realistic and natural than individual interview. It is also inexpensive and flexible to use. I could get rich information in a short period. Since I was sampling from schools, I could draw up focus groups from natural peer groups.

I was concerned of weaknesses of focus groups such as problems that might occur from participants' personalities, worries about confidentiality, and generalizability. However, I had experiences on group interventions and of being a facilitator. I could handle problems that might occur during group interactions. We set group rules before discussions and I enhanced confidentiality by raising the discussion with a story of other adolescents, not talking about themselves. I was interested in a particular group in a particular context. Even though there are some weaknesses of focus groups, it is practical, flexible, and suitable for gaining the information I wanted.

I used a structured vignette to prompt focus group discussion and to determine attitudes in questionnaire study. I encouraged participants to discuss by telling stories about Somchai (male) and Mali (female) who are the same age as participants. After telling a story, questions were asked phase by phase and discussions were encouraged. In the case where participants raised points, in-depth discussions were encouraged for more information. In questionnaire, a story about Somchai and Mali was given before asking questions. Projection technique could help participants feel more comfortable to talk or respond to questions. Talking or answering how other adolescents think, feel, or behave could reduce the potential of personal embarrassment. It could minimize problems that might occur from asking direct questions about people's own beliefs or behaviours (Helman, 2000).

Semi-structured interview was another method used to collect data from teachers, policy makers, and key stakeholders. I predetermined questions and modified the order based upon an appropriate situation. Semi-structured interview is flexible and more practical to use because question wording can be changed and an explanation given. Particular questions that seem inappropriate with a particular interviewee can be omitted, or additional ones included (Robson, 2002). Face-to face interviews offered me a great

opportunity to modify the line of enquiry, follow up their responses, and underlie motives in a way that questionnaire could not provide. I was concerned about reliability of information and interviewer biases. Interviewing arrangements and ways of approaching cases were carefully planned, as well as concerns about subjectivity. I applied interviewing skills I had from my professional work as a nurse and a counselor and from training during my post graduated study.

I took an opportunity to gain more of an understanding about social mechanism that may influence key persons' ways of thinking and doing by integrating Biographic Narrative – Interpretive - Method (BNIM). The biographic account of the individual's life, in which particular events and experiences are linked in time, could reveal the working of particular social mechanisms in a given culture, for example, particular ways of thinking, feeling, and doing (Wengraf, 2002).

I, as an interviewer, asked a narrative question (a question about the linking of events in historical time), and then allowed the interviewee to tell his/her story in whatever form he/she wanted and discussing whatever events or actions he/she liked. This method minimized difficulties of the interviewee in talking about their assumptions, purposes, feelings and knowledge that have organized and organize a person or society's life. The less contested and controversial they are, the less an interviewee will be aware of them and able to talk about them (Wengraf, 2002).

The BNIM interview is composed of three subsections. In the first subsection, the interviewee is encouraged to answer an initial narrative question. The subsection 2, the interviewer asks for more stories. The question asked is strictly designed to elicit more narrating about the topics initially raised. These two subsections should be covered in the same day. Subsection 3 is a separate interview, after a preliminary analysis, and is wholly structured by the interviewer's additional concerns.

I designed a Singer Questions Aimed at Inducing Narratives (SQUINs) for senior officials and front line teacher/personnel separately. For senior officials, instead of asking them to tell life history, I asked them to tell a story of when they got involved in sex education straight away. I started with ".........Tell me how you got involved in sex education for adolescents, and how this fits in or doesn't with your profession, all the

events and experiences which have been important to you since you got involved". The SQUINs for senior officials was much related to research concerned to minimize incomplete interviews that might occur if I started with asking them to tell their life story (senior officials were busy people, they might have difficulties for interview arrangement). However, they could start whatever they liked and wherever they wanted; it was absolutely up to them. For front-line teacher, I started with "..........Tell me your life story, all events and experiences which were important to you...." If the sex education programme emerged in his / her story, it became a topic for subsession 2. If not, I prepared a narrative question for subsession 3 on the lines of question that used for senior officials above. The participant responded to narrative question by telling their story.

The historical story of particular events and experiences in which the individual experienced sex education programmes could provide more understanding of why and how particular attitudes have or practices developed. I used this method to obtain illustrative examples of how people develop their own attitudes to sexual health education for adolescents.

One method is not better than the others, but it may be better for some kind of data than the others. And no single method can grasp the subtle variations in ongoing human experience (Denzin & Lincon, 1994). Hence, I applied mixed methods: Knowledge questionnaire, focus group, semi-structured interview, and biographical life narrative interview and studied in a wide range of groups: adolescents, parents, teachers, key stake holders, and others who were involved in sexual health education delivery.

3.4 Ethics and governance

This study raises important ethical issues. Issues of harming the respondent by a sensitive question (psychological or sociological somehow), issues of confidentiality and anonymity of the interviewee, the need for parental consent; and the legal issue of holding research material were my concerns. Even though my research was not life

threatening, did not involve patients, nor doing any intervention with participants, I did not ignore ethics and governance in doing research.

Ethical approval for the study was first obtained from University College London Research Ethics Committee and all data were collected and stored according to requirements of the UK Data Protection Act 1998. There is no direct equivalent to the research ethics committee in Thailand, so formal ethical approval was not sought locally. In Thailand, convention is that parents are not required to give consent to their children participating in research undertaken at school. The school is seen as having the authority and mandate to give consent for children to participate in any research study. In my study, I sought oral consent from head teachers and principals, which is standard convention in Thailand. I sent a letter to them, made an appointment and visited them to describe the research. They gave oral permission and introduced me to other teachers who had responsibility for sex education and/or those teachers who were running sexual health interventions in the school. I contacted 7 schools; one school refused permission. Approval, consent and input to the design of the study were obtained from the governing body or equivalent of the individual schools during an extensive consultation phase (in 2003) prior to the main fieldwork (2003–2004).

Even though it was not considered standard practice to seek parental consent, I was somewhat uncomfortable about head teachers giving consent on behalf of pupils and parents. For this reason, I ensured that pupils had an additional opportunity to provide informed consent. In the questionnaire study, all participants received a printed sheet describing the nature and purpose of the research and inviting participation (see page 268, Appendix III). It was made clear on this sheet that filling out the questionnaire was voluntary. Questionnaires were returned anonymously, and if desired, the pupil could return a blank questionnaire in a sealed envelope, or an empty envelope.

I did the same procedure above with parents' attitude questionnaire. I explained to the director and teachers, who had responsibility to coordinate with other teachers who delivered the questionnaires, about voluntary and confidentiality of the respondents.

In the focus group study, I explained to teachers that pupils should only be selected for the focus groups if the teacher was confident that the pupil had given informed consent. However, before starting group discussions, I informed participants about my research, made clear it was voluntary to join the group, asked for oral consent, asked for permission of tape recording, and told them that they could leave the group if they wanted. While running the focus groups, I was sensitive at all times to the possibility that a pupil might feel uncomfortable and was prepared to allow a pupil to leave the group if he/she became obviously distressed or reluctant to participate. In fact, such a situation did not arise and all pupils seemed to enjoy the focus groups and used them as an opportunity to gain information and ask questions.

I did the same procedures with participants in parent and teacher focus groups. Even though schools arranged group meetings, I asked coordinators to leave the groups with me. I told them that joining the groups were voluntary. If they did not want to join the discussions they did not have to, and they could leave the group at any time. I asked for permission for tape recording and making notes. I was sensitive at all times, if any member felt uncomfortable to join the group. Even though some of them were reluctant to talk at the first stage, they received support from others, and they did not want to leave the group. They were happy to share experiences with others and used an opportunity of joining focus group for getting information from others and the researcher.

All participants in focus groups filled in a questionnaire, providing personal information and as a confirmation of joining the group and informed consent. I was concerned about confidentiality of what members of the group discussed, this was added in the group's rules before discussions. For anonymity, participants were told not to write their name in the questionnaire and no real name will be presented in my thesis.

School staff – interviews were voluntary. Teachers who were introduced might not be interviewed, if they did not want to. However, all people I approached were willing for the interviews. Even though some people felt reluctant of being an interviewee at the first stage, they were happy to give me an interview at the end. I made a good relationship with key informants before asking for interviewing. I introduced myself; explained about my research and what I was doing. I shared with them my experiences in providing sexual health education, problems that occurred and told them the importance of their views. I asked for oral consent to interview and permission for tape recording. During interviewing, I was concerned about the interviewee's feelings, I

observed nonverbal behaviours and verbal behaviours, interpreted them, and asked them if my understanding was corrected. They could stop the interview at any time if they felt uncomfortable or unhappy to talk. I confirmed confidentiality of information and anonymity of person who provided any information. Information provided was up to the interviewees.

In all kinds of interviews: semi-structured interview, biographical life narrative with key persons, and focus group, issues of confidentiality and anonymity were raised before, during, and after interviews. All procedures applied in all interviews.

For confidentiality, anonymity, and rights protection to all people involved, name of schools, key informants, and participants in the study would not appear throughout my thesis. All records: tapes, recorded paper, and answered questionnaires were kept in a safe place, for me, with the research purpose only, and all will be destroyed three years after I finish my thesis.

The study took place in Chiang Mai, the largest of the six provinces in the Upper North region of Thailand, with a population of approximately two million of which 11.6 % are adolescents (MOPH, 2000b). Concern about HIV/AIDS has led to the introduction of a wide range of school-based interventions that represent some of Thailand's most progressive policies on the provision of sex education. It comprised of 2 study phases: preliminary study phase and main study phase.

3.5 Preliminary study phase (2002)

A detailed knowledge of the research setting and the gateways to data collection is essential, so I undertook a preliminary study with a view to preparing for a qualitative research study and a purpose to identify opportunities and develop methods of doing qualitative research around school-based sexual and reproductive health education for adolescents in Thailand. The study in this phase was based on a) face to face interviews and b) review of the published local literature in Thailand.

Both informal contacts and a formal snowball technique (Bowling, 2002) were used. I contacted persons whom I knew to have hands-on experience in the topic area and whom I believed could either give me some information directly, or who were likely to know other individuals who knew about sex education in schools. Informal interviews were conducted in the informants' place of work or a mutually convenient venue. No interviews were conducted in schools at this stage because of limitation of time and the nature of the preliminary study. The list of informants interviewed is given in Table 3.1, page 77, along with the reasons for selection and the question topic(s) discussed. I asked a series of exploratory questions (the question prompt for the interviews is shown in Appendix I, page 258). I made contemporaneous notes during the interviews and added additional notes immediately afterwards. Some quotes were written down verbatim.

I reviewed one national and one local policy document on sexual health and sex education, three intervention documents from public health officers, a teacher handbook, and a few leaflets (more information were sought out in the main study phase when I got into schools). I looked for general information and topics covered without an aim to critique the policy or documents.

I analysed, and summarised these data together with information gathered from literature review on sexual health education in Thailand and where relevant, internationally, to provide outline of key structural influences in which teenage sexual health choices are made and in which sex education interventions are delivered and planned for the main study phase.

 Table 3.1
 Key informants interviewed in the preliminary study phase

Key informant	Position / Place of work	Gender	Reasons for selection	Topics covered
A	Doctor -Tutor /	Male	Health researcher	Sexual health education policy
	University hospital			
В	Doctor /Director of	Male	Has done many	Sexual health education policy
	HIV/AIDS section,		interventions in sexual	and intervention
	Psychiatric Hospital		health and HIV/AIDS	
С	Nurse, Key B's assistant	Female	Has done many	Sexual health education policy
			interventions in sexual	and intervention
			health and HIV/AIDS	
D	Health educator HIV/AIDS	Male	Has done many	Sexual health education policy
	Section		interventions in sexual	and intervention
			health and HIV/AIDS	
Е	Nurse, counsellor/	Female	A member of health	Sexual health education intervention
	Province hospital		educator	
F	Counsellor/ Community	Female	Has done many	Sexual health education policy
	Hospital		interventions in sexual	and intervention
			health and HIV/AIDS	
G	Formal Head Teacher/	Female	Was a key person in	Sexual health education policy
	Director of community-scout		municipality school	and intervention in school
	training		System	
Н	Head teacher of	Female	Head of a pilot school	Sexual health education policy
	municipality school		for sex education	and intervention
I	Education inspector /	Male	A coordinator in sex	Sexual health education policy
	Department of General		education in school	and intervention
	Education			
J	Health educator/ Health	Male	Has done intervention	Sexual health education policy
	Promotion Department		in school	and intervention
			1	

3.6 Main study phase (2003-2004)

This was a mixed method study based in six secondary schools, purposively selected from 42 secondary schools in Chiang Mai. Two parts of the study took place in each school: a quantitative study, a study of adolescents' sexual health knowledge using the questionnaire; and a qualitative study, a study of socio-cultural factors using multimethods that included focus group, semi-structured interview, and Biographic Narrative Interview. In addition, an attitude questionnaire was used instead of the focus group to elicit data from parents in one school because the principal did not consent to the focus group. Different aspects of this mixed method study are described in turn below.

3.6.1 The schools in the sample

Schools were considered for inclusion in the study if: a) they were known to be providing some sort of sexual health education to adolescents; b) they added to the diversity of the sample as a whole (see characteristic of schools –Appendix II, 264) and c) head teachers had consented to the study being undertaken in their school. In accordance with standard case study methodology (Stake, 1995), each school should have different characteristics and represent schools that operated by different systems. The sampling strategy for schools was chosen so as to provide maximum variety in key organisational variables.

Under the criteria for selecting schools, six secondary schools were chosen, purposively based on information obtained in the preliminary interviews from education organizations and health personnel. The sample schools have different geographical and demographic features, pupil populations, operating structures and a different culture and ethos. Informal contact and snowball techniques were used to find a gateway to study each school. After informal permission, a formal letter was sent to the head teacher or the principal asking for permission to study the school. Seven schools were contacted. One school refused permission. The sample schools were two schools under the Department of General Education operative system; one under the Department of

Private Schools; one under the Municipality Department; and two under the Primary Provincial Education Office operative system in Chiang Mai.

During the gathering of the data, the education and school administration system were changed. Schools are now divided by location and organized by the head sector in each area instead of administration from the departments. However, the changes should not have much influence on the study because implementation of national restructuring mandates is generally a slow process. The selected schools retained key organisational characteristics throughout the study despite a change in the regional administration system part way through the study.

Characteristics of the studied schools

The data was collected from students in lower secondary schooling and upper secondary schooling in six schools in Chiang Mai. Five government schools and one private school were studied. All schools had mixed gender students. The main differences between each school were size, location, religion, and socio-economic status of students in each school.

School A is a government expanded-primary school², situated in a temple area in the northern suburban area of central Chiang Mai. Many students come from low-income families around the school and other villages nearby that do not have expanded primary schools in the area. The school is smaller than School B. The number of secondary students in the school is around a hundred. There was a HIV/AIDS project provided in cooperation with an NGO as well as additional sex education information provided by the school.

School B is also a government expanded-primary school, located in the western suburban area of central Chiang Mai. This school is larger than school A in terms of

² 'Expanded-primary school' means that the school was originally a primary school but additional study years have been added to meet local demand in the absence of designated secondary schools.

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number of students and size of buildings. Most students come from low-income families around the school and other villages. Many scholarship students from ethnic groups come to this school. The number of students at secondary school level is more than two hundred. There were many projects and interventions from government and non-government organizations in this school, together with privately funded development projects.

School C is located in the municipality area and operated by the Chiang Mai municipality. It is an expanded primary school, located in the temple area. Most students in School C come from lower socio-economic families around the school. The number of secondary school students in this school is about two hundred.

The school received an award from the Minister of Education as a school that has a good administration system. Many organizations such as schools and colleges sent students and personnel to this school for training. The school cooperates with other organizations to integrate interventions for students. This school is one of the schools in the sex education pilot project (Details about the project are presented in section 4.3, Chapter 4).

School D is a district government school while School E is the provincial government school. School D is located in a district further north of Chiang Mai. School E is located in the heart of Chiang Mai. Both offer secondary schooling from Year 7 to Year 12. Students come from low to middle income families. Students in School D are mainly from the local district, while students in School E come from different districts. There are around 3,000 students in School D, and around 5,000 in School E.

There were interventions in these schools in cooperation with other organizations. However, School E, which is a larger school (the provincial school, more students and more supports), has more opportunity to contact with bigger organizations such as university hospital, Chiang Mai Public Health Office, other public health head office, and NGOs. There was a teacher conference about sex education in School for teachers from schools in Chiang Mai holding in School E about a year before my study.

School F is a large private school in a district further north of Chiang Mai. It offers education from Year 1 to Year 12. The number of secondary school students in this

school is around 1,500. Some school funding is from Christian Charities. There is a special administration in the Christian school system integrated with the general school system. The school offers special classes in moral education. Despite this overtly Christian ethos, the students are from all religions, mainly Buddhism.

This school cooperates with other government organization, such as local community hospital and police department, and non-government organizations in providing information for students. Apart from a characteristic that is different from other schools, this school was named and suggested for the study by personnel from one NGO as a school that has sex education intervention and services supported by youth leaders who were trained by them.

I sought to achieve maximum variety in socio-economic background of pupils, prevailing cultural norms, religion and religiosity, geographical location (urban/rural), and current approach to providing sex education by selected six different characteristics schools (see Characteristics of studied schools in Table 5.1, page 122).

3.6.2 Developing, piloting and delivering the questionnaire

A modified version of the WHO knowledge questionnaire was developed and translated into Thai. I developed the questionnaire based on my own knowledge about sexual health education, services available in Thailand, and cultural prospect. Some original questions were not relevant to Thais, others I assumed Thai adolescents might not have information or know about. Moreover, I might not get permission to study in schools if I asked some questions, for example, questions that asked about current heterosexual relationship and experienced penetrative sex (cultural reservation might have an affect on key persons' decision making). That kind of information could emerge from focus group and interview. Even though an original version of WHO questionnaire is a standard questionnaire, a modification of questionnaire to suit the purpose, culture, and place of study is necessary. The modified version questionnaire is shown in Appendix III, page 267.

Some questions and choices of answer from original questionnaire were omitted; others were modified for practical purpose. I also modified the vignette of male and female adolescents before asking questions, aimed to eliminate embarrassment of answering about themselves by projection to other persons (Somchai and Mali).

The modified questionnaire comprised 28 pages of 73-item self-completion pen and paper instrument, which included yes/no, Likert scale and open-ended questions. Items covered knowledge of STIs, safer sex, condom use, awareness of sexual and reproductive health services, communicating about sex, and reproductive health knowledge.

The modified version questionnaire was pre-piloted in 3 English adolescents. There were few points unclear to them. I modified words used before translated and piloted in 30 Thai adolescents who were not my samples. Slightly modified words used applied afterward, no question was cut off. The new modified questionnaire was used in samples in selected schools.

I did not find out a statistical validity and reliability of the modified version of the questionnaire. The standard WHO questionnaire has validity and reliability. Same questions were used in the modified version but in Thai language. I only tested for practical use in Thai adolescents and their understanding of questions.

In the definitive study, a large sample representative of Chiang Mai teenagers was sought. All secondary levels (Year 8 up) in sample schools were chosen for a practical purpose (average age of students in Year 8 is 14). Number of levels in studied schools was varied (some schools provide secondary education until Year 10, others provide until Year 12, depending on characteristics of schools (see Appendix II, 264).

In each Level, classes were selected by a pragmatic sampling procedure. Students in selected classes were samples of the study. I did not do further sampling from within the sample classes to avoid questions from pupils or staffs about why some were selected and others not. In total, 2,737 pupils were sampled from a total of 5,029 in Year 8-12 in 6 schools.

Ouestionnaires were prepared in a big envelope for each class. Schools chose the date to deliver the questionnaires. I prepared the questionnaires in separate envelopes and gave them to the schools. Each school delivered big envelopes to class teachers. The class teachers were informed that answering the questionnaire was confidential and anonymous. They received a big envelope containing a number of questionnaire envelopes for all students in the class. Each student in the selected class received 3 parts of papers: a printed sheet describing the nature and purpose of the research and inviting participation, a 28 page questionnaire, and an information of services sheet in the envelope. It was made clear on the first sheet that filling out the questionnaire was voluntary. Questionnaires were returned anonymously, and if desired, the pupil could return a blank questionnaire in a sealed envelope, or an empty envelope. I put information of services, which included places and telephone numbers to offer information they might need. The respondents answered the questionnaire in their preferred place: at school or at home. They handed it back a few days later to teachers in the envelope provided. All returned envelopes were put back in the big envelope and returned to coordinated teachers and I had arranged to take them back. I did not receive 52 envelopes return.

3.6.3 The pupil focus groups

Participants for the pupil focus groups were recruited from the wider sample used for the questionnaire study described above. In other words, respondents who answered the questionnaire might or might not also be involved in focus group discussions. Participants in the focus group discussions were purposively selected and grouped for characteristics hypothesised to influence sexual norms and attitudes. These are shown in Box 3.1, page 84. Teachers helped me to select pupils with these characteristics and assign them to suitable groups. I emphasised to teachers that I wanted pupils to be placed in natural social groups ('peer groups') as far as possible. Because I was not familiar with the individual pupils, I left teachers to make the key decisions in composing the different groups. The number and composition of focus groups varied with each school (see Table 5.1, page 122).

Box 3.1: Characteristics used to put together different focus groups

'High risk group' – teenagers whose teachers identified them as risk takers in any aspect of their lives and lifestyles

'Studious' - teenagers whose teachers identified them as mainly interested in academic study

'Sporty' – teenagers whose teachers identified for keenness and ability in sport

'Beautiful boys' – boys identified by teachers as attractive, fashion conscious and acted as girls, i.e. put lipstick, and had feminine mannerisms

'Charming girls' – girls identified by teachers as attractive, dressing as boys, or having some male mannerisms

'General group' - teenagers identified by teachers as they were ordinary adolescents

The way each school identified groups was different. Some schools might not have 'beautiful boys' or 'Charming girls' groups, others might not have 'risk takers' group. It depended on what problems occurred in schools, how big a gap between each characteristic in school, and how teachers saw and thought about their students. Hence, the number of groups was different between schools. The focus groups were held in school. A total 20 focus groups, involving 185 respondents were conducted in classrooms and a mutually convenient venue (outdoors where they played or gathered in a group and meeting room), with an average of 8-12 participants per group.

There were two parts of the focus group discussion: a) participants filled in a questionnaire providing personal information (and it could be used to confirm oral consent of attending the group for discussion) and b) discussions between group attendants. Tape recordings were made during focus group discussions after permission was obtained by oral consent from participants.

Focus group guideline (Appendix IV, page 294) and a story vignette were used in focus group discussion. Topics discussed would focus on the views and behaviours of adolescents, risk taking, risk prevention, condoms, and information needed. More details about their sexual and reproductive health knowledge, views about sex education and

suggestions for improvements to their current sex education were asked. In order to encourage group discussion, a story vignette was developed. I modified a story based on information about adolescents' behaviour in Thailand, from informal interviews at the preliminary study phase, to use as a projection tool. A projection tool was successfully used in a previous research study (see Greenhalgh, Helman & Chowdhury, 1998) to promote discussion on sensitive topics.

A story about two adolescents Somchai (male) and Mali (female), the same age as participants, was told to the group, phase by phase. There were 8 phases of the story. After telling each phase, I stopped and asked questions. I asked, 'what do you think this person would feel or do at this point?' to the group and discussions were encouraged all the way through. In case that there were points raised by participants, in-depth discussions were encouraged for more information. This vignette is shown in Box 3.2, page 86.

Box 3.2 Structure vignette story used in teenage focus groups

Mali (meaning "flower") is the same age as you. Her parents are very strict and they tell her that she must not get a boyfriend until she has finished her secondary school.

[Prompt: How do you think Mali would feel? What do you think she would do?]

Mali meets a boy, Somchai (meaning "handsome boy") at school and he invites her to meet him in the evening.

[Prompt: How do you think Mali would feel? What do you think she would do?]

She goes to meet Somchai, and he suggests that they go together to the fair outside the village in the evening. He indicates that he likes her very much (and they will have a grate time being together).

[Prompt: How do you think Mali would feel? What do you think she would do? How do you think Somchai would feel? What do you think he would do?]

After the fair, they go to the park, and they begin kissing. Somchai is very keen to have sex with Mali.

[Prompt: How do you think Mali would feel? What do you think she would do? How do you think Somchai would feel? What do you think he would do?]

Later, Mali is also keen to have sex.

[Prompt: How do you think Mali would feel? What do you think she would do? Do you think Mali would think about using a condom? Do you think she feel strongly about using a condom? Why do you think she would feel that way? Do you think Somchai would think about using a condom? What do you think he would do? Why do you think he would do that?]

Somchai says he has no condom.

[Prompt: How do you think Mali would do next? Why do you think she will do that way? What do you think Somchai would do?]

Finally, they have sex.

[Pr [Prompt: What do you think they will be worried about? Why do you think he / she will think that way?]

Mali and Somchai have friends. They always chat with each other.

[Prompt: Do you think Mali will talk with her friends about sex? What do you think Mali and her friends will talk about? Do you think Somchai will talk with his friends about sex? What do you think Somchai and his friends will talk about?]

I practiced focus group discussion in one adolescents group. I found out that clarification might be needed for some participants; answers could overlap; and attitudes and values emerged from interaction during focus group. I had confidence in facilitating and using the vignette to encourage group discussions. After doing focus groups in samples, and group-by-group, some important points were reviewed, referred to, and adapted to use in a new group.

3.6.4 Parent focus groups and questionnaire

A study of adolescent attitudes, norms and behaviour is more meaningful if placed in the context of the norms and attitudes of parents. Parents of the students in two schools, school C and F, were studied. In other schools, there was no study of the parent group because head teachers were reluctant to involve parents in the research.

Parents in school C were selected for a convenience sample. The principal and the teachers in this school arranged the parents' meetings for me. The school passed a message through the students, to ask parents to come to school and join the group discussion for research. Coordinated teacher asked the parents to meet at the school. On the day we arranged, the discussions were conducted in the meeting room. The coordinated teacher introduced me to the parents. She left the room before I started. I explained the purpose and plan of the research to the parents again, and assured them that participation was voluntary. I asked for permission and they gave oral consent for tape recording before starting discussion, and filled in personal data form after the discussion.

Parents were asked about their own memories of sex education, their views about the sex education their teenagers were receiving, and their suggestions for changes and improvements to current sex education. I conducted two focus groups of parents in school C, involving a total of 23 parents: 18 females (78.3%) and 5 males (21.7%).

In school F, the principal did not agree for me to do focus group or interview in parents. He asked me to use an attitude questionnaire instead. Hence, a short attitude questionnaire was developed and used instead of the focus group that I had planned. The attitude questionnaire is shown in Appendix V, page 300. The school helped me in collecting data from parents by organising an ad hoc meeting on school premises, linked to an annual parent teacher consultation. The parents first met in a large group (annual general meeting), after which they would separate and meet their child's class teacher. The class teachers gave the parents the questionnaire after their meeting. The teachers explained to them about the research, and I also gave them a letter with further details about the study in writing. Teachers asked for verbal consent. The class teachers collected the questionnaires after the meeting. I received 351 questionnaires from 146 male (41.6%) and 205 female (58.4%) parents.

3.6.5 Exploring the context and delivery of sex education

To explore the social and organisational context of school based sex education delivery in Chiang Mai, key informants interviewed in the main study phase and methods of interviewing are shown in Table 3.2, page 89. In total, 18 informants were interviewed. Representatives of all stakeholder groups were purposively selected, contacted informally or formally, and interviewed. Participants in this phase comprised 2 policymakers, 2 principals, and 6 front line teachers. Other informants from other organizations who were named by others were contacted and interviewed. There were 2 health personnel; 2 volunteers; 2 chiefs of 2 NGOs; and 2 religious leaders. Interviews were conducted at work, mainly in the informants' offices (in schools, temple, and hospital). Some of them were interviewed using the semi-structured interview guide; others were interviewed using the life history narrative question, SQUINs (see page 71-72).

BNIM was used because preliminary data suggested that the person's own experience had a strong influence on the way they feel, involve, and deliver information to adolescents. In some cases, I used semi-structured interview at the first stage. Based on information from semi-structured interview they had much involved in sex education delivery, I used BNIM for additional information. In other cases (person whom I known they had much involved in sex education delivery), I asked them to tell me about their

life history (or folk), using SQUINs (see page 71-72) straight away after introduction about the study and asked for permission of interviewing and tape recording (for practical purposed - times and an opportunity for interviewing concerns).

Table 3.2 Key informants and methods of interviewing in the main study phase

No of informants	Informant Position	Gender	Interviewing Method
2	Policymakers	1 female, 1 male	1 semi-structure, 1BNIM
2	Principals	1 male, 1 female	1 BNIM, 1 semi-structure
6	Frontline teachers	1 male, 5 females	5 semi-structure, 1BNIM
2	Health personnel	2 females	2 semi-structure
2	NGO volunteers	1 female, 1 male	1 semi structure, 1 BNIM
2	Chief of NGOs	2 females	2 semi-structure
2	Religious leaders	2 males	2 semi-structure

In school F, the principal arranged for me to meet a group of teachers. For practical reason, I adapted my method. I used a focus group instead of individual interview. I did one focus group of teachers, 3 males and 5 females, in this school.

In addition, I also studied grey literature such as sex education documents and internal reports in Thailand. The documents and reports included:

- 1) a policy hand book by Ministry of Education, used as a core learning document in Hygiene and Physical education and a health policy document
- 2) 3 teacher handbooks that teachers planned and used to teach their students,
- 3) 3 reference books named 'Hygiene and Physical education', for Moa 1 (Year 7), written by 3 different authors. They are studied books, mentioned by a teacher. I bought them from a bookstore. Teacher can use them as references in providing information for students in Year 7 –Year 9. He/she can make decision when and what to provide to students within the three years in the new education system,

- 4) leaflets I picked up from shelves in schools HIV, sex and relationship, and others related topics leaflets, and
- 5) 2 video tapes (about sex education) and 5 audiotapes (about HIV) which teachers specified were used as sources of information school.

Information I got from each method was overlapped and linked together. Apart from formal methods I mentioned above, observation was always used together with other methods. I observed what were they doing, how, and asked them why they did that. If I could not see, I listened to how people spoke about sexual health education and related topics.

I had a chance to observe activity provided by NGOs, the AIDS campaign for youth leaders from secondary schools in Northern provinces (in private premise outside school). I also went to a private place that offered services for adolescents, supported by the same NGO, observed the place, and interviewed a service provider. I had an opportunity to observe when a teacher was providing information in a class in one school. I also observed activities in schools such as students meetings, AIDS campaign in school, and students' volunteer work (service and helping teachers). I made notes of those activities, what I saw, how I felt, commented for interesting points, and looked for further information if needed.

Collected data from different methods were stored and processed in various ways. Data storage, processing and analysis will be discussed in the following section.

3.7 Data storage, processing and analysis

Because this was a mixed method study, I used a variety of analytic methods appropriate to the nature of the data. These methods are summarised in Table 3.3, page 91 and considered in turn in the following text.

Table 3.3 Methods of data analysis

Research method	Nature of data	Method of analysis
Observation	Field notes	Thematic content analysis
Documents	Written text	Thematic content analysis
Questionnaire (closed item responses)	Nominal, ordinal and continuous quantitative data	Statistical tests including descriptive statistics, K score, T-test, and Chi-square test
Focus groups	Transcribed text	Thematic content analysis
Semi-structured interviews	Transcribed text	Thematic content analysis
Biographical narrative interviews	Transcribed text	BNIM analysis including Biographical Data analysis, Thematic Field Analysis, and Datum by Datum analysis

Observations were recorded in real time and annotated immediately afterwards using supplementary field notes. Additional data were collected to supplement the emerging findings through progressive focussing. For example, when early data seemed to suggest that 'girls' was associated with lack of negotiating power in the sexual relationship, I explicitly sought focus groups of 'girls' to pursue this theme in more detail. For the same reasons, I also modified the focus group questions as data emerged. This process was repeated with additional focus groups until no new themes emerged.

All focus groups and interviews were audio taped and labelled with the school code for subsequent storage and transcription. Identifiable information was not included on the tape but a list of school codes and informant codes was kept separately. During the fieldwork, I reviewed all qualitative data while I was collecting it. Data gathered from observation, focus groups, and interviews were summarised and clarified to participants, and respondent validation sought. Data were not routinely translated into English as the analysis was undertaken in my mother tongue (Thai); but selected transcripts (around one-quarter of the total data set) were translated in full for the purposes of PhD

supervision and developing the framework for the analysis in collaboration with my supervisors.

The interview data were analysed thematically by annotating printouts of transcribed text. Key descriptive themes in the texts were highlighted and preliminary coding categories assigned (for example 'statement of what is normal for teenagers' or 'account of past experience when delivering sex education'). These themes were then combined to produce more abstract categories (for example, 'norms' or 'experiential knowledge'). The abstract categories were developed through repeated reflection and discussion with supervisors.

Topic and keynotes were recorded in The SHEIOT (Situation, Happening, Event, Incident, Occasion/Occurrence, and Time) notepad in the first sub-session in four interviews using BNIM. All interviews were audio taped and labelled with code for storage and transcription. Again, data were not routinely translated into English as the analysis was undertaken in my mother tongue (Thai); but selected 1 transcript was translated in full for the purposes of PhD supervision. Biographical data was analysed addressing the chronology of experiences in the lived-life. The interview text was analysed to reconstruct the structuring principles of the story. Then, Biographical Data Chronology and a Text Structural Sequentialization were analysed datum-by-datum by panels (including 2 health personnel, 1 social support personal, and 1 accountant) to minimize a limitation and bias of interpretation based on my own mental model and experiences. BNIM analysis was undertaken in Thai and with Thai panels for practical purpose.

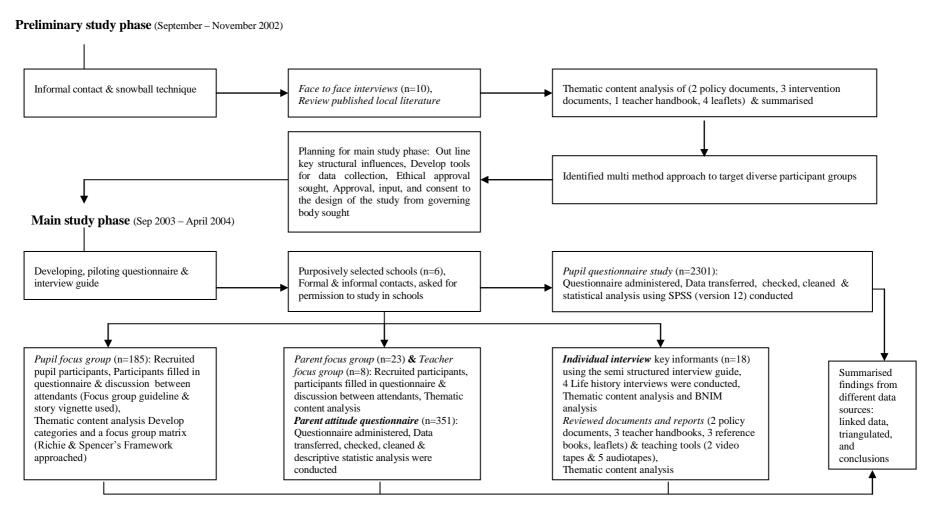
The focus group data were also analysed thematically but because of the greater volume of data and large number of themes, I used an electronic spreadsheet to develop and refine descriptive categories through an application of Ritchie and Spencer's Framework approach (Ritchie & Spencer, 2001). About half (12) of focus group transcripts were translated into English. My supervisors and I analysed and coded separately. We discussed and explored key themes further and resolved discrepancies in interpretation. Framework for analysis, a focus group matrix, was developed in collaboration with my supervisors. We discussed preliminary codes. After that I added the other data using a Thai version of the matrix.

Data from the questionnaires were transferred (by myself) to an SPSS spreadsheet. Data accuracy was double checked by comparing with another spreadsheet keyed in by two university students (they did not know name of schools or respondents, I put codes in the questionnaires). Data were cleaned up and analysed using statistical package from SPSS (version 12). Descriptive statistics such as frequency, mean, and standard deviation were generated for all items and analysed further by gender, level of education, school, or socio-economic status (parent questionnaire). Some scores were combined for the purpose of analysis such as correlation: T test (student), and chi-square. A p value of ≤ 0.05 was taken as statistically significant.

Once data had been generated from the various empirical sources, a further phase of data synthesis was undertaken, in which I sought to build up a rich picture of the field of study. This phase required considerable discussion with my supervisors, re-analysis of data sources as new hypotheses emerged, and focussing within the data set to refine emerging higher-order themes. This phase was somewhat more than a conventional 'triangulation' of the data (confirming, for example, that knowledge revealed in a focus group broadly corresponded to questionnaire scores) because I specifically studied discrepancies in the data to suggest hypotheses about why, for example, pupils and parents appeared to hold 'conflicting' attitudes.

The conclusion of process of data collection and analysis to the conclusion of the main phase of the study are shown in Diagram 3.1, page 94.

Diagram 3.1 The conclusion of process of data collection and analysis to the conclusion of the main phase of the study



In summary, in this chapter I have first considered some philosophical issues about research design, and then described my concerns about researching sensitive issues. I have justified the use of mixed methods in this in-depth case study of Chiang Mai, and given the sampling frame for schools. I have also described the different methods used along with the approach to data analysis. The results will be presented in Chapter Four, Five, Six, and Seven. In the next chapter, which is based on both my preliminary field work and the interviews and observations in the main study, I shall describe the current sex education policy in Chiang Mai, available sexual health information, context of sexual health education delivery, interventions provided in schools, and also present my assessment of sexual health education in Thailand.

CHAPTER FOUR

SEX EDUCATION IN THAILAND

Chapter Three described the research methodology. Chapter Four presents my findings on sex education in Thailand. It also offers a provisional evaluation of sex education in Thailand based on the field study undertaken in preliminary phase (2002) and main phase (2003-2004). Section 4.1 describes the present sex education policy. Section 4.2 presents the context of sex education delivery. Section 4.3 discusses interventions provided in schools. Section 4.4 presents the existing sex education. Lastly, section 4.5 discusses the gap between policy and practice.

The data sources for this chapter are from reviewing documents, teacher handbooks, leaflets, videotapes, and interview key informants, teachers, and policy makers.

4.1 Sex education policy

In Thailand, sex education has been developed over the years since sexuality education was adopted in school-based education in 1994. Sexuality education has been revised and has been integrated into the school curriculum since the year 2001 (see Table 2.5, page 56).

During those years, sexuality information, mainly about biological and physiological information, had been provided in hygiene class and was known as family life education. Such information was taught in relation to hygiene rather than a matter of sexual development. Therefore, many people (in the general population) were not sure about sex education.

Interviews with key informants indicated that sex education policy was not well

recognised. Teachers and health personnel knew that there was some sexual health information provided in health and hygiene lesson in school, but they were not sure about the policy: what policy said and what school should provide. One key informant who is a health researcher said, "I have never heard of a sex education strategy for adolescents at national level. There are some interventions in school but it is not clear what school has to do."

Until my main phase study in 2003-2004, I found that sex education was integrated in school as a small part (e.g. one or two lessons) in a health and hygiene class in school. There were 8 concepts of learning through school education. These included learning Thai, mathematics, science, social studies, religion and culture, hygiene and physical education, art, vocational and technology, and foreign language.

Interviews with teachers indicated that teachers had heard that sex education was integrated in the school curriculum in the new education system, but they were not sure what it was all about. This might be because the term 'sex education' was not generally used, even though information had been provided (except in schools in the 'sex education' pilot project that I will describe later in section 4.3). In fact, the term 'sex education' had been used in information delivery for less than ten years. I supposed not until a core concepts manual was distributed to all schools in 2003.

In 2003, the Ministry of Education set national standard core concepts as guidelines for schools in providing education and delivered the manuals to schools all over the country. Policy makers revealed that some teachers started using the core concept manual as a guideline. Others might keep on providing what they had normally done, using available books. One policy maker said, "It is the beginning of change: teachers start to learn and develop teaching tools. The core concept stated more clearly what information should be provided. However, it depends on teachers who deliver information. Teachers can judge what they should provide. It depends on the school environment and problems in communities."

My conclusion from reviewing policy documents and interviews with key informants, teachers, and health personnel in both phase studies was that "the sex education policy is still unclear and not well recognised", even though it was officially in the reproductive

health policy as one in ten components (see Table 2.1, page 20) or a small part of one from eight main concepts of learning in education policy.

This might be because it was the beginning of a period of putting 'sex education' into school practice. People who did not have direct responsibility or work in the field, whether they were health personnel or teachers, did not know much about sex education and the policy; the Thai Ministry of Public Health and WHO commented that the sex education policy of the country was not clear (MOPH & WHO, 2003); and sex education had been handled by various agencies other than the Ministry of Education for over the years since it had been adopted in school-based education in 1994 (UNESCO, 2001). I did not attempt to evaluate the policy specifically because this was beyond the scope of this thesis. Rather, I moved on to a central question of my study, to explore what sex education information was actually available. First, however, I will describe the context of sex education delivery in the next section.

4.2 The context of sex education delivery

From the information I gained in my preliminary study, it appeared that the context of sex education delivery could be divided into four levels: national, regional, provincial, and school level. The national level, Ministry of Education and Ministry of Public Health worked together in developing policy and strategy. Non-government organisations and the private sector were also involved. At the regional level and provincial level, there was cooperation between health sectors, education administration sectors, and NGOs, who worked together in developing programme interventions, mainly about HIV/AIDS. At school level, teachers provided information in classes. Health personnel and other professionals from other government or non-governmental organisations (NGOs) also provided information in school if there were special interventions organised by them.

I planned that my definitive fieldwork would compare a wide range of different aspects of sex education delivered in schools in different school operational systems. During my main phase study in 2003-2004, the school education administration system was changed. However, these wider structural changes of the school system are unlikely to have impacted on sex education in school since the overall policy – that schools should follow the curriculum and the standard core concept manual – did not change during this period. More importantly, I found that school context was the vital context of sex education delivery.

Interviews with policy makers, principals, head teachers, and teachers indicated that sex education in school followed the national school curriculum. I did not have clear information about sex education policy in schools. None of the schools in my sample provided me any formal school policy: no written school policy was available. Interviews and discussions with teachers, parents, and adolescents indicated that there was limited parental and no adolescent involvement in the schools' sex education programme development.

In fact, there was sexual health information provided in the schools I visited. However, the information really provided in school varied considerably. One male health professional commented, "It depends on schools and teachers who have responsibility teaching this matter." (The information provided in school is presented in detail in Chapter Five).

Interviews with key informants indicated that apart from sexual health information provided in hygiene classes, there were various other interventions that provided sex education in school. Those relied upon front-line providers in each school and also on school policy. Findings suggest that school administrators and responsible teachers have influence on the information delivery. Some schools were very forward-thinking in providing sex education, while the others showed significant reluctance to do so – an approach one commentator described as "cowardly" (Senator Saisuree, cited in UNESCO, 2001).

Providing sex education in school might expose the school to criticism from people in society. One female key informant told a story. "There are various views of providing sex education to children", she said. "One teacher received many criticisms because he taught sex education, using VDO tape. Some people thought it was OK, but others

worried about moral issues. Some worried that it would encourage the children to have sex. There were news and television programmes that criticised his teaching." These findings suggest that at the outset of this study, sex education in schools was a highly sensitive and contested issue that needed more advocacies.

My interviews with key informants and teachers indicated that sex education advocacy was not easy. There were arguments and criticisms of what should be provided to children in school. At the time of the study, advocacy about sex education in school remained uncommon (UNESCO, 2001). Despite this, some progress was being made. In the next section, interventions in schools will be discussed.

4.3 Interventions provided in schools

Even though sex education was integrated in the school curriculum, it appeared that what and how information was delivered to students varied in individual schools. In general, schools provided information in hygiene and physical education class. However, number of teaching hours, contents, and methods varied between schools. Schools might have special interventions providing information to their students.

From interviews, there were special interventions that provide sexual health information in schools. Most interventions were aimed directly towards HIV/AIDS prevention. Few of them were aimed to prevent pregnancy or contraception. There was relatively little education that addressed topic about sexuality, pregnancy, and contraception.

In most cases where interventions were initiated and developed by the Public Health Office and hospitals, schools were asked for coordination, for example, preparing students, setting up dates and a venue for interventions, or distributing leaflets to students. In other words, where the initiative for an intervention was from medical professionals, schools were used mainly as a distribution vehicle.

Occasionally, those schools would set up their own programmes and asked health personnel to join by providing suitable information for adolescents. Health

personnel could support school-led initiatives by providing suitable documents or leaflets, offering available tools, or teaching in the topics required.

Interventions provided in schools varied, depended on school policy and the providers. Activities included teaching in classes, playing cassettes during school break, providing life skill development courses, and specific programmes such as HIV/AIDS programmes, sex education pilot project, and the White School Project (see below). Some specific programmes will be described to provide pictures of what information they might cover.

The most direct sex education programme was "sex education pilot project". It was a pilot programme providing sex education in 20 pilot schools, established by the Department of General Education. The pilot schools were provided with guidance in providing sex education. A report entitled "Sex Education, Why? and How?" prepared by the Health Promotion Section of the Department of Health, Ministry of Health, Thailand, set out the official guidance for schools participating in the pilot project. The report set out the topics that teachers should provide for students. Topics covered were human sexuality development, sexual health, sexual behaviours and sexual relations, personal skills, and social and cultural gender roles (Department of Health, Ministry of Public Health, 2001). There were examples and guidelines of information delivery. However, the information that had actually been provided 'on the ground' in the pilot schools was not available. It might or might not be the case that the information outlined above was provided in all pilot schools.

The White School Project covered various issues, including sexual health information. The aim of the White School Project was to ensure that participating schools were free from drug and substance abuse; bullying; hooliganism; sexually explicit materials (e.g. pornography); gambling; and free from sexually transmitted infections, including HIV. The project was started in 1998, the Thai Government, through the Ministry of Education provided funding to all schools. The small budget was offered to all schools to do activities to meet an aim of the project. Schools might provide information, or coordinate with other organisations to provide information, in the related area for their students. The programmes had been discontinued in many schools because of budget

problems: most commonly because a time-limited project had come to an end. However, some schools were continuing with this project by integrating the information in their regular basis, and teaching with no added funding. This might be because the project was a popular initiative and hence was more likely to succeed in terms of implementation. However, the behavioural outcomes of the project were not available at the time of my fieldwork.

There were interventions provided by NGOs both in schools and outside schools. Most interventions were aimed at the youth leaders. NGOs asked schools to cooperate and get involved in their special projects. The name of projects and interventions varied, for examples, AIDS prevention project, Youth leader, and sex education programme. Not all schools were involved in NGOs' project. (Intervention in studied schools is discussed further in relation to adolescents' knowledge in Chapter Five).

From my interviews with policy makers and head teachers, there was a NGO that provided 'sex education' in schools. The information provided included physiological change, relationship, sexual health, and contraception. This NGO had youth representatives in schools. The representatives got information, training, and equipment, including condoms and contraceptives from the NGO. The NGO included schools in the Northern provinces in its project. Few schools in Chiang Mai were involved.

It appeared that sex education interventions in schools were much about HIV/AIDS. It was because schools received a small budget to do HIV/AIDS intervention (such as White School Project described above); they could seek help from health personnel in the area to provide information in schools or did intervention in schools themselves as School C and E presented HIV/AIDS information boards for a week during the period of study. Other schools might have interventions (as teachers said in interviews) but not in the period I went to schools. Findings supported preliminary findings that HIV/AIDS was a major concern than other sex information topics. Sex information providing in order to prevent the disease was acceptable, but discussing sex in general terms appeared to be a taboo.

Interventions in schools relied on teachers who had responsibility for teaching PE or health and hygiene class, or teachers who worked in the HIV/AIDS project. Only a

small budget was available for special projects in schools. Therefore, what project should be supported and provided in school depended on how active teachers were and school policy. In general, special interventions in schools would support or provide by other organisations rather than using school budget. Similar to UNESCO, findings showed that work of the Ministry of Education about sex education had been handled by various agencies-NGO, private sector, and university rather than work and support within the Ministry of Education and school organisation (UNESCO, 2001). In the next section, I present my assessment of existing sex education based on findings from both study phases.

4.4 Existing sex education

From both the qualitative study in various groups, which include teachers, adolescents, and parents, and the questionnaire study in adolescents, my view about sex education in Thailand is discussed in the following.

4.4.1 Limited quantity, quality, and consistency

Referring to core concepts of learning in new Thai national education reform presented earlier in this Chapter, even though information topics are stated clearly, information offered is flexible and much vary by teacher judgement. One frontline teacher commented about the curriculum:

"There is not enough information in the curriculum for younger adolescents. We should provide the younger adolescents more information as which we provide to the older adolescents. I want to offer them more information, preparing them before they get older. The curriculum is limited to 4-5 topics. Sometimes I dropped out some topics because worrying about teaching other subjects. I accepted what the Education Department suggested for information students should receive at each age. I think it is right in other circumstance, but not in sex education. I think there should have more information stated in the curriculum. I think we should prepare younger adolescents by providing

PE male teacher, aged 40

Even though the hygiene and physical education is among other core concepts in education system, it is less important than other core concepts. In other words, sex education is not as important as other subjects such as mathematics, sciences, or languages. It is not a major subject: the number of hours is less and priority is lower.

In hygiene and physical education lessons, the body, health and fitness are main concerns. Students learn about the gendered nature of their embodiment. This constructs sex into dominant forms of heterosexual masculinity and femininity. A gender stereotype may be reinforced during students' sexual learning through physical education. Students' gendered bodies and behaviours are scrutinised and disciplined by their peer group, with public and negative labelling for those unwilling or unable to conform to group norms (Paechter, 2003). Boys are expected to act like boys and play like boys, while girls are expected to act and play like girls. Peers may not accepted boys who want to play with girls' things or vice versa.

Hygiene and physical education class consumes 2-3 hours of 34 hours of study a week and includes five concepts of learning, of which sex education is one. In comparison with other main learning concepts such as science or mathematics, which consume 6 hours or more a week. Sex education lessons may have 1 to 2 hours a month because limited of times; and lessons may not provide continuously or consistently (This is discussed in adolescents' and teachers' views of sex education in Chapter Six).

Schools, teachers, and parents pay attention to the main classes such as mathematics or science more than hygiene and PE because hygiene and PE offers information and knowledge for living, not for further education (Department of Education Technique, Ministry of Education, 2003). Adolescents are also concentrated with the main subjects. Even though sex and other concepts in hygiene and PE are necessary for students, it is a subject with complementary rather than accredit for higher education. This creates a sense of possible ignorance of sex education lesson/hygiene and PE class in comparison with other classes. Academic subjects such as mathematics are valued more than life

skills.

One teacher was concerned that less sexual health information might be provided in practice because hygiene and PE class could be collapsed and the class could be postponed or dropped because of special programmes in school. "Last month I did not teach any lesson about life and the family. We had a special programme about foreign languages. It just finished this week. I will catch up by teaching them extra lesson during lunch break. Otherwise, they will miss a lot of information." A PE teacher said. Imagine in case a teacher is not concerned much about sex education and/or the children, it is possible that some information will be omitted and not provided to the children.

When sex education is a very small area and less important than other subjects, it is understandable why it has made slow progress. From my interviews and focus groups, parents, teachers, and policy makers thought that sex education was "fairly important". But they also believed adolescents should pay attention to their studies rather than worry about having a relationship or become interested in sexual matters. Sex education seems to be an important matter but it does not need to be taught: sexual relationship is a natural matter that the children will learn from experience in the future (What people thought about sex education is presented in more detail in Chapter Six).

Findings indicated that available information was broad, there was lack of explanation, and much of the information was impractical. Information on physiology and biology was available but information about other topics was not clear. Even the physiology and biology information available was not provided in depth. Information about masturbation and genital organs was not discussed in detail. Even though there was information provided in schools, as with other researches (Elliott, 2003; Hughes & MaCauley, 1998), adolescents were often not being taught of what they wanted to know (What adolescents wanted to know is discussed in more detail in Chapter Six). Overall, they would rather seek information from other sources than from school.

My focus groups and survey indicated adolescents gained information from friends, books, magazines and the Internet (Findings are presented in Chapter Five). Although the media, peers and other sources can be a helpful source of sex information (Chambers, Wakley & Chambers, 2001; Creatsas, 1997), the quality of advice

provided from these sources varies and may not always be accurate. Adolescents felt that they could not get information they wanted and might receive justice and punishment from teachers, parents, or health personnel. Findings indicated that adolescents were more comfortable getting information from other sources than from teachers and parents even though the information may be less accurate (What adolescents thought about sex education is presented in more detail in Chapter Six).

There was little information provided about sexual relationships, sexuality, pregnancy, contraception and service. Without such information young people may not know how to act in the relationship, how to negotiate sexual encounters or how to use contraception effectively, and they may not know where to get help (Chambers, Wakley & Chambers, 2001; Masters, Johnson & Kolodny, 1995). So, even though there is sex education in school curriculum, findings suggest that information provided is limited.

Even though the curriculum stated that all schools should provide similar information, findings indicated that information provided depended on teachers' ability, motivation and skills. There was a broad explanation of what should be provided but no standard guidelines for teachers about what to teach their students and how to deliver this information. Some teachers searched for more information from various sources, but others mentioned teaching based on their basic knowledge.

I found that some teachers might mainly provide physiological information but other teachers also provided information on sexual relationship and pregnancy as well as physiological information. Front line teachers who had responsibility for providing such information might take the initiative in providing such information but others might not. Even though some teachers thought that sex education was important, they might not want to be involve in teaching sex education themselves (Teachers' views are discussed in more detail in Chapter Six). Their contribution might therefore vary. As a result, information adolescents received could vary widely by individual teacher.

Apart from information from classes, schools may cooperate with other organisations and have extra sexual health interventions or programmes such as HIV/AIDS programmes and youth volunteer for sex education (see activities in studied schools in Table 5.13, page 143). The more schools have activities and interventions, the more

the children have an opportunity to get information. Yet in other schools, they may leave it to the responsibility of individual teachers and may not support sexual health interventions in cooperation with other organisation.

The findings on sex education in schools should be interpreted in the context of changing sexual behaviour in Thai adolescents: having sex at younger age, many do not use condom, changing sexual roles, and increasing sexual health problems in adolescents. However, this was a beginning period of using the core concept manual; and an evaluation about the school curriculum was not available. Therefore, I explored the curriculum and its implementation in schools, rather than critique it from the outset (Findings are discussed in Chapter Five and Six).

4.4.2 Too late

Evidence suggests sex education should be initiated before young people are sexually active (AVERT, 2005; Chambers, Wakley & Chambers, 2001). I found that information about relationships was available (albeit in limited form) for students in level 11-12 – aged 16-17 (see Chapter Five). However, other research indicated that some Thai teenagers had sexual relationships under the age of 16-17 (Riewtong, 2003; Allen et al., 2003; Kittisuksatit, 2002). There is evidence that the rate of sexual health problems in Thai adolescents is increasing because young people lack the ability to negotiate safer sex, do not use condom, lack access to contraceptive services, and do not using contraception effectively (MOPH & WHO, 2003; Chitwattanapath, 1999 cited in UNESCO, 2001).

Findings indicated that some teachers/parents/politicians wondered that providing sex education at an early age might lead to adolescents' experimentation of having sex. (This is discussed in Chapter Six). Even though we cannot guarantee young people will not experiment sexually, evidence suggests that with sex education and confidence building skills, young people are less likely to engage in unsafe or coercive sex (Rivers & Aggleton, 2001).

It is important to note that 'risk-taking' has different meanings in different points of views. It could mean having sex, having sex without prevention, or having behaviours that may lead to having sex. The meaning of sexual risk differ in terms of how risk is understood and reference to discursive understandings of HIV, STIs, pregnancy, and public health (Race, 2003). What other people think is risk behaviour may not be viewed as 'risk taking' in adolescents' perception (Elkind cited in Hockaday, et al., 2000). Again, this suggests that sex education should take into account adolescents' opinions and apply strategies in providing information that meet their needs.

If young people know how to negotiate relationships, it may reduce risk taking (AVERT, 2005; ACPD, 2001). In case that they want to have sex, they may prevent themselves from consequences by negotiating with their partner to use a condom or practicing no penetrated sex. Hence, information should reach adolescents before they would experience having sexual relationship. It will be too late for young people receiving sex information when they are 16 years of age or over; information needs to be delivered at a much younger age (AVERT, 2005; UNESCO, 2001; Hassan & Creatsas, 2000).

4.4.3 Lack of parental involvement in sex education

Thai parents do not traditionally discuss sex-related issues with their children or provide sexual health information (Doungjan, 2004). Some parents may talk with their children, but in a very general way often providing information that is superficial and unclear. Many parents have never talked about sexual related matter with their children and many Thai parents find talking about sex embarrassing or uncomfortable, especially with children of the opposite sex (Barriers of providing sex education are discussed later in this Chapter). Thai parents are also limited through their own lack of sexual knowledge, and the prevailing traditional cultural standards where talking about sex is considered a taboo or private matter (Parents' views are presented in Chapter Six). There is evidence that this seems to be the case for parents in many countries (Race, 2003; Anochie &

Ikpeme, 2001; Kane & Wellings, 1999).

In some countries parents play a role in determining what sex education issues are taught within school (Kirkman, Rosenthal & Feldman, 2005; Pluhar & Kuriloff, 2004; Walker, 2004; Milton, 2003). In Thailand parents are less involved in influencing the content and delivery of school sex education. The school determines what is taught without consultation with parents, and although there are bi-annual parents meetings, these do not cover issues of sex education.

Other cultural shifts mean many Thai parents now work outside their home and have less time to care for their children. Child support therefore falls to teachers or grandparents (MOPH & WHO, 2003). This may further limit parents' opportunities to discuss sexual health issues with their children. Parents do not have time, and they do not know when, where, and how to start. Furthermore, it will be more difficult for the parents discussing sexual matter with the children when conservative grandparents are around.

Moreover, if parents have a poor relationship with their child, their child may feel too scared to ask about sex-related issues for fear of punishment (Adolescents' views are presented in Chapter Six and their belief of punishment is discussed in Chapter Seven). Even where young people ask for help their parents may not be able or willing to answer their questions. Parents who have a close relationship with their child have more opportunities to share information on sex-related issues with their children (Coleman, 1992).

4.4.4 Lack of comprehensive information and resources

Apart from biological and physiological information available in the hygiene study handbook, analysis of materials for young people (Some examples are presented in Table 4.1, page 111) indicated a variety of sources of sex information available for adolescents. Schools provided a variety of information in class and activities in school. In addition teens may access magazines, brochures, audiotapes, videotapes, and

posters in schools or clinics. However, the main focus of these is on HIV/AIDS with fewer resources available on contraception, communication, emotions or other relationship issues (as presented earlier in this Chapter). Although contraceptive services are available, the promotion of such services is poor (UNESCO, 2001). Overall, there is information available but it does not cover all information adolescents may need. Again, as a result many adolescents search for more information from friends and other resources within and outside school.

In conclusion, sex education has been provided but the quality and amount of information varies between teachers and schools. The main focus of sex education is physiology and information on relationships is lacking. Where sex education is delivered, it tends to be for an older age group (16 and older). Many parents and teachers do not value sex education, and while Thailand offers sex education - it is not comprehensive enough to meet the needs of young people. There is more work that needs to be done to improve quality and quantity of sex education in Thailand.

Table 4.1 Examples of materials available in schools

Material	Content cover	Source	Comment
Reproductive health programme	Information about organization and activities	Thailand Planned Parenthood Association	Generally provided information about activities of organisations, only few information about about services available for adolescents
STIs and HIV	Prevention, What to do in case of having unusual symptoms, how to wear a condom	STIs and AIDS centre	Mainly information of getting STIs may increase opportunity in getting HIV, information about using a condom is clear, with pictures Include information about service locations
Sex and AIDS	Diseases and prevention	STIs and AIDS centre	Use cartoons, short phrases, covered useful information, including service locations and telephone numbers
Peer outreach for reproductive health in Thailand (PORT)	Information about project	Thailand Planned Parenthood Association	Mainly provide general information about the project, not clearly about services available
Consideration points for family's happiness	Consideration points for practicing within the family	Psychological health department	Life skills and communication within the family

4.5 Gap between policy and practice

At the time of this pilot study, then, sex education was being provided in school. However, sexual health problems in adolescents were still increasing. Apart from the issues discussed above, there were additional factors at the level of training and policy, which explained the gap between policy and practice. These are discussed below.

4.5.1 No standard and practical guideline

There is a broad explanation of what should be provided to student in a core concept manual. However, there is no standard and practical guideline for teachers of what and how information should be delivered.

Findings from reviewing the core concept manual and interviews with teachers indicated that the manual only provided a guide on what should be covered, which is not a practical help for teachers. In particular, it does not inform teachers on how to deliver potentially sensitive information in an accurate and positive manner. Teachers who do not have clear understanding about sex education cannot provide information confidentially and effectively. Teachers who lack confidence are not well placed to deliver effective school sex education, resulting in the observed variation in teaching quality. Female teacher, aged 44 said,

"I don't know what I should tell them, I just tell them what I know and what I think they should know. I lack of confident, sometimes. Sometimes I don't know what should I answer them when they ask some embarrass question."

This is not a specific problem related to Thailand; it's a problem in many countries, including UK (Fok, 2005; Milton, 2003; Smith et al., 2003; Measor, Tiffin & Miller, 2000). But for Thailand, putting sex education into practice needs intensive training to help teachers to overcome barriers related to their cultural background (Cultural barriers are discussed later in this section). It is not only a matter of getting new information, but also a matter of how to deliver sex information. Teaching and dealing about sexual issue

is not an easy task, teachers need to overcome their personal barriers as well as dealing with other people judgement.

4.5.2 Lack of support

Front line teachers lack information and training (Teachers' views of sex education are discussed in Chapter Six). Where teachers lack accurate information they remain uncertain what to teach and how to deliver information. As a result, teenagers may receive inaccurate, outdated or misleading information.

Teachers who provide sexual health information are usually staff responsible for hygiene and physical education. They are required to teach sex education as part of their job, not because it is a subject that interests them or they are good at delivering. Unsurprisingly some do better than the others. Teachers who are just given something to teach may struggle to do so effectively. Teachers in my study complained that they lack confidence in providing such education. They were not sure what they should provide and how to provide information effectively. One teacher said, "Sometimes, I was not sure that what I taught them was correct. I am not a health professional. I don't know much about sexual health."

Support from the head teacher and school is very important for effective sex education delivery. Head teachers should provide an opportunity for teachers to be trained in sexual health teaching and support their activities. Interviews with teachers indicated most front line staffs work alone, without support. They do not have a chance to discuss the sex education syllabus and some experienced negative feedback and blame from colleagues when they provided sensitive and frankly information.

Teachers who were providing sex information said they felt abandoned and lacked of confident (teachers' views are discussed in more detail in Chapter Six). More often that topic about sexuality is avoided because teachers are 'uniformly comfortable with discussions of sexuality' (Smith et al., 2003). Therefore, support from friends and colleagues are important. Working in a good environment and supporting from others

can booze front line teachers' confident and help them to overcome difficulties in providing sex education (Milton, 2003).

Not only psychological and emotional support teachers may need, teachers also need support funding for interventions and teaching tools. As known that one obstacle of sex education in Thailand is teachers are not equipped to teach sex education, or prepared to teach sex education (UNESCO, 2001). My research indicated there was less funding for sexual health projects. There was no special budget for sex education; information was provided on regular basis. When most of sexual health projects in schools focused on HIV/AIDS and budgets were cut, sex education suffered accordingly. If there is no budget, it is less opportunity for teacher to create activities or interventions to improve quality of sex education.

In addition, support from parents and community was not assisted in providing sex education. Schools, parents, and communities did not work together in providing such information. It is mainly up to school in providing information to their children. This might be another important factor of a slow progress of sex education in Thailand. Schools and teachers are reluctant to provide information because worrying about parental and community acceptance. Some of them shared their emotion during interviewing and discussed about news related to providing sex education in school. One principal said, "It's very difficult to explain to parents about sex education. They may oppose and refuse permission for the school to provide such education." Findings from parents' attitude questionnaire and focus group indicated that Thai parents are conservative about sex issues (This is discussed in Chapter Six and Seven).

4.5.3 Barriers to providing sex education

There are barriers that make sex education in Thailand a slow progress. These include culture barrier, lack of knowledge and skill of teachers and key decision makers, and politics and politicians.

Cultural barriers

According to Thai social and cultural norms, sexuality is not a topic for public discussion (MOPH & WHO, 2003). Such negative views about sex have greater repercussions across Thai culture. Traditional Thais' attitude to sex and social expectation has had an impact on Thai women life. As a female should be discreet and modest (McAndrew, 2000), Thai female is expected to be polite, quite, and submissive. Therefore, many Thai females feel embarrass to discuss with others even though they have questions or problems. This leaves the woman in a vulnerable position within relationships — lacking the skills or confidence to negotiate sexual relationships effectively.

By contrast Thai males have more opportunity to discuss about a relationship and sex more than Thai females (Charanasri et al., 2004). They may discuss about sex and relationships with friends and others more openly. However, they may not ask or discuss with others when they have sensitive questions or problems. Even though it is more acceptable for men to talk about sex, they may still have difficulty accessing information – particularly on highly personal topics.

It is a common problem the world over for men and has been discussed at length in the masculinity literature. Some boys may feel embarrassed to ask or to engage with the teaching and learning (Strange et al., 2003). Others may lack confidence to ask for advice because they have a norm of being 'a man'. Men are expected to have masculine manner and have sexual knowledge (UNESCO, 2007; Measor, Tiffin & Miller, 2000; Aggleton, Oliver & Rivers, 1998). They are expected to have a strong sexual desire, an aggressive behaviour, and many sexual partners and it is a male's responsibility knowing what to do in a sexual encounter and act like they know, even though they may have some insecurity and anxiety lie behind their behaviours (Measor, 2004). That can have a negative impact on their well-being and that of their partner.

In fact, traditional attitudes towards sex and social expectation, which are constructed by culture, have influences on male's and female's behaviours. Restraint social norms could hold back adolescents from getting into sexual information. The other way round, it seems to be a blind that block adults to discuss sexual matter with children.

Findings from teacher interviews and parent focus group indicated that parents and teachers did not feel comfortable to talk. They believed that sex was a privacy matter and it was individuals' experience. Some thought that it was immoral talking about sex and they worried about social judgement. Others thought that the children would know and learn on their own when they grow up. Most of them thought that adolescents would know when it is a time to have sex (This is discussed in Chapter Six).

Findings from adolescent focus groups indicated that adolescents could not ask about what they wanted to know (This is also discussed in relation to value and belief in Chapter Seven). Therefore, they used their imagination, asked friends, or searched information from magazines, books, or Internet instead of asking parents or teachers (Sources of information and whom adolescents discussed with are presented in Chapter Five). This raises concerns about adolescents' receiving fragmentary and inaccurate information and excluding adults in their learning.

There is a fear that young people may want to have sex because they want to experience after they have got information; whereas if they do not know any thing about it, they will not think about it. Findings indicated that parents and teachers worried that adolescents might take risk if they knew too much. They thought that knowing little was better, which contrast from adolescents' views. Some pupil participants claimed that the more talking about sex was difficult, the more adolescents wanted to find out (Participants' views of sex education are discussed in Chapter Six).

Cultural barriers have much influence on providing sex education in every step, from developing a policy to delivering sex information. A doctor, a director of a HIV/AIDS section, a sexual health expert and his assistant told the story of their experience when providing sex education to teachers in Chiang Mai. They told that teachers had negative attitudes to sex education; many of them were reluctant to discuss in a class; and some of them disturbed the class in their training.

"Once, we were training school teachers for teaching sex education, one male teacher stood up and said that he did not agree with us about teaching sex education to adolescents. He said: 'If we teach them about sex education, it seems like we tell them how to have sex, it's immoral'."

Nurse, aged 45

Attitude of head teachers and teachers in school also has influence on sex education in school. This has an effect on opportunity of coordination between school and other organisations in providing sex education in school. One health educator said,

"It depends on head teacher and teachers in each school. Head teacher or teachers who are enthusiastic and keen to give information about HIV/AIDS to their students asked us to go to school and prepared students for us. But in some schools, when we asked for giving education in their schools, they refused and said, 'There is no HIV in our students – no need to go to our school'."

Male health educator, aged 39

From the interviews, I found that there was less discussion, less information about sex education among teachers. Teachers are reluctant talking about sex education. One informant said, 'I could not talk much about sex education. Some teachers might not understand. They might view me as a lewd teacher.' In fact, a discussion about sex education is strange among teachers. Teachers who talk frankly about related topic may be strangers to their colleagues.

• Lack of knowledge and skills of teachers and key decision makers

Providing sex education in schools is a challenge for providers. Interviews indicated that teachers struggled and did not have confident in providing sex information. Even health and sanitation teacher, they may provide physiological information, which is in curriculum, but not deeper information about relationship.

From discussions with key informants from the Psychiatric Hospital, the teachers and the health educator, they complained that there is poor knowledge about the nature and purpose of sex education amongst people in general population. It would appear that many professional people share these fundamental misunderstandings.

According to Tungphisal (1999), key personnel lack the basic knowledge about sex education (cited in UNESCO, 2001). Perhaps for political reasons, although there is an abundance of information about HIV/AIDS available for teachers and health personnel

in Chiang Mai to draw upon, there is very little information available to them about sexual relationships and other broader aspects of sex education.

I found that health personnel were the key individuals who provide HIV/AIDS education in schools. They routinely provided information about the nature of HIV disease, virus transmission, the prevention, and how to live with people with HIV/AIDS. But they did not routinely provide information about sexuality, relationships or contraception. A health educator in Public Health Office said.

"Education about contraception and sexuality will be offered on an individual basis, personally and occasionally only when the students need more information. It is difficult to provide this information in general, because there are many obstacles to talking about contraception. It's unacceptable for teachers and adolescents themselves. Some health personnel feel comfortable to teach about condom use, but some don't. It depends on the health personnel themselves"

Information that health professionals provided relied upon individuals' decisions and knowledge of topics they provided. They would provide information they felt comfortable with. Personal feelings of freedom to talk and discuss issues around sex might influence the quantity and quality of sex education messages.

Politics and politicians

In Thailand, during the period when worries about HIV/AIDS were strongest (1994-1998), there was a huge support for HIV/AIDS interventions to promote prevention and raising public awareness. Many politicians actively supported HIV/AIDS campaigns. There were more activities, funds, and coordination between schools and other sectors (Carl et al., undated). Information was intensively provided in schools. For example, schools had white school project; health personnel implemented HIV/AIDS intervention in school; NGO organised youth leader camp; and more resources were distributed in schools. Even though it was mainly about HIV/AIDS, related sexual health information such as STIs and condom was also covered.

In recent years, even though HIV/AIDS is still a big sexual health problem for Thailand, it seems to have less priority than ever before. Interviews key informants indicated that budget and supports for promote HIV/AIDS prevention were reduced. Health personnel mentioned changing in HIV/AIDS policy. "We received a small number of condoms, budgets, and supports. Today, HIV is not a priority health problem. He (a director of a hospital) wants us to follow the public health policy. He said that we have to follow and work to meet aims of Ministry of Public Health. We (hospital) will be evaluated from what we have done following the policy." one female health professional said.

Findings from interviews indicated that politics and politicians had influence on sex education. Sex education policy was influenced by politics; politicians' views, attitudes, beliefs towards sex education, and their misunderstanding about sex education effected the policy planning. A doctor from a psychiatric hospital who had done many projects in HIV/AIDS and sexual health said,

"It is really hard to debate the provision of sex education in schools. There is a general reluctance in the developing of sex education strategy in our country. Politicians' personal views and attitudes towards sex education influence sex education policy."

"The strategy and policy change very often. There is a lot of uncertainty. Whenever the key administrative official, or politician who controls the ministry changes, the policy will be changed."

"They [politicians] think that sex education is education about sex. They think it is a teaching about how to have sex and how to prevent pregnancy. They said, providing sex education seems like 'showing a squirrel a way to run into a tunnel' [telling adolescents the way how to have sex]. Even educated persons have an idea like this, can you imagine about the others? How can we help our adolescents?"

Doctor, aged 44

Key informants revealed that not many politicians showed their interest or support of providing sex education in schools to the public. One female key informant told that there were discussions about sex education in the media. She mentioned, "Some politicians blamed a teacher who used VDO tape in teaching sex education. They said that it was inappropriate and unacceptable for Thai culture".

One key informant complained about reducing budgets for HIV/AIDS programme in school. He said, "After Thailand made a successful debate in reducing HIV against HIV/AIDS, government provided fewer budgets in HIV/AIDS programme. There were fewer interventions both in and outside schools. There was a lack of cooperation between organisations". In fact, when policy changed, the budget changed and a progress of sex education was interrupted. This suggests that unclear policy may have an impact on quality, quantity, and consistency of sex education in school.

Even though findings indicated that politics and politicians had influences on sex education, there was no evidence in Thailand about how politics had influence on sex education in term of specific strategy like in the USA, the UK or some countries in Europe. This suggests that more debates are needed to pursue politicians pushing sex education into a priority matter.

In this chapter, I have described the present sex education policy, available sexual health information, the context of sex education delivery, and interventions providing in schools. I also presented my assessment of existing sex education in Thailand based on findings from both phase studies. In the next chapter, I offer an assessment of adolescents' sexual health knowledge.

CHAPTER FIVE

SEXUAL HEALTH KNOWLEDGE OF TEENS

The previous chapter presented and discussed sexual health education in Thai schools, based mainly on my initial fieldwork in 2002-3. This chapter offers an assessment of Thai adolescents' sexual health knowledge based on the results of questionnaires, focus groups, and interviews undertaken in the main empirical phase of the study in 2003-4. Because of the mixed methods used in this study, the qualitative and quantitative findings are reported together to present a detailed picture of each topic. Section 5.1 presents demographic data on research participants. Section 5.2 describes available sexual health information. Section 5.3 presents adolescents' sexual health knowledge. Section 5.4 presents people whom adolescents discussed with about sex and relationship. Lastly, section 5.5 discusses adolescents and sexual health services.

5.1 Demographic data on research participants

Samples were drawn from six selected secondary schools. The characteristics of the six schools and the different samples for the questionnaire survey and focus groups that were drawn from each school are shown in Table 5.1. The main group of participants for the questionnaire study were from public and private secondary schools and about 10% of participants were from extended secondary schools: School A, B and C (Diagram 5.1). Almost half of participants were from Year 8 and Year 9; and 54% were from Year 10, Year 11, and Year 12 (Diagram 5.2).

Table 5.1 Characteristics of schools and field studies by school

	secondary-age affiliation		Ongoing sexual- health initiatives	Schoo	l population		Question	naire sample	Fo	ocus group sample(s)		
		pupils				Socioeconomic status	Gender	Age range (years)	Number (response rate)	Characteristics	Number	Characteristics
A	Government 'expanded primary'*	100	Suburban	Located in Buddhist temple area	HIV prevention project in collaboration with local NGO	Mostly poor	Mixed	6-18	53 of 55 (96%)	M and F aged 12-18 years	1 group	M "high risk" group
В	Government 'expanded primary'	200	Suburban	None	HIV prevention in collaboration with GOs and NGOs.	Mostly poor	Mixed	6-16	67 of 72 (93%)	M and F aged 12-16 years	2 groups	1 M "sporty" group, 1 mixed general group.
С	Government (municipality) expanded primary	200	Urban	Located in Buddhist temple area	HIV prevention and sex education in secondary school pilot project	Mostly poor	Mixed	6-17	96 of 96 (100%)	M and F aged 13-17 years	2 groups	1 M and 1 F general group
D	Government (district)	2000	Urban	None	HIV prevention in collaboration with GOs.	Mixed poor and middle income	Mixed	13-18	691 of 889 (78%)	M and F aged 13-21 years	2 groups	1 M and 1 F general group
Е	Government (provincial)	2300	Urban	None	HIV prevention in collaboration with GOs.	Mixed poor and middle income	Mixed	12-18	869 of 1002 (87%)	M and F aged 12-19 years	4 groups	1 mixed "high risk" group, 1 mixed "studious", 1 F and 1 M "sporty".
F	Private	1300	Urban	Supported by Protestant charity	HIV prevention in collaboration with GOs and NGOs.	Mixed poor and middle income	Mixed	6-18	525 of 623 (84%)	M and F aged 12-19 years	9 groups	1 M and 2 F general groups, 1 M "sporty", 1 mixed "beautiful" M / "charming" F, 1 mixed "studious", 1 mixed "high risk"
Total		6100								918 M, 1373 F, 10 not specified gender aged 12-18 years	185	80 M, 96 F, 9 did not specify gender aged 13-18 years

GO= government organization. NGO=non-government organization. M=male. F= female. 'Expanded primary' means that the school began as a primary school and subsequently added additional year groups to make up for limited local secondary provision. Two parent focus groups were recruited from Schools B and E; 351 parents were recruited from School F.

Diagram 5.1 Questionnaire participants by school

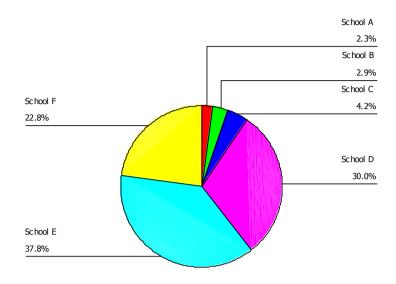
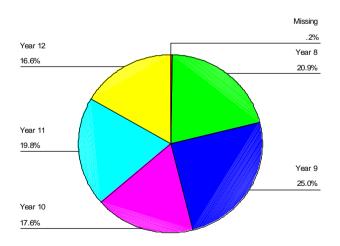


Diagram 5.2 Questionnaire participants by level of education



Overall, 2301 pupils and 351 parents completed the questionnaire (with response rates ranging from 84% to 100%). In some schools, pupils encouraged each other to complete the questionnaire in classroom settings, which explains the high response rates shown in Table 5.1, page 122; in other school where there was less discussion of the questionnaire, response rates were slightly lower (but still 84% or greater).

Pupils' knowledge questionnaires were completed by 918 male (40.1%), 1373 female (59.9%), and 10 pupils (0.4%) who did not specified gender. Participants' mean age was 15.46 years, and standard deviation was 1.54. The youngest was 12 years old; the oldest was 21 years old. There were 146 male parents (41.6%) and 205 female parents (58.4%) completed the attitude questionnaire. Most were aged 41-50 years, with a primary school education. Demographic details of the study participants are shown in Table 5.2, page 125.

There were 185 pupils and 23 parents who participated in focus group discussions. These included 80 male pupils (43.24%), 96 females (51.89%), and 9 pupils who did not identify gender (4.87%) in 20 focus groups with 8-12 pupils per group. The youngest participants in the focus groups were 13 years, and the oldest were 18 years. There were 5 male parents (21.7%) and 18 female parents (78.3%) in 2 focus groups (11-12 per group). Most were aged 31-40 years. The main religion of participants was Buddhism. Full details of demographic data on focus group participants are shown in Table 5.3, page 126.

Table 5.2 Demographic data on research participants

	Teenagers (n=2301)*	Parents (n=351)
Gender		
Male	918 (40.1%)	146 (41.6%)
Female	1373 (59.9%)	205 (58.4%)
Age (years)		
Teenagers		
12	7 (0.3%)	
13	249 (10.9%)	
14	449 (20.4%)	
15	466 (20.4%)	
16	456 (20.0%)	
17	418 (18.4%)	
≥18	231 (10.0%)	
Parents	· · ·	
20-30		8 (2.3%)
31-40		140 (39.9%)
41-50		186 (53%)
≥ 51		17 (4.8%)
Grade†/Year		· /
Teenagers		
$8 \text{ (age } \ge 12)$	482 (21%)	
$9 (age \ge 13)$	575 (25%)	
$10(age \ge 14)$	404 (17.6%)	
$11(age \ge 15)$	455 (19.8%)	
$12(age \ge 16)$	381 (16.6%)	
Parents		
Primary 1‡		61 (17.4%)
Primary 2		93 (26.5%)
Secondary 1		75 (21.4%)
Secondary 2		44 (12.5%)
Technical		25 (7.1%)
University		45 (12.8%)
Postgraduate		3 (0.9%)
Other		5 (1.4%)
Religion		<i>(11170)</i>
Buddhist	2183 (95.2%)	324 (92.3%)
Catholic	19 (0.8%)	16 (4.6%)
Protestant	73 (3.2%)	1 (0.3%)
Muslim	7 (0.3%)	10 (2.8%)
None	1 (0.0%)	0
Other	10 (0.4%)	0

^{*} Denominators vary slightly because of missing responses. †Because it is common for children to repeat school years, there is no upper age limit for any grade. ‡ Primary 1 refers to years 1-4, primary 2 to years 5-7, secondary 1 to years 1-3, and secondary 2 to years 5-6.

Table 5.3 Demographic data on focus group participants

	Teenagers (n=185)	Parents (n=23)
Gender		
Male	80 (45.5%)	5 (21.7%)
Female	96 (54.5%)	18 (78.3%)
Age (years)		
Teenagers		
13	15 (8.2%)	
14	40 (21.7%)	
15	47 (25.5%)	
16	58 (31.5%)	
17	19 (10.3%)	
18	5 (2.7%)	
Parents	, ,	
< 20		1(4.3%)
20-30		2 (8.7%)
31-40		12 (52.2%)
41-50		7 (30.4%)
≥ 51		1 (4.3%)
Grade†/Year		
Teenagers		
$8 \text{ (age } \ge 12)$	40 (21.7%)	
$9 \text{ (age } \ge 13)$	45 (24.5%)	••
$10(age \ge 14)$	53 (28.8%)	
$11(age \ge 15)$	46 (25%)	
$12(age \ge 16)$	0	
Parents		
Primary 1‡		5 (21.7%)
Primary 2		8 (34.8%)
Secondary 1		6 (26.1%)
Secondary 2		2 (8.7%)
Technical		0
University		2 (8.7%)
Postgraduate		0
Other		0
Religion		
Buddhist	197 (96.8%)	21 (91.3%)
Protestant	5 (2.7%)	2 (8.7%)
Catholic	1 (0.5%)	0

[†]Because it is common for children to repeat school years, there is no upper age limit for any grade.

[‡] Primary 1 refers to years 1-4, primary 2 to years 5-7, secondary 1 to years 1-3, and secondary 2 to years 5-6.

5.2 Available sexual health information

From reviewing the hygiene and physical education perspective and core concept manual, it stated that life and family information should be provided to students. Information about value of life and family, life skills, sexual development, sexual hygiene, sexual behaviour, relationship, and society and culture are included in life and family session (see Department of Educational Technique, Ministry of Education, 2003). In fact, sexual health information or sex education is referred to as 'life and family' in the school curriculum.

The manual stated more clearly about the sexual health information that should be provided (scope of information stated in the manual is shown in Appendix VI). It provides a wide scope of information that should be provided to students; the standards of learning and expected outcomes are set up in the manual. The manual provided opportunity of integrating information that is suitable for students, schools, and communities. Teachers and providers have to find their own ways of delivering information. They have to search for information, find methods of teaching, and find an acceptable way in delivering sex education in their community.

A range of sexual health information is available in schools, basically, in hygiene class. Apart from teaching in classes, various written documents are also available; cover different topic areas through books, leaflets, and posters. Contents covered are HIV/AIDS prevention, STIs, and available services. There are few leaflets that contain information in areas around sexual relationship, sexuality, pregnancy, and contraception and there is not much information provided. Sex education is much related to sexual health, information from health personnel can provide more information about it.

From the reviewing of audit sheets and reports from health educators, and the interviewing of health personnel at the Public Health Office and counsellors in the hospitals, the Public Health Office and the hospitals focus on providing information and interventions about sexual health problems. Topics covered are HIV/AIDS such as mode of HIV transmission, the principles of prevention, the use of condoms, STIs, and pregnancy and contraception (though it appears that this last topic is rarely and superficially covered).

From discussion with a head teacher and a former teacher, schools sought to input information from health organizations. However, information provided was various. Individual health professionals made the choice of which information to provide and in what format.

Findings from questionnaires and focus group with participants should provide a clear picture of what information was available in schools. From questionnaire study, when asked what topics adolescents recalled having received sex education on, most respondents recalled basic biology (77.75%); more than half recalled awareness of HIV/AIDS. Half of pupils recalled having information about how to act in a relationships, sexual feelings and emotions, STIs, condom, contraception, and pregnancy. Information about recalled sex education is shown in Table 5.4, page 129.

Overall female participants seemed to recall more information than male participants, whereas males were more likely to respond that they did not recall or had not been taught many sexual health topics. Females were more likely than males to recall being taught about pregnancy and having a baby, abortion, and how our bodies develop. This difference might have arisen because sex education for females is linked to informing them about menstruation, often taught in a context of fertility, meaning that topics such as pregnancy, birth, abortion, or physical development might also be taught in these lessons. Males might be excluded from classes in which menstruation is discussed, or perhaps are discouraged from paying attention to something that is constructed by teachers as a female's issue. This discrepancy could also explain why, within the qualitative data, both males and females were more likely to see negative consequences of sex as being the fault and the responsibility of a female.

Table 5.4 What participants remembered being taught in sex education classes

, willing	(%) of participants who recalled that this topic was covered in sex education class Females Males					
	Observed frequency Expected frequency				ency	
Have you heard of AIDS?						
Yes	1327 (99.0%)	1319.8	849 (97.6%)	856.2	≤0.01	
No	11 (0.8%)	12.7	10 (1.1%)	8.3		
Don't know	3 (0.2%)	8.5	11 (1.3%)	5.5		
Can people take a blood test to find out whether they have HIV?						
Yes	1313 (97.7%)	1308.7	836 (96.9%)	840.3	<0.23	
No	8 (0.6%)	11.6	11 (1.3%)	7.4	_0.23	
Don't know	23 (1.7%)	23.7	16 (1.9%)	15.3		
Can people protect themselves from HIV?						
Yes	1288 (96.1%)	1283	828 (95.2%)	833	<0.55	
No	17 (1.3%)	18.2	13 (1.5%)	11.8	_0.55	
Don't know	35 (2.6%)	38.8	29 (3.3%)	25.2		
How our bodies develop						
Yes	1125 (84.1%)	1069.9	655 (73.8%)	710.1	≤0.001	
No	94 (7%)	113	94 (10.6%)	75	_0.00	
Don't know	119 (8.9%)	115.1	139 (15.7%)	102.9		
What HIV / AIDS is						
Yes	875 (65%)	766.1	396 (44.6%)	504.9	≤0.001	
No	421 (31.3%)	503.9	415 (46.8%)	332.1		
Don't know	50 (3.7%)	75.9	76 (8.6%)	50.1		
Contraception and birth control						
Yes	848 (63%)	727.1	358 (40.4%)	478.9	≤0.00	
No	432 (32.1%)	524.5	438 (49.4%)	345.5		
Don't know	65 (4.8%)	93.4	90 (10.2%)	61.6		
Sexually transmitted infections other than HIV / AIDS						
Yes	836 (62.5%)	732.9	379 (43.1%)	482.1	≤0.00	
No	435 (32.5%)	510.9	412 (46.8%)	336.1		
Don't know	67 (5%)	94.1	89 (10.1%)	61.9		
Pregnancy and having a baby						
Yes	830 (61.9%)	698.8	331 (37.3%)	462.2	≤0.00	
No	452 (33.7%)	56.4	485 (54.7%)	373		
Don't know	59 (4.4%)	78.2	71 (8.0%)	51.8		
How to act in a relationship						
Yes	800 (59.4%)	724.2	403 (45.3%)	478.8	≤0.00	
No	394 (29.3%)	437	332 (37.3%)	289		
Don't know	152 (11.3%)	184.8	155 (17.4%)	122.2		
(Continues on next page)						

(Continue from previous page)					
How to use a condom					
Yes	747 (55.5%)	729.3	464 (52.2%)	481.7	≤0.002
No	530 (39.4%)	523.3	339 (38.1%)	345.7	_0.002
Don't know	69 (5.1%)	93.3	86 (9.7%)	61.7	
Sexual feelings and emotions					
Yes	668 (49.6%)	731.4	546 (61.5%)	482.6	≤0.001
No	473 (35.1%)	391.6	117 (19.9%)	258.4	
Don't know	205 (15.2%)	222.9	165 (18.6%)	147.1	
Being bisexual (someone who finds both men and women sexually attractive)					
Yes	612 (45.5%)	574.7	342 (38.6%)	379.3	
No	589 (43.8%)	607.2	419 (47.2%)	400.8	≤0.001
Don't know	143 (10.6%)	162.1	126 (14.2%)	106.9	
Being lesbian (women who find other women sexually attractive)					
Yes	575 (42.8%)	469	203 (22.9%)	309	≤0.001
No	670 (49.8%)	747.6	570 (64.3%)	492.4	
Don't know	100 (7.4%)	128.4	113 (12.8%)	84.6	
Being gay (men who find other men sexually attractive)					
Yes	529 (39.5%)	460.3	236 (26.6%)	304.7	≤0.001
No	707 (52.8%)	750.9	541 (61.0%)	497.1	
Don't know	104 (7.8%)	128.8	110 (12.4%)	85.2	
Abortion					
Yes	510 (37.9%)	428.3	201 (22.6%)	282.7	
No	755 (56.1%)	815.6	599 (67.5%)	538.4	≤0.001
Don't know	80 (5.9%)	101.2	88 (9.9%)	66.8	
Does a person with HIV always look unhealthy?					
Yes	481 (35.9%)	539.8	409 (47%)	350.2	≤0.001
No	335 (25%)	314.8	184 (21.1%)	204.2	
Don't know	525 (39.1%)	486.4	277 (31.8%)	315.6	
	l ' '		1 ' '		

^{*} Comparing proportion responding yes, no, or don't know between boys and girls. Percentages based on number with known responses.

Males recalled more than did females that they had been taught about sexual feelings and emotions. This topic did appear in the curriculum, but interviews with teachers suggested that it was often not taught because the teacher's lack of skills or confidence. Although males recalled being taught this information in class, they might have actually learned about feelings and emotions through the media or peers.

Although a high proportion of participants of both genders said they had heard of HIV/AIDS, more females than males recalled being taught what HIV/AIDS is, possibly

because females were more interested or concerned about the issue. Other research has shown that males may have less interest in sex education; they pay less attention to sex education programmes than do females because they think they know the information (Measor, Tiffin & Miller, 2000).

Findings from focus groups indicated that even though some adolescents recalled that they had been taught about sexuality in classes, information they had was superficial. From reviewing teaching documents, I found that there was no detail about sexuality. From teacher interviews, there was no class that talked about the topic directly. Findings indicated that limited information about sexuality was provided. This is disappointing since other research has shown that sex education is likely to have limited success if it focuses only on biological facts and negative consequences such as STIs or pregnancy without covering issues related to sexuality such as intimacy, interpersonal relationships, sexual decision making, different sexual orientations, and coercive sex (Milton, 2003; Alloway, 2000; Masters, Johnson & Kolodny, 1995).

More females recalled than did males that being taught about sexual orientation (particularly about being lesbian or gay). In a country where homosexuality is taboo, males in particular might be unwilling to reveal that they recall being taught about being gay. Evidence from teachers' interviews indicated that sexuality was not always discussed. It might be because of teachers' discomfort, a perception of moral issues, or a fear that mentioning homosexuality might lead to young people "becoming gay" (Barriers to providing sex information was described in Chapter Four).

From the questionnaire study, even though the sexuality education class was recalled less than other topics, about 25% of respondents answered that they should have fewer classes about homosexuality and bisexuality. This might be because they were only interested in heterosexual sex education. Similarly, findings from the focus groups showed that only a few participants in focus group discussions showed interest in homosexuality and bisexuality information. Those who asked questions were adolescents in the 'beautiful boys' and 'charming girls' group. However, some participants in focus groups might have wanted to ask questions about these topics, but did not because they felt inhibited.

It was possible that some adolescents who had homosexual or bisexual interests might worry about other people's views. They might feel uncomfortable to show their interests; they knew that homosexuality was not what social expected them to be. They might feel that it was a shame to like people within the same gender. One female pupil, aged 15 asked, "Is that a mistake to like person in the same gender? Is that a sign of psychoses?"

Findings from other studies suggest that information about sexuality in school is limited and adolescents who have homosexual orientation may have difficulties being themselves because they are expected to practice gender roles that meet sexual norms and social expectation (Masters, Johnson & Kolodny, 1995). Research has shown that young people who have a homosexual orientation may have difficulties in school climate permeated by homophobia and 'heterosexism' (Rivers 1996; Douglas et al., 1997). It is far more difficult for youth to ask about homosexuality given the climate they are living in – and where teachers/parents/peers often view homosexuality as a sickness or taboo. Ideally, sexuality education in school should help children to understand about the different genders and different sexual identity, which includes sexual orientation (Milton, 2003). Arguably, Thailand needs much wider political and public debates on the matter of discrimination on the basis of one's sexual orientation.

The taboo towards sexuality may also limit the opportunity for young people to get information about the biological functioning of their bodies in relation to sex and reproduction. Evidence suggests that girls worldwide are often given education on sex (particularly menstruation, pregnancy, and birth), but in many societies (including Thailand) because of unequal status, girls are unable to put this education into action, particularly in sexually coercive situations (Rivers & Aggleton, 2001). Boys are assumed to be "naturally" sexual and so might not be offered sex education, or might be expected to be less attentive to it than are girls (Aggleton, Oliver & Rivers, 1998; Measor, 2004). Additionally, boys might not be taught gender-specific issues associated with girls (such as pregnancy or menstruation), which again places more responsibility for learning about controlling sexual activity with girls.

5.3 Knowledge about sexual health

Findings showed that overall adolescents' knowledge of pregnancy, contraception, condom, HIV/AIDS, and STIs was moderate (mean = 8.74, std. deviation = 2.32, total points = 15). Their knowledge was highly variable, with a few scoring highly on all sections but most showing only a moderate or poor understanding of contraception and pregnancy prevention (mean = 3.62, std. deviation = 1.82, total points = 8). Adolescents' knowledge scores are shown in Table 5.5.

Table 5.5 Adolescents' sexual health knowledge

Knowledge (points)	N	Mean	Std. Deviation	P*
Pregnancy & contraception (8)				
Male	918	3.4	1.90	≤.001
Female	1373	3.84	1.73	
Condom (2)				
Male	918	1.47	.71	≤.001
Female	1373	1.23	.68	
HIV/AIDS (4)				
Male	918	2.69	.71	≤.001
Female	1373	2.83	.68	
STIs (1)				
Male	767	.72	.45	≤.001
Female	1207	.64	.48	
Total point =15 Male	767	8.77	2.39	
Female	1207	8.73	2.27	

Overall sexual health knowledge of both genders was not significantly different (males' mean knowledge = 8.77, females' mean knowledge = 8.73). However, females had slightly more knowledge about contraception, pregnancy prevention and HIV but slightly less knowledge about condom and STIs than males ($p \le .001$). The females answered questions correctly more than the males except questions about ejaculation, safety period, morning after pill, and condom (Table 5.6, page 134).

From participants' response to questions about Mali (female) and Somchai (male), teenagers' having a sexual relationship, even though adolescents knew that a sexual encounter could result in pregnancy, 39.7% of them did not think that Mali could get pregnant if it was her first time. Most of them (92.0%) thought that having sex during a "safety period" could prevent Mali from getting pregnant and 84.4% of them thought that 'withdrawal' could prevent Mali from getting pregnant. Even though they knew that Somchai's using a condom could prevent Mali from getting pregnant (85.6%), only 53.1% of them thought that a condom was an effective method.

Table 5.6 Percentage of adolescents who answered questions correctly by genders

Number (%) of participants who answered questions correctly							
	Females	Males	Total	p*			
1. Mali can get pregnant on the very first time that she has sexual intercourse.	882 (64.2%)	500 (54.5%)	1383 (60.3%)	≤.001			
2. Somchai can pull out of Mali before he ejaculates to prevent her getting pregnant.	204 (14.9%)	153 (16.7%)	357 (15.6%)				
3. They can avoid sex on days when pregnancy likely to occur.	93 (6.8%)	90 (9.8%)	183 (8.0%)	≤.009			
4. Mali can take a pill every day to stop her having a baby.	848 (61.8%)	465 (50.7%)	1313 (57.3%)	≤.001			
5. Mali can have an injection every 2 or every 3 months to stop her having a baby.	685 (49.9%)	405 (44.1%)	1090 (47.6%)	≤.007			
6. Somehai can put a condom on his pennies before sex to protect Mali getting pregnant.	1201 (87.5%)	759 (82.7%)	1960 (85.6%)	≤.001			
7. Mali can take a pill soon after sex to stop her getting pregnant.	426 (31.0%)	315 (34.3%)	741 (32.3%)				
8. Do you know where you could get contraceptives?	927 (67.5%)	448 (48.8%)	1375 (60.0%)	≤.001			
9. Is condom be an effective method of preventing pregnancy?	576 (42.0%)	641 (69.8%)	1217 (53.1%)	≤.001			
10. Can condom be used more than once for sex?	1140 (83.0%)	710 (77.3%)	1850 (80.8%)	≤.001			
11. Can people protect themselves from HIV?	1288 (93.8%)	828 (90.2%)	2116 (92.4%)	≤.001			
12. Is it possible to cure AIDS?	951 (69.3%)	619 (67.4%)	1570 (68.5%)				
13. Does a person with HIV always look unhealthy?	335 (24.4%)	184 (20.0%)	519 (22.7%)	≤.015			
14. Can people take a blood test to find out whether they have HIV?	1313 (95.6%)	836 (91.1%)	2149 (93.8%)	≤.001			

Table 5.7 Participants' answers about method Somchai and Mali are likely to choose

Method Somchai and Mali are likely to choose	Number of participants	Percent (%)
Condom	841	47.0
Pill	188	10.5
Injection	42	2.3
Sterilization	35	2.0
Others (mixed methods)	590	32.9
Don't know	95	5.3
Total	1791	100

Adolescents had poor understanding about getting pregnant and were likely to have taken risks. About half of them (47%) thought that Somchai would use condom and 10.5% thought that Mali would take contraceptive pills (Table 5.7). The responses suggested that adolescents had a poor understanding of contraceptive methods: 38.1% of them had never heard about methods of contraception, they did not know much about the oral contraceptive pill, injection, and the morning after pill; and only half of them knew where to get contraceptives.

Table 5.8 Sexually transmitted infections that participants had heard about

	N (n=768	Male	Fer (n=1212	male 2) %	To (n=1980	tal) %	P *
Gonorrhoea	569	74.1	924	76.2	1493	75.4	
Genital warts	108	14.1	169	13.9	277	14.0	
Syphilis	201	26.2	441	36.4	642	32.4	≤.001
Chlamydia	53	6.9	40	3.3	93	4.7	≤.001
Herpes	191	24.9	508	41.9	699	35.3	≤.001

Participants had heard about sexually transmitted infections (Table 5.8, page 135). Most of them (75.4%) had heard about gonorrhoea. About one third had heard about syphilis and herpes. Males had heard about syphilis and herpes less than females. Not many of them had heard about Chlamydia and genital warts.

Even though they had heard about STIs, they generally did not know much about the symptoms of the STIs. They answered that boys and girls would know that they had got a STI when they felt sick. They knew that people would have something abnormal (using words "not very well" or "get sick" instead of specific symptoms) but could not tell actual symptoms of the disease. Or they might be confused because the question was not clear, did not specify the name of the diseases (because it would give them answers for an earlier question). About one third of participants answered that a boy or girl would know that they had got STIs by having a physical examination or blood test; they could prevent STIs by using a condom (47.5%), avoiding having sex (4%), and having a monogamous relationship (1.8%); 22.8% thought that using combination of condom with other methods would prevent them from infection. Participants' answers about how boys and girls know if they have got STIs are presented in Table 5.9.

Table 5.9 How boys and girls know if they have got STIs

	he has g	a boy know if ot a STI? 1639)	How would a girl know she has got a STI? (n=1656)		
	Number	(%)	Number	(%)	
Get sick	489	29.9	464	28.0	
Abnormal discharge	3	0.2	10	0.6	
Blood check	240	14.6	259	15.7	
Physical exam	363	22.1	398	24.0	
Others	297	18.1	284	17.1	
Don't know	247	15.1	241	14.6	

The shortage of practical sessions, life skills training or discussion about emotional issues in sex education might probably explain participants' widespread confusion about the risks and options in the different stage of vignette scenario. For example, although most participants' questionnaire responses suggested that they knew that any sexual encounter could result in pregnancy or STI, they nevertheless felt that Mali was unlikely to get pregnant if this was her first time, Somchai was unlikely to have a STI if he did not have sex very often, and Somchai and Mali would not need a condom if they were in a "safety period" (a vague and inconsistent notion of a time in her menstrual cycle when Mali could not get pregnant) or if they used the withdrawal method or a vaginal suppository.

The knowledge discussed above did not include knowledge about relationships and sexuality. In the focus groups, most adolescents complained that they did not know how to act in a relationship. They did not have confidence about having a relationship and some worried if they should have a relationship at school age. The participants revealed that they frustrated and did not have insufficient information about how to act in a relationship, and sexuality.

Adolescents' knowledge was related to information they had got from schools. Adolescents who answered that there were classes that provided information in school answered questions in related topics correctly more than adolescents who did not recall their sex education class. Adolescents who answered that there were classes that provided information about condom, pregnancy, and HIV/AIDS answered questions about condom, pregnancy prevention, and HIV/AIDS correctly more than the others (p≤.001).

The school curriculum indicated topics that should be provided for students. Contents provided were selected to suit students' developments. One topic was spread to several parts and provided in different levels. More and deeper information was available in higher level. Hence, adolescents in higher level recalled more classes that provided sexual health information than adolescents in lower level (Table 5.10) and their knowledge score was also higher. However, they might also get information from other available sources.

Table 5.10 Percentage of pupils who recalled sex education classes by level

	Year 8	Year 9	Year 10	Year 11	Year 12	
How our bodies develop						
Yes	74.1	74.8	79.0	81.5	81.1	≤0.021
No	11.2	9.2	6.4	5.9	7.3	_0.021
Don't know	14.7	16.0	14.6	12.5	11.5	
What HIV / AIDS is						
Yes	44.0	46.8	61.9	67.0	62.2	< 0.001
No	44.0	40.8	31.2	27.5	32.0	≥0.001
Don't know	9.3	11.1	6.9	5.5	5.8	
Doll t know	9.3	11.1	0.9	3.3	3.6	
Contraception and birth control						
Yes	40.7	40.9	59.7	64.6	63.0	≤0.001
No	48.1	46.1	32.2	29.2	30.4	
Don't know	11.2	13.0	8.2	6.2	6.6	
Sexually transmitted infections other than HIV / AIDS						
Yes	42.1	44.2	59.4	65.3	58.5	≤0.001
No	46.7	41.2	31.2	28.8	34.6	
Don't know	11.2	14.6	9.4	5.9	6.8	
Pregnancy and having a baby						
Yes	37.3	40.2	58.2	64.4	58.8	≤0.001
No	52.9	48.9	34.7	29.9	33.9	
Don't know	9.8	11.0	7.2	5.7	7.3	
How to act in a relationship						
Yes	42.9	44.9	59.9	60.9	58.3	≤0.001
No	36.7	38.3	25.5	25.3	29.4	
Don't know	20.3	16.9	14.6	13.8	12.3	
How to use a condom						
Yes	38.4	42.6	58.2	67.5	62.5	≤0.001
No	50.8	43.3	34.2	27.9	30.7	
Don't know	10.8	14.1	7.7	4.6	6.8	
Sexual feelings and emotions						
Yes	39.8	49.9	63.1	58.9	56.4	≤0.001
No	40.7	30.3	20.8	22.9	24.9	_5.551
Don't know	19.5	19.8	16.1	18.2	18.6	
Being bisexual (someone who finds both men and women sexually attractive)						
Yes	34.6	35.7	49.5	47.0	44.6	≤0.001
No	51.2	46.1	37.6		38.6	_0.001
Don't know	14.1	18.3	12.9	44.2	16.8	
		10.0	12.7	8.8	10.0	
(Continues on next page)				1		

(Continue from previous page)						
Being lesbian (women who find other women sexually attractive)						
Yes	24.5	27.1	49.0	35.8	49.1	
No	63.9	56.9	41.3	55.8	38.3	≤0.001
Don't know	11.6	16.0	9.7	8.4	12.6	
Being gay (men who find other men						
sexually attractive)	27.2	25.2	47.0	33.2	39.1	≤0.001
Yes	61.0	58.6	43.1	57.1	49.3	
No	11.8	16.2	9.9	9.7	11.5	
Don't know						
Abortion						
Yes	18.0	20.0	35.4	46.8	40.2	≤0.001
No	72.2	66.6	55.0	46.6	51.2	
Don't know	9.8	13.4	9.7	6.6	8.7	

^{*} Comparing proportion responding yes, no, or don't know between schools. Percentages based on number with known responses.

Year 8 = average age is 14

Year 9 = average age is 15

Year 10 = average age is 16

Year 11 = average age is 17

Year 12 = average age is 18

Findings indicated that more information was available around Year 10 -12 (age 16-18). Findings from the teacher focus group and interviews indicated that there were adolescents who faced problems dealing with their emotions and feelings. Similar to others (Riewtong, 2003; Allen et al., 2003; Kittisuksatit, 2002), some adolescents involved in sexual relationship and got pregnant at the younger age. These findings suggest an important of early sex education (Hassan & Creatsas, 2000).

From the core concept manual, students should receive sex education starting from Year 1 (see Department of Education Technique, Ministry of Education, 2003). But when I looked through the scope of information, some issues are offered later than this. For example, information about safer sex, consequence of having sex, and family life planning is provided to students in Year 12. Together with findings, which indicated that participants did not get most of sexuality and sexual relationship information and that some adolescents involved in a sexual relationship at the younger age, it would be therefore a matter of what, when, and how information was delivered.

Effective sex education is sex education that based on evidence (Connell, 2005). Therefore, one possible reason why existing sex education in Thailand is not effective is,

it is not based on evidence - in term of adolescents' needs and situations. Therefore, sex education in the curriculum needs to be reviewed, reformed, and reassured that it reaches students. Again, as I did not aim to evaluate the curriculum specifically, I could only provide overall picture from outside views, more specific study is needed.

Findings from different schools might provide some answers about what could have influences on sex education. Next, I present adolescents' sexual health knowledge scores and sex education compare between studied schools.

Adolescents' sexual health knowledge varied somewhat between schools (Table 5.11). Adolescents from the private school (F) and the provincial government school (E) had higher score than adolescents from expanded government secondary schools (A, B & C) and district government secondary school (D).

Table 5.11 Adolescents' sexual health knowledge by schools

Schools	Mean	Std. Deviation
A	7.72	2.08
В	8.42	2.67
С	7.41	1.94
D	8.54	2.39
E	8.88	2.24
F	9.18	2.25
Total	8.74	2.32

Adolescents from School D, E & F had slightly higher knowledge score than adolescents from School A, B & C. Characteristic of the two groups of schools: size and operative systems were different. School D, E & F, which are bigger schools and provided higher secondary school years (until Year 12), recalled sex education in topics such as having a baby, relationship, sexual feelings and emotions more than adolescents from School A & B except school C (Table 5.12).

Table 5.12 Adolescents' sex education recall by school

	Percentage of	pupils who re	called that th	is topic was co	overed in sex	education clas	ses P*
	School A	School B	School C	School D	School E	School F	
How our bodies develop							
Yes	66.0	73.1	83.3	73.2	83.0	75.8	≤0.001
No	18.9	10.4	10.4	10.3	5.9	7.4	
Don't know	15.1	16.4	6.3	16.5	11.2	16.8	
What HIV / AIDS is							
Yes	35.8	37.3	61.5	47.9	67.5	48.6	≤0.001
No	52.8	56.7	36.5	43.0	26.2	40.8	
Don't know	11.3	6.0	2.1	9.1	6.2	10.7	
Contraception and birth control							
Yes	26.4	38.8	47.9	44.1	64.9	48.4	≤0.001
No	60.4	53.7	42.7	45.0	27.0	42.1	
Don't know	13.2	7.5	9.4	10.9	8.1	9.5	
Sexually transmitted infections other than HIV / AIDS							
Yes	39.6	32.8	61.5	45.6	64.4	46.3	<0.001
No	49.1	56.7	33.3	42.8	27.5	41.9	≤0.001
Don't know	11.3	10.4	5.2	11.6	8.1	11.8	
Pregnancy and having a baby							
Yes	30.2	26.9	51.0	45.6	60.5	46.1	≤0.001
No	62.3	65.7	42.7	44.9	31.8	45.1	
Don't know	7.5	7.5	6.3	9.6	7.7	8.8	
How to act in a relationship							
Yes	20.8	32.8	53.1	45.4	63.1	49.9	≤0.001
No	60.4	41.8	34.4	37.5	24.4	31.2	
Don't know	18.9	25.4	12.5	17.1	12.5	18.9	
How to use a condom							
Yes	45.3	37.3	52.1	43.6	61.8	52.6	≤0.001
No	41.5	49.3	41.7	45.6	31.1	37.3	
Don't know	13.2	13.4	6.3	10.9	7.1	10.1	
Sexual feelings and emotions							
Yes	43.4	32.8	59.4	50.2	54.7	56.2	≤0.001
No	34.0	44.8	30.2	31.3	27.5	23.2	
Don't know	22.6	22.4	10.4	18.5	17.8	20.6	
Being bisexual (someone who finds both men and women sexually attractive)							
Yes	39.6	31.3	46.9	35.2	47.9	40.2	
No	45.3	52.2	45.8	49.8	38.1	45.0	≤0.001
Don't know	15.1	16.4	7.3	15.1	14.0	14.9	
Being lesbian (women who find other women sexually attractive)							
Yes	30.2	28.4	25.0	26.3	45.2	28.2	≤0.001
No	56.6	61.2	62.5	61.8	43.4	59.0	_0.001
Don't know (Continues on next page)	13.2	10.4	12.5	11.9	11.4	12.8	
Don't know (Continues on next page)	13.2	10.4	14.3	11.9	11.4	12.0	

(Continue from previous page)							
Being gay (men who find other men sexually attractive)							
Yes	22.6	31.3	26.0	26.3	42.2	30.5	≤0.001
No	62.3	53.7	63.5	61.5	46.1	57.0	
Don't know	15.1	14.9	10.4	12.2	11.6	12.6	
Abortion							
Yes	18.9	13.4	16.7	23.3	42.1	28.6	≤0.001
No	69.8	80.6	78.1	66.1	48.3	60.8	
Don't know	11.3	6.0	5.2	10.6	9.6	10.7	

^{*} Comparing proportion responding yes, no, or don't know between schools. Percentages based on number with known responses.

Some schools provided sexual health information in classes more than the others (assumed from what participants recalled). Among the expanded secondary schools, School C provided sex education classes more than other expanded secondary schools (School A & B). However, adolescents in School C had less knowledge score than adolescents from other schools. School E provided sex education classes more than School F but adolescents in School E had less knowledge score than adolescents from School F. This suggests that there are other influences apart from education in classes that have an impact on adolescents' knowledge.

Apart from information provided by schools, schools might seek help from other organizations to provide information for their students. Some schools cooperated with other organizations doing special projects, but others did not. In other words, some schools were more active than the others. Students in one school might have an opportunity to get information more than the others. The more activities in schools, the more information students could receive.

There were different environments in each school. It was obvious that socio-economic differences of students between schools were related to size of schools (see characteristics of studied schools in Table 5.1, page 122). Interestingly, activities in schools and teachers' personality seemed to have much influence on information adolescents might have.

Activities, support, and teachers' personalities in schools were different (Table 5.13). Relationships between teachers and adolescents might relate to adolescents' knowledge. I observed that conveying information and support were increasing in School B & F and

adolescents' knowledge scores in these two schools were higher in comparison with adolescents in schools that had similar characteristics: School A, B & C - small, expanded secondary schools, School D, E & F- big, full secondary school.

Table 5.13 School environments and activities in schools

School	Socio-economic of students	Environments and activities
A	Mostly poor	HIV/AIDS intervention by a NGO, good teacher-students relationship
В	Mostly poor	Active teacher provided special activities outside classes, closed teacher-students relationship
С	Mostly poor	Principal's support, active teacher, HIV/AIDS prevention activity in school
D	Mixed poor and middle income	No extra or special activity
Е	Mixed poor and middle income	Teacher supported in a club, HIV/AIDS prevention activity in school, sex education programme in cooperation with NGO & other GO
F	Mixed poor and middle income	Principal's support, open minded principal, close teacher- students relationship, sex education programme in cooperation with NGO

It appeared that sex education interventions in schools were much about HIV/AIDS. It was because schools received a small budget to do HIV/AIDS intervention; they could seek help from health personnel in the area to provide information in schools or did intervention in schools themselves as School C and E did HIV/AIDS information boards for a week during the period of study. Other schools might have interventions (as teachers said in interviews) but not in the period of my study; or I did not have an opportunity to observe. Findings suggested that HIV/AIDS was of greater concern than other sex information topics.

In fact, even when information was provided within an HIV context, the focus was on health/disease rather than about managing relationships, confidence, communication and prevention in a holistic context. Therefore, the information they received might not have been the information they wanted or needed (Information they wanted will be discussed in Chapter Six).

Even though all schools reported offering sex education interventions in cooperation with other organizations, only some schools had such intervention during study period. School A had a NGO (NGO-1) provide HIV/AIDS information in a special "moral week". From interviews with key informants in primary phase and interviews principal and teachers in the main study phase, information about sex and relationship, pregnancy, and contraception was provided in School E & F by another NGO (NGO-2) and there were NGO's volunteers providing information and supports (condom, contraceptives, and referring) in ongoing sex education programme in these schools.

I had an opportunity to observe a youth leader camp, organized by NGO that provided sex education programme, outside school. It was about HIV/AIDS, not about sexual relationships, pregnancy, or contraceptives. There was no other intervention in my main study period; therefore I could not obtain a full picture of what the NGO provided in their wider sex education programme.

Even though some adolescents revealed that they wanted more information, others thought that they had too much information (but not about practical things). About one third of respondents responded that the number of classes was about right in almost all topics. However, questions did not ask for details of what they had been taught. Some of them wanted more classes, but others did not.

There were many resources that adolescents could get sexual health information from. From responses questions about Somchai and Mali, people whom Somchai and Mali would go for information varied by the topics concerned. Parents, friends and sister were the main resource for body change; health personnel, teachers, book and magazine, including mother were the main resources for information about pregnancy, and friends, parents, brother or sister were the main resources for information about how to act in a relationship (Table 5.14).

Table 5.14 The main resource of information

Resources (%)	First Highest	Second highest	Third highest
Topics			
Body changes			
Somchai would go to	Father (57.25%)	Friend (44.5%)	Mother (34.1%)
Mali would go to	Mother (71.8%)	Sister (47.5%)	Friends (45.9%)
Pregnancy			
Somehai would go to	Doctor/Nurse (57.6%)	Teacher (56.4%)	Book/magazine (35.3%)
Mali would go to	Doctor/Nurse (55.4%)	Teachers (53.8%)	Mother (42.6%)
How to act in a relationship			
Somchai would go to	Friends (49.5%)	Father (41.4%)	Brother (38.7%)
Mali would go to	Friends (47.4%)	Mother (47.0%)	Sister (43.5%)

Adolescents answered that parents who had the same gender as Somchai or Mali were people whom he or she would go to for information. They expected that Mali would go for information to her mother or sister while Somchai would go to ask his father or brother. Somchai and Mali might go for information about pregnancy from health personnel and teachers. Health personnel and teachers were professional and experienced people. However, they might feel more comfortable to get information from books and magazines. Half of adolescents ranked friends as a first highest resource that Somchai and Mali would go for information about how to act in a relationship.

In the next section, I will present findings from a similar question which asked about participants themselves, not projecting to Somchai and Mali.

5.4 Whom adolescents discussed with about sex and relationships

The percentage of adolescents who answered that they discussed with friends was much higher than when they answered about Somchai and Mali. The responses showed that most of them (86.5%) discussed with their friends who were the same age while about half of them answered that Somchai and Mali would go to friends. In addition, 42.4% discussed with older friends and 34.4% discussed with boyfriend or girl friend. Friends were adolescents' most preferable resources.

Figure 5.1 To whom did participants talk to about sex?

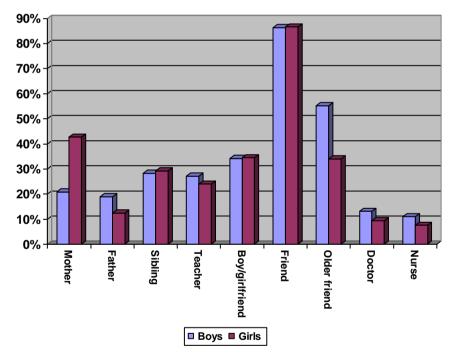


Figure 5.1 showed the difference between two genders in discussion about sex and relationships with parents, older friends, doctors and nurses ($p \le .001 - \le .006$). Males discussed with father, older friends, doctor, and nurse more than females. Females discussed with mother more than males. They might feel more comfortable to talk with people in same gender because of more understanding and less worrying about embarrassment. Similar to Measor (2004), both boys and girls emphasized the

importance of friends in relation to information about sex, but the girls also noted the significance of their families with the same gender.

Findings indicated that adolescents would go for information from resources they preferred rather than seeking information from accurate resource. This suggests that sex education can be improved by providing information through peers, parents, and siblings (Walker, 2004; Morgan, Robbins & Tripp, 2004; Strange et al., 2003).

Participants in my study were highly unlikely to seek conversations about sex and relationships with parents, older friends, older brothers or sisters, teachers, doctors or nurses. This could be due to fear of punishment and respect for authority, or simply reflect a lack of access to services (The norm of punishment is discussed in Chapter Seven; adolescents and sexual health services is discussed in the next section). Findings from pupils' and parents' focus groups indicated that parents rarely seek opportunities to discuss sex with their children. Other research has shown that Thai parents do not discuss sex with their children, although Thai mothers may prepare their daughters for menstruation (Duangjan, 2004).

Adolescents in the 15-17 age group discussed with others more than other age groups. They discussed with father, boyfriend or girlfriend, friends of the same age, and health personnel (p≤.001-.024) more than younger age group. This could be because of their physiological and psychological factors; they might have a relationship; or they might want information only.

5.5 Adolescents and sexual health services

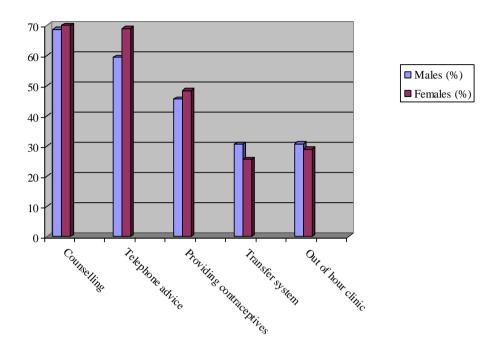
Adolescents did not have much information about available sexual health services. About one third did know where these were (males did not know more than females, $p \le .025$), and what services they provide for adolescents. Some did not think that there were any services for adolescents (15.5% of males, 8.0% of females, $p \le .001$). Almost 40% of them worried about judgement from others (females more than males, $p \le .048$), about 20% replied that it was difficult to get to the services (males more than female,

 $p\leq.001$) and 36.2% did not sure about difficulties of using the services. What they thought about sexual health services are shown in Table 5.15.

Table 5.15 Adolescents' answers about sexual health services

	Number (%) of pupils		P*
	Female	Male	
	(n=1321)	(n=851)	
I don't know where they are.			
Yes	421 (31.9%)	317 (37.3%)	<.025
No (as knowing)	492 (37.2%)	280 (32.9%)	≥.023
Don't know/ not sure	408 (30.9%)	254 (29.8%)	
I don't know what services they provide for adolescents.			
Yes	458 (34.7%)	326 (38.3%)	
No (as knowing)	469 (35.5%)	265 (31.1%)	
Don't know/ not sure	393 (29.8%)	260 (30.6%)	
They do not have services for adolescents.			
Yes	105 (8.0%)	131 (15.5%)	
No (as having)	691 (52.5%)	408 (48.4%)	≤.001
Don't know/ not sure	519 (39.5%)	304 (36.1%)	
I worry people who work there will judge me.			
Yes	519 (39.5%)	308 (36.2%)	
No	300 (22.8%)	233 (27.4%)	≤.048
Don't know/ not sure	496 (37.7%)	310 (36.4%)	
I don't think that they are very useful.			
Yes	302 (23.0%)	279 (32.9%)	
No (as thinking –useful)	605 (46.1%)	321 (37.8%)	≤.001
Don't know/ not sure	406 (30.9%)	249 (29.3%)	
It is difficult to get to them.			
Yes	318 (24.4%)	245 (28.9%)	Z 001
No	514 (39.3%)	299 (35.2%)	≤.001
Don't know/ not sure	475 (36.3%)	305 (35.9%)	

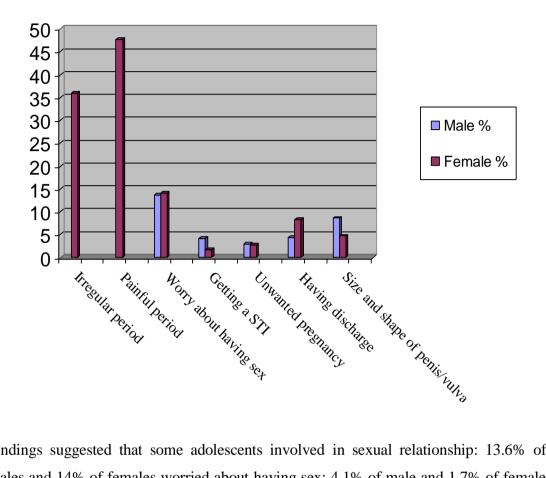
Figure 5.2 Types of services that adolescents would prefer to have for sexual health



Similar to findings by others (Ruangyuttikarn et al., 2004; Suparb, Srisorachartara & Sunthawaja, 1996), participants in my study would prefer to have counselling services, telephone services, contraceptive services, an out of hours clinic, and transfer service (Figure 5.2). They wanted to have special services that are easy for them to access. Females wanted telephone advice more than males (p≤.001). They might need more information, wanted to discuss their problems privately, or they might feel embarrassed and did not want to meet personnel face by face. Evidence from other research has shown that visibility and attitudes of stigma affect the behaviour of adolescents in using sexual health services (Craig & Stanley, 2008; Ruangyuttikarn et al., 2004).

Not many adolescents used the existing sexual health services. Even though participants answered that people who got STIs could seek help from hospital (90.4%) or private clinic (64.1%), some of them (8.2%) would suggest self-treatment by buying medicines from pharmacy to their friends.

Figure 5.3 Adolescents' sexual health problems



Findings suggested that some adolescents involved in sexual relationship: 13.6% of males and 14% of females worried about having sex; 4.1% of male and 1.7% of female experienced having a STI; 3% of males had girlfriend who had unwanted pregnancy; and 2.7% of females had had an unwanted pregnancy (Figure 5.3).

They had some sexual health problems. Most of them had problems that normally occur in their age such as painful period or irregular period, worrying about having sex, or the size and shape of sexual organ. They might need information but did not think that they should go to see health personnel. They went to see a doctor when they had general sickness such as fever (52.9%) and other health problems, rather than sexual health problems (0.8%). This could be because they did not have severe sexual health problems or they had problems but did not seek help.

Findings suggested that services did not reach adolescents. There were sexual health services available in local hospital; family planning services and counselling were available, generally for adults (MOPH & WHO, 2003). There were few sexual health

services, operated by NGOs in the city and these had costs. Limited of information about services, taboo and cost of services might be a cause of low access. Contraceptive services, out of hours clinic, including counselling and telephone advice were not available in all hospitals in local area. All this suggests that making more services available and easy for adolescents to access is necessary. My findings suggest that adolescents preferred a one-stop service including both counselling and medical services embracing them with empathy, forgiveness and positive attitudes (Ruangyuttikarn et al., 2004).

In this chapter, I presented adolescents' knowledge of sexual health, what they recalled about sex education in school, including what they knew and thought about services. In the next chapter, I will present my findings on what do adolescents, parents and teachers want from sex education.

CHAPTER SIX

WHAT DO THAI ADOLESCENTS WANT

FROM SEX EDUCATION?

Previous chapters have indicated that sex education was provided in schools (to a greater or lesser extent) and adolescents had some knowledge about sex and relationships, however, they lack of skills and wanted practical information. Therefore, it is important to know their views and take their suggestions into account. Chapter Six discusses what adolescents in my study wanted from sex education. It also includes parents', teachers' and policy makers' views of sex education. Section 6.1 describes adolescents' views of sex education, information they want; and the methods by which they want to receive information. Section 6.2 presents parents' views of sex education. Section 6.3 discusses teachers' views of sex education. And lastly, section 6.4 presents policy makers' attitudes and opinions.

What participants thought about sexual health education

In Thai society, sexual health education is a topic that invites many different reactions. Some people want to discuss and keen to know about, but others do not. It can be a start of gossip about a person, a teacher in particular, who teaches about this topic. Many adolescents wanted to have sex education provided in school but others were unsure. This chapter discusses the views participants in my research had about school sexual health education.

6.1 Adolescents' views of sex education

Overall, adolescents wanted sexual health information. However, some liked what schools provided, but others disliked it. Their views of sex education provided in school are presented in Table 6.1.

Table 6.1 Participants' views of sexual health education classes

	Number (%	6) of participants	p*
	Female	Male	
	(n=1343)	(n=888)	
How our bodies develop			
About right	558 (41.6%)	276 (31.2%)	≤0.001
Should have more classes	288 (21.5%)	184 (20.8%)	
Should have fewer classes	328 (24.5%)	213 (24.1%)	
Shouldn't have classes	43 (3.2%)	60 (6.8%)	
Don't know/ No idea	124 (9.2%)	151 (17.1%)	
HIV / AIDS			
About right	475 (35.5%)	193 (21.9%)	≤0.001
Should have more classes	304 (22.7%)	241 (27.4%)	
Should have fewer classes	339 (25.3%)	154 (17.5%)	
Shouldn't have classes	49 (3.7%)	67 (7.6%)	
Don't know/ No idea	172 (12.8%)	225 (25.6%)	
Contraception and birth control			
About right	461 (34.3%)	219 (24.9%)	≤0.001
Should have more classes	241 (17.9%)	163 (18.6%)	
Should have fewer classes	395 (29.4%)	203 (23.1%)	
Shouldn't have classes	48 (3.6%)	68 (7.7%)	
Don't know/ No idea	198 (14.7%)	225 (25.6%)	
Sexually transmitted infections other than HIV / AIDS			
About right	486 (36.3%)	195 (22.3%)	≤0.001
Should have more classes	, , , ,	, , ,	≥0.001
Should have fewer classes	281 (21.0%) 347 (25.9%)	192 (21.9%)	
Shouldn't have classes	38 (2.8%)	204 (23.3%) 71 (8.1%)	
Don't know/ No idea	186 (13.9%)	213 (24.3%)	
Pregnancy and having a baby			
About right	490 (36.5%)	224 (25.6%)	≤0.001
Should have more classes	201 (15.0%)	132 (15.1%)	
Should have fewer classes	416 (36.5%)	194 (22.2%)	
Shouldn't have classes	56 (4.2%)	84 (9.6%)	
Don't know/ No idea	179 (13.3%)	241 (27.5%)	
(Continue to next page)			

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How to act in a relationship			
About right	444 (33.1%)	225 (25.3%)	≤0.001
Should have more classes	192 (14.3%)	177 (19.9%)	
Should have fewer classes	372 (27.7%)	181 (20.4%)	
Shouldn't have classes	106 (7.9%)	80 (9.0%)	
Don't know/ No idea	229 (17.1%)	225 (25.3%)	
How to use a condom			
About right	503 (37.5%)	223 (25.3%)	≤0.001
Should have more classes	197 (14.7%)	163 (18.5%)	
Should have fewer classes	354 (26.4%)	208 (23.6%)	
Shouldn't have classes	77 (5.7%)	85 (9.6%)	
Don't know/ No idea	211 (15.7%)	202 (22.9%)	
Sexual feelings and emotions			
About right	438 (32.6%)	233 (26.3%)	≤0.008
Should have more classes	129 (9.6%)	111 (12.5%)	
Should have fewer classes	321 (23.9%)	214 (24.2%)	
Shouldn't have classes	171 (12.7%)	134 (15.1%)	
Don't know/ No idea	284 (21.1%)	193 (21.8%)	
Being bisexual (someone who finds both men and women sexually attractive)			
About right	350 (26.1%)	171 (19.4%)	≤0.001
Should have more classes	194 (14.4%)	145 (16.4%)	
Should have fewer classes	379 (28.2%)	179 (20.3%)	
Shouldn't have classes	150 (11.2%)	147 (16.7%)	
Don't know/ No idea	279 (20.1%)	240 (27.2%)	
Being lesbian (women who find other women sexually attractive)			
About right	224 (24 00/)	169 (10 00/)	<0.001
Should have more classes	334 (24.9%)	168 (19.0%)	≤0.001
Should have fewer classes	165 (12.3%)	115 (13.0%)	
Shouldn't have classes	395 (29.4%)	139 (15.8%)	
Don't know/ No idea	175 (13.0%) 274 (20.4%)	152 (17.2%) 308 (34.9%)	
Paing gay (man who find other man carnelly	274 (20.470)	300 (34.770)	
Being gay (men who find other men sexually attractive)			
About right	320 (23.9%)	169 (19.2%)	≤0.001
Should have more classes	160 (11.9%)	117 (13.3%)	
Should have fewer classes	403 (30.1%)	146 (16.6%)	
Shouldn't have classes	174 (13.0%)	152 (17.3%)	
Don't know/ No idea	282 (21.1%)	296 (33.6%)	
Abortion			
About right	351 (26.2%)	173 (19.6%)	≤0.001
Should have more classes	210 (15.6%)	133 (15.1%)	
Should have fewer classes	330 (24.6%)	150 (17.0%)	
Shouldn't have classes	184 (13.7%)	148 (16.8%)	
		•	i

^{*} Comparing proportion responding "about right, should have more classes, shouldn't have classes, should have less classes, and don't know / no idea" between boys and girls. Percentages based on number with known responses.

The findings above suggest that participants liked most of the sexual health education provided. However, they seemed to have less interest in information about sexuality (homosexual and bisexual), sexual feelings and emotion, and abortion. More than half of pupil participants thought that number of classes that provided sexual health information were about right and some thought there should be more classes in most topics; about thirty percents of them thought that there should not have classes about sexuality and abortion.

From the focus groups, twenty-nine participants revealed that information provided was not enough and superficial.

"I want teachers to talk more about sex, normally they do not. Not many teachers want to teach about this."

Female pupil, aged 16

"There are a few classes talking about sexual relationships but not much detail."

Female pupil, aged 16

Females seemed to have more interest in sexual health education than males. The females might perceive and be aware of risks. Other authors have commented that information provided by a school should increase the opportunity for getting information, especially for females who may have opportunity of getting sexual health information otherwise (Charanasri, et. al., 2004; Rivers & Aggleton, 2001).

From the focus groups, participants agreed that it was good that the school provided sex education. However, three participants mentioned sex education had both positive and negative impacts. Information was useful as they might use it for prevention diseases. However, they felt it could encourage adolescents to experiment about sex.

"Sex education is OK. But there are both points: good and bad points. The good point is in situation that there may have sex, we know preventive techniques. If we have not learnt about it, we shall not know. The bad point is some teenagers may want to have experiment of having sex."

Female pupil, aged 15

Six participants mentioned the teacher's gender and personality. They felt uncomfortable when teachers were the opposite gender. In particular it was embarrassing for female pupils to ask questions of male teachers.

The personality of teachers played a part. One female, aged 13 said that her teacher was a big, noisy, serious and unfriendly man who she was afraid of. "I could not look at his face, how I could ask him a question." She said. Even though teacher's personality was discussed among few participants from one school, it could be an example of what participants disliked in sex education.

Fifteen participants felt that teachers might look them down on if they asked some questions (such as what should they do if they wanted to have sex, how could they know that their boyfriends wanted sex – see more about questions asked from Table 6.4, page 161). They might be blamed as rude, badly behaved, and risk-takers. Teachers would think that they were a 'bad student' if they showed their interests in information about sex. "I cannot ask my teacher. If I asked her what feeling of having sex is like, she will hit my head and shout at me" – one male pupil aged 15 said. Interestingly teachers also stated they felt if they talked about sex-related issues they may be judged in a similar way by the wider community. This problem was discussed Chapter Three.

Sexual health information is important but how to get the information is also important. Findings from focus groups indicated that adolescents wanted information but they were not sure if they should ask for it. They also could not guarantee they would get answers if they asked questions. More often that information they got was not information they wanted. They disliked vague information and barriers to getting information from teachers and parents. The following section describes what Thai teenagers in my study wanted from sex education.

6.1.1 What information did adolescents want?

There is evidence that even though sex education has been provided, consequences of adolescents' sexual relationship are increasing (This was discussed in Chapter Two). It

might be because adults, not adolescents, set sex education policy and curriculum – they decide what sex education should be and what is 'effective' sex education. Researches suggest that school sex education can fail if it does not provide information adolescents want and not meet adolescents' aims (Allen, 2005; Measor, Tiffin & Miller, 2000). Similar to Elliott (2003), even though most adolescents in my study liked most aspects of sex education, findings indicated that the information they had was not what they really wanted to know.

Responses to focus groups and questionnaires indicated that participants had varying information needs. From questionnaire study, 12.1% of participants revealed that they wanted information about sex, 8.0% wanted information about relationships, 6.7% wanted to know more about body changes. Information they wanted to know and whom they wanted to get information from is presented in Table 6.2.

Table 6.2 Information needs

Topics	Number (%) (N=2301)	First three groups whom they would like to get information from
Relationship	184 (8.0%)	Other 32.4%, health personnel 14.4%, parent 13.8%
Sex	278 (12.1%)	Other 29.9%, health personnel 27.4%, teacher 14.9% (parent 2.1%)
Birth control	98 (4.3%)	Health personnel 54.1%, teacher 15.3%, other 11.2% (parent 2.0%)
Prevention	79 (3.4%)	Health personnel 54.4%, teacher 20.3%, other 11.4% (parent 3.8%)
Body changes	155 (6.7%)	Health personnel 37.2%, teacher 23.7%, other 17.3% (parent 4.5%)
Baby born	102 (4.4%)	Health personnel 52.9%, teacher 18.6%, other 12.7% (parent 2.9%)
Abortion	90 (3.9%)	Health personnel 53.3%, teacher 13.3%, other 11.1% (parent 4.4%)
Diseases	135 (5.9%)	Health personnel 51.9%, teacher 17.8%, other 11.9% (parent 2.2%)
Sexuality	98 (4.3%)	Other 33.7%, health personnel 31.6%, teacher 12.2% (parent 2.0%)

It was clear that adolescents wanted information from health personnel. They expected that health personnel could give them answers that they could not get from teachers. They believed that health personnel had knowledge. Health personnel could provide good explanation and give them frankly and clearly information. Some mentioned that they felt more comfortable asking health personnel some questions than asking teachers or parents. "If I asked a teacher or my mom about how to have sex, or how to invite a girl to have sex with me, I might be beaten by them. They would shout at me, definitely," a male pupil aged 15 said. Participants thought that health personnel were professional: "Health personnel have knowledge. They may view sexual matter as a normal matter. They may understand and will not blame us if asking them such questions."

There were some differences between genders about whom they wanted to get information from in some topics ($p \le .003$ -.03). Males wanted to know about how a baby is born, abortion, or disease from health personnel, teachers, and parents while females did not want such information from parents. One female pupil aged 16 years said, "In case of getting pregnant, what should we do? Where can we get a safety service to take a foetus out without the recognition of the parents or the teachers?" The females might worry about judgement and punishment from parents and school. Findings from interviews and focus groups (teens, teachers, and parents) indicated that adolescents who got pregnant had to drop out from schools. And that is their main concern. Imagine the difficulty teenage girls will have when they get involved in a relationship, with limited ability to negotiate the male to use a condom, and they have to take all responsibility for consequences of a sexual relationship without support from parents and schools.

Adolescents at a younger age (<14 years) wanted information about sex, birth control, body changes, and sexuality from teachers or parents while the older pupils (aged 15-16 and 17-18 years) preferred to get information from health personnel than parents or teachers ($p \le .001-.028$). One female pupil aged 16 talked about Mali (in story vignette) that "Mali didn't know whom to consult, she couldn't talk with parents. If she talked to her dad, she would have a big problem." The older age group might want information from professional because they did not have to worry about punishment (see beliefs about parental punishment in section 7.1.2, page 210).

Findings suggested that adolescents wanted information from people whom they thought have the knowledge. However, people whom adolescents would go for information might not be the same people whom they really wanted information from (People whom adolescents discussed about sex and relationship with was presented in Chapter Five). There were barriers getting information such as social values of adolescents and/or teachers was mentioned earlier in adolescents' views and also presented in Chapter Four.

• Information about sex and relationships

Even though 13.9% of participants from the questionnaire study answered there should not have classes about sexual feelings and emotion, 24.05% answered there should have fewer classes (Table 6.1, page 153), participants from focus groups acted differently. About 70% of participants in focus groups showed their interests about sex and relationship. They had wide discussions on various topics related to sex that could be grouped into three main topics. What they wanted to know about sex is presented in Table 6.3.

Table 6.3 What did participants want to know about sex?

	Female Number (%)	Male Number (%)	Total (n=129)
What would actually happen if somebody wants to have sex with him or her?	36 (53.7%)	38 (61.3%)	74 (57.4%)
What should they do in the situation that they might have sex?	25 (37.3%)	17 (27.4%)	42 (32.6%)
How could they deal with their feelings?	6 (9.0%)	7 (11.3%)	13 (10.1%)

Points of interest between the males and the females were slightly different even though the topics of interest were similar. The males showed their interests about what would actually happen, what was it like, what to do in having sex, how to control their sexual feelings, including how to control over the female feelings. It reflected a gendered value of the male taking control over the female in a sexual relationship. While the females wanted to know how they could know when the male wanted to have sex with her and what should they do. They wanted to know about managing desire when being with opposite sex including how to negotiate with the male when they did not want to have sex or when the male did not want to use a condom and how to reduce partner's sex needs.

This is a commonly found theme within research on young people. Girls do experience desire but also feel they have to limit it to protect their reputation (Connell, 2005). They also feel responsible/are given responsibility for managing boys – who frequently act in coercive ways. This has an impact on both boys and girls psychosocial development. Measor, Tiffin & Miller noted, Freud described that girls may experience the difficulties in being socialised in the context of male power and Codorow described that boys may experience difficulties to establishing and communicating gender identity; and might have demand to signal and achieve their masculine identity by having more defensive behaviour (Measor, Tiffin & Miller, 2000). Indeed, adolescent males and females have different roles to play and parts to take in sexual encounters – their 'scripts' are different (Measor, 2004).

An aspect of the fieldwork that I did not foresee was the extent to which the adolescents in the focus groups seized the opportunity to ask me questions. Specifically they wanted to know how to act in a romantic/sexual relationship as they hoped to be in one in the future. Males asked questions centred on what happens in the sexual act and how to perform sexually. Females wanted to know how to get and keep a boyfriend and how to manage a sexual situation. Younger pupils in particular were preoccupied with the mechanics of sex. Table 6.4 shows some examples of questions asked.

Table 6.4 Example of questions asked about sex and relationship

Questions asked	Gender	Age
"We wanted to know how boys think about girls and how girls think about boys."	Male &Female	15, 14-16
"How to recognise that the others want to have sex, what does the feeling like?"	Male	15
"Is it true that the females have sex temper more and longer than the males?"	Male	15
"What is the different between ejaculate outside the body and inside the body? Could the female get pregnant if the ejaculation was outside the body?"	Male	15
"What should I do if I do not want to have sex?"	Female	15
"What should I do when my boyfriend ask for having sex?"	Female	16
"Is it true that the male will get bored with the female after he has sex with her?"	Female	15-16
"Is it true that the male will leave the female after he has sex with her?"	Female	15

I used my professional background in dealing with and responding to questions. I encouraged group to discuss and share ideas. I clarified and explained to them, afterward. I answered their questions straight away if necessary. In case they asked sensitive questions such as positions of having sex or how to have sex, I observed group environment before giving responses because not all participants were comfortable hearing such information in public. I gave them information necessary and introduced resources if they wanted more information or needed help.

This role should not have an impact on my findings. I was concerned about the impact of my answers to further discussions. In case that could happen, I would response to questions at the end of sessions. I was also concerned about what should be talk within the groups and what should be discussed individually. It was my opportunity to share my knowledge and help them. With different roles I experienced in my study should raise concerns for other researchers in similar areas that they may have to deal with situations and practice different roles when doing research, especially when facilitating group discussion.

Adolescents complained that they could not ask parents and teachers those questions; they would be blamed and punished. However, adolescents mentioned that in case they had a good relationship with parents or teachers, they could ask questions. It might be because they had less tension or embarrassment. And they had trust in parents and teachers. Adolescents may feel more comfortable asking questions while parents and teachers may happy to discuss and give them answers.

"Only some teenagers want to learn about sex and take experiment. Others who grown up in a good environment and have been taught in the right way will not keen to know about it. This is not the right time; we don't need to pay attention to. Out duty is to study. So we have to pay attention to our studying. Even we get information about this from TV or Mass Com and know about sexual matter, it does not cause a problem. Sex is not in our mind. We play with friends and have fun without thinking about sex."

Female pupil, aged 15

There is evidence that sex education should be delivered in a sensitive manner, and account for different levels of maturity/understanding (Singh, Bankole & Woog, 2005). Therefore, adolescents who do not want to hear messages about sex, teachers may discuss about gender, identity, disease and prevention; adolescents who have interests about sex may need more inputs about relationship, pregnancy prevention, and contraceptives. Again, teacher training can be a solution to improve skills to deliver effective information to adolescents with different needs. Evidence from researches has shown that information that meets the needs of adolescents is important and positive sex education should be encouraged (Allen, 2005; Connel, 2005; Ingham, 2005; Measor, 2004). A next challenge for Thailand is - what and how positive sex education in Thailand should be.

These participants seemed to have more conservative views. They might have concentration on studying or they had less interest about sex. Similar to Nualnak (2002), these adolescents were more traditional and influenced by their parents. Certainly focus group discussions indicated teenagers with closer links to their parents appeared to hold similar views. They worried about their parents' feelings and they talked about parents' expectations many times. "We should think about what is good or bad. If it's not good, do not do it. Our parents who look after us and educate us would be embarrassed by any consequence problem." One female pupil, aged 16 years said.

Age also affected participants' views. Older teenagers (aged 15-16 and 17-18 years) talked about sexual relationships more than the younger ones (aged 13-14 year). This may be due to physical development, personal experience or exposure to discussions about sex from peers and wider culture. As one male pupil, aged 16 told what he observed teens' behaviour. He said, "There were talks about sex and sexual experiences among friends. Boys always talked about the girls with their friends. They told their friends what they did with the girls; did they have a good sex; and the girls' body shape." Another female pupil aged 16 years mentioned; "Males would talk and showed to their friends that they had sex with girls." It was noticeably easier for older teens to talk about sex-related issues than younger participants.

Participants from different social groups, which included studious, beautiful boys/charming girls, risk, normal, and sport group (named by schools), reacted differently as well as participants at different ages. I observed that participants in sport group and risk group had broader discussions about sexual relationships than participants in studious group. They were more enthusiastic to talk and talked more openly. This might be because different social groups have different subcultures and one group might have more experiences than the others.

As known that sexuality is social construction that shaped by cultural, values and norms of people in society (This was discussed in Chapter Two), males and females in different social groups may have different have different attitudes, norms, and behaviours. I observed that focus group with varied characteristics had vary group behaviour and different interests. Participants in the sport group and the risk group exchanged information and experiences about sex education and relationships more fluently than

other groups. In discussions about Somchai and Mali in the vignette, they thought Mali would have a sexual relationship with Somchai; it was fine for Mali to have sex with Somchai if she loved him; Somchai would tell his friends about his sexual relationship; Mali would consult her friend about her relationship especially if she worried about getting pregnant. One female aged 16 years said, "If there is a problem, they will consult friends definitely. They cannot consult parents. The parents will blame and punish them." Participants in the 'risk group' did not mention parents' feelings and children's responsibility but interestingly, they talked instead about their feelings. In contrast, participants in the 'studious group' referred to parents in a positive way through out the discussions.

Response from participants in the studious group reflected high respect and concerns about their parents. One female aged 16 in the studious group said, "For us, we should think about what is good or bad. If it's not good, do not do it. Our parents who look after us and educate us would be embarrassed by any consequence problem." Another female pupil commented about Mali, "Mali should tell her parents the truth about Somchai. She should keep the relationship with Somchai as a close friend, not a boyfriend."

Participants in this group did not think that it is necessary to have a boyfriend/girlfriend. They commented that Somchai and Mali should discuss with parents about their relationship: "They must talk and have reasonable discussion with their parents." "It is adolescents' life style, having boyfriend and study at the same time. Let our parents know him and knowing his parents, so we are in the sight of parents." "They should have an agreement with their parents that they will not get out of the way (They will continue their studying, do not involve in a sexual relationship)." They were happy to study and enjoy adolescence period without having a relationship.

Adolescents from different social groups may practise a relationship in different ways. Some groups may have more chances having a sexual relationship than the others. Adolescents in risk group may have a sexual relationship while adolescents from studious group not; even they are in the same situation. It varies by their attitudes and values. One male pupil aged 16 from mixed group commented, "Abstinence seems to be an idea of studious students. For non-studious group, most of them do not think about it.

Studies group will do good things for parents, concentrate on studying. They think that if they have AIDS, their parents will upset."

As relationship patterns and social context change during adolescence, peers become significant providers and support, as well as models for appropriate behaviours (Ben-Zur, 2003). Similar to others (Measor, 2004; Strange et al., 2003), findings from questionnaire and focus group indicated that peers were a prefer source of information, especially information about sex and relationship. Pupil participants also mentioned influences of peers on adolescents' behaviours. They revealed that adolescents shared their views with friends. Friends put pressure on them to act or behave in similar way with others within the group.

When I asked them that what sex information should be provided and how, they suggested that sex education for different groups should have different approaches. One female pupil aged 15 said, "It depends on what group they are in. The group may lead in a good way (doing or having good behaviours) or a bad way (having behaviours that lead to problems). We have to look at the group." Therefore, adolescents from different social groups may need different information and different approaches.

From the focus groups, almost all participants in the study showed a high degree of awareness of, and curiosity about, sex and sexuality. A common topic of curiosity was masturbation. Pupils wanted to know if it was right or wrong, could be potentially harmful, and whether there was a right way to masturbate. Their confusion illustrated then mixed messages of traditional Thai culture (masturbation is a taboo topic, sinful, dirty and unhealthy, and does not occur in women and girls) and western culture (masturbation is normal, harmless, and useful in learning about our bodies, especially for women and girls).

• Information about prevention

3.4% of participants filled in the questionnaire that they wanted to know more about prevention but did not specify what prevention they wanted to know about. Findings

from focus groups indicated that adolescents wanted information that they hopefully can be used in the future. They needed information for multiple preventions. They wanted the prevention of a sexual relationship until they feel ready. As one female pupil aged 14 said, "We almost finish Moa 2 (Year 8). We may have to face outside world. We do not know whom we will meet and when. We have to be prepared to protect ourselves." They also wanted to know how to avoid unwanted sexual activity. They addressed that they wanted information about negotiating skills. Male pupil aged 15 said, "I wanted to know how adolescents say 'No'." They wanted to know how to postpone dating, including how to negotiate not to have sex. Female pupil aged 14 said, "I wanted to know how to manage the temper, not to follow what boys try to do and how to behave when being with boy." They also wanted to know the prevention of infection and the prevention of pregnancy. They addressed that they wanted to know how to negotiate with their partners to use a condom.

However, sexual health information needs was varied among adolescents. Adolescents who did not want to involve in any relationship did not want such information. One female pupil aged 14 years said, "If it is possible, it is better if there is no teaching about this topic (How to mange the temper, not to follow what boys try to do, how to behave when being with boy) because that make adolescents want to try and experiment. Study in theory today and have experiment tomorrow." They might have negative attitude towards sex information or they might have conservative ideas and traditional belief that transferred from parents (similar with others who had less interest about sexual matter). Another female at the same age said, "People in the past did not know about sex. They had children late. They knew that when it was an appropriate time to get married. They were married late when the elders gave permission." These participants believed that if they followed their parents' teaching, they would have a happy family in the future.

They overlooked their sexual needs and paid attention to do other things such as studying, sport, playing with friends, or playing games. One male pupil aged 15 enjoyed his adolescence without paying attention to sex. He mentioned how to overcome needs of having sex by playing music, exercise, and playing games. "I played games for a whole week without coming to school. I did not think about sex or relationship." Even though doing activities may not prevent adolescents from having sex, somehow it may minimise adolescents' sexual interests at some level. However, it cannot help them in

making decision when it is 'the time'. In fact, sex education should help them to make a right choice rather than avoid discussing about what choices they have.

However, I found that a matter of choices and behaviours was not described in the curriculum. Findings from pupil focus group and reviewing teacher handbook indicated that discussion about choices and behaviour in schools was limited. There is evidence that sex education should be informed range of choices and behaviours (Connell, 2005).

There were adolescents who might or might not get involved in a sexual relationship but they wanted information about pregnancy prevention. They wanted to know how to use a condom, its effectiveness, and where to get them. One male pupil aged 14 said, "I wanted to know about condom. How many types are they? How many sizes are they? and How to wear a condom?" Others wanted to know about contraceptive methods such as pills and morning after pills. Preventive and protective skills should be provided in sex education because they could be useful for them in the future. Some of them wanted to discuss alternative ways of pregnancy prevention such as masturbation and discussion about the "safety period".

Fourteen males and ten females said they wanted to know about masturbation, whether it is for releasing sexual tension, or as an alternative to penetrative sex (intercourse). They did not have much information about masturbation. A male pupil aged 16 in studious group wrote on a piece of paper, "How to do masturbation?" Another male pupil from mixed group asked, "What is the healthy way to do masturbation?" Females were not sure whether masturbation was right or wrong, whether it was a cause of problems, and what the right way to masturbate was. Findings indicated that participants did not have practical information about masturbation.

This might be because sex education did not provide much information about masturbation. Information from interview with an instructor showed that information was limited. She said, "There were arguments about a book that had pictures about masturbation. The Ministry of Education called back all books and prohibited schools not to use the book in providing sex education. They argued that it was immoral and was not suitable for Thai Culture." Three key informants, one teacher and two instructors

mentioned, "The book was fine, not as terrible as the rumour. It is nothing to do with the book. The book has useful information teenagers may need."

The issue of masturbation is a problem in sex education. Teachers often do not know what to say about it, may give negative explanations, or may avoid discussing it. More often that sex education does not cover all aspects of sexuality, avoids discussing sexual desire and choices, and do not deal directly with sex (Measor, Tiffin & Miller, 2000; Allen, 2005; Connell, 2005). This suggests that teacher training in discussing such sensitive issues is essential; and as providing sex education is 'culturally sensitive', more pubic debate is needed (Smith et al., 2003; WHO, 2000).

Participants were not sure whether there was a "safety period" in which they might have sex without worrying about using a condom or getting pregnant. They wanted to know whether there was any period when they might have sex without using preventive methods (using condoms or taking pills). One female aged 16 years asked, "Safety period.... Can having sex during the period (menstruation) prevent pregnancy?" Another male added, "Seven days before and after the period is safe." Similar to Ruangyuttikarn et al. (2004), Thai adolescents appeared to have negative attitudes to condoms and used inappropriate methods of prevention.

Participants also mentioned that they wanted to know about methods of prevention that did not include using a condom or taking pills. Male aged 16 asked, "How could we prevent pregnancy by not using condoms?" Another male pupil aged 15 mentioned when discussed about Somchai, "It is not natural. It is not fun. Somchai will not use a condom."

Findings indicated that adolescents had negative attitude toward condom among participants. This suggests that they may not use condom if they have sex, especially if they have sex with their girlfriend. There is evidence that Thai adolescents prefer not using a condom with girlfriend, whereas they may be more likely to use one with a sex worker (AVERT, 2005).

These findings suggest that it is important to provide them with clear information about pregnancy, pregnancy prevention, and the perceived 'safety period'. It is also necessary

to promote good attitude towards using a condom and reducing unhealthy sexual practice.

From interviews and focus groups, information about after-pills was limited; pills and after pills service was not available and accessible for many adolescents. While some pupil mentioned that boys did not want to use a condom, others also mentioned girls did not want to use pills. One female aged 15 asked, "How to prevent pregnancy without a condom or taking pills." They did not want to use pills because they did not have sexual relationship on a regular basis, or they worried about the side effects of pills. Few female pupils discussed the side effects of using pills; they worried about getting fat. Few of them preferred having sex without using a condom and wanted to use morning after pills instead. One female pupil aged 16 asked, "How to prevent pregnancy after having sex?"

Findings indicated that participants' lack of knowledge about pregnancy and contraceptives; information they had got was superficial. In addition, teacher interviews confirmed that they did not provide much information about how to use the pills and morning-after-pills. Teachers might or might not have information or they might worry that providing information could encourage adolescents to have sex (see barriers to providing sex education in Chapter Four, page 114). Whether adolescents wanted information for themselves or for their friends, they could not get information from teachers.

However, the younger age group (13-14 years) did not say they wanted to know about contraceptives or how to avoid pregnancy. It might be because they were not yet sexually active or were not yet sexually experienced; adolescents at the younger age were generally less likely to know about contraceptive methods than those who were (Singh, Bankole & Woog, 2005).

• Information about consequences

Participants stated that they wanted to have more information about the consequences. They wanted explanation of what would happen if they had sex and how it would change their future. Consequently, participants talked a lot about problems of having a sexual relationship such as getting pregnant, catching infection, uncertain relationship, or negative future life. It might be because some Thai adolescents used to receive negative information about sex, from friends, parents, teachers, and the media. The negative information could have impacted on their views: some might prefer negative sex education, as they believed that it could stop adolescents from having sex. One female 16 years of age told a story, "My friend told me a story that what had happened to her. The one who had sex, had experience separated from her boy friend after he had sex with her. She worried that he left her. She lost her virginity but did not gain anything." The conversation reflected that the girl had sex with the boy as a proof of love and she had expectation that the boy would stay with her after had sex. Even though it was a sad story, the girl who told the story thought that she learnt from her friend's bad experience. Participants who wanted negative information might want to know about problems they may face if they have sex. Providing them with a real picture of what would happen after having sex was one of their suggestions (see quotation from sex education they suggested presents later in this chapter). However, not all adolescents wanted such negative information and wanted to oppose by practicing in opposite way information they received.

"Sometimes when we are forbidden from parents, we want to know why they forbid us. So, we want to have experiment on it."

Female pupil, aged 16

They did not like a way they had been told not to do things without explanation. "Telling us not to do things [not to have a boyfriend or a girlfriend or not to have sexual relationships] will put pressure on us." Therefore, the information should be clear and provide reasons rather than being prescriptive.

Even though Thailand may not be ready for discussing sexual desires and pleasures – both teachers and children may be reluctant to discuss sexual activities – it is a time for changes. Findings indicated that adolescents had curiosity, but they worried and were not sure whom they should ask. Evidence suggests that schools need to know what to do by law; guidance that advices on how sex education should be taught within the context of personal, social and health education, and included guidance on the teaching of

sensitive issues, on partnership working, and on addressing issues such as confidentially is necessary (Warwick, Aggleton & Rivers, 2005).

Despite the inexplicit policy, opening doors for sex education by advertising may be a starting point. I asked for their suggestions of what could raise their interests to come to such services. Participants suggested words that could be used in advertising. They suggested words such as "Love and safety", "Love girls or love AIDS", "Having sex: good or bad", "What is having sex?" "Come on in if you want to know", "Thinking before doing", and "Have you ever tried (having sex)?" Advertising about services was in adolescents' interests.

Information about services

Even though not many participants reported any serious sexual health problems such as STIs or unplanned pregnancy, the questionnaire and focus groups indicated some of them were involved in a sexual relationship and therefore would benefit from sexual health services. Findings about adolescents' health problems, what did they want from sexual health service, and how did they used the services were presented in Chapter Five).

Pupil discussions indicated that participants needed information about the services that were available for their age group: the services they could get, and where could they get help. From the focus groups, five males aged 15-16 addressed that they wanted to know what to do if their partners got pregnant. Seven females wanted to know about abortion: where to go for an abortion. One female aged 16 years wrote, "I wanted to know how to do an abortion by using vaginal suppository." Another female aged 16 revealed, "I wanted to know how to get rid of a foetus. Where can I get an abortion?" It was possible that they wanted information in case that they or their friends needed help. Otherwise, they might treat an infection themselves by getting drugs from the pharmacy (as 8.2% of participants answered that they would suggest their friends) or they might have to find a back street abortion service. Again, they might get wrong or incomplete

treatment. Therefore, information about available services is necessary for adolescents. They should have information ready in hands, whether they will use a service or not.

Findings from my questionnaires and focus groups indicated that participants wanted the services. Information from interviews also supported that some teenagers had used the services. Health personnel from one local hospital revealed that 25-30% of clients who used telephone services were teenagers. NGO's volunteers revealed that there were teenagers using counselling service, contraceptive service, and referring service from 'Youth centre' (There were few places that offered special services for adolescents). Apart from improve, expand, and make the services available, there should be more advertising about services through the media as well as providing information about the services in schools. Service promotion should increase in a number of adolescents using telephone and counselling services.

Biological and psychological information

Even though participants revealed that they needed more than biological information, they did not mean that they did not want such information. Although they felt that their teaching was overly biological, it obviously was not covering the kind of biology they wanted to learn about.

They wanted to learn the biology of opposite sex as well as the biology of their own body. In my opinion, it might be because teachers were reluctant to talk even about physiology. For many Thais, even saying names of genital organs (penis or vagina) is not easy. Most Thais feel embarrassed to say "penis" or "vagina". They think that it is impolite and worry that others may view them in a bad way (Barriers to providing information discussed in Chapter Four). Participants learnt about both female and male bodies but they revealed that the information they had had was not clear. They also wanted biological information related to sex such as ejaculation and vaginal discharge. One male pupil aged 15 said, "Is it true that the females have vaginal discharge when they have sex needs?" They might hear about this information but not sure that it was right. They wanted to have accurate information.

Participants also wanted psychological information. They wanted to know the views of the opposite sex towards themselves in the relationship. Males wanted to know about females' thought and females wanted to know about males'. They might think that they should know about psychology of opposite sex or they might want information for preparing themselves.

Six participants addressed that they wanted to know about psychology of homosexuality. One female pupil aged 15 asked, "How does somebody like (feel in love) a person within the same sex? Why?" Another female aged 15 added, "Is that a mistake to like a person of the same gender? Is that a sign of psychosis?" They might want information for understanding about themselves or might want to understand the others. Both participants were from 'normal' female group. Male participant aged 15 wanted to know how to manage sex needs. He asked "How can I control my emotion if I have sex needs?" Another male pupil aged 15 added, "If a male does not have sex when he has sex need, what would he do?" They might only want to know what to do if those things happen with them in the future. They were from 'beautiful boy' group. They were young, might not have experience and did not know what to do. Or they might feel attracted by people in the same sex and had less interest in heterosexual relationship. Whether they were homosexual or not, their needs should not be ignored.

Findings suggested that existing sex education did not provide much about psychology of homosexuality or bisexuality. Teachers might overlook this matter, they were likely to teach less about sexuality especially homosexuality and bisexuality (sex education classes were presented earlier in Chapter Four). It might be because they lack knowledge or they might have negative attitude toward homosexuality.

Schools did provide sex education. However, what schools did provide might not cover what participants wanted. It might be possible that schools provided sex education in various topics but how deep information and how clear explanation schools provided were not known. I neither observed all steps of sex education providing nor did I evaluate sex education in schools. What participants complained might vary by information they had got, how they got information, and whom they got information from. Teachers' skills and willingness to providing information might be a cause of differences. Some participants might get enough information, but others might not.

Overall, participants thought that information provided was much about physiology that was useful, but not practical in dealing with situation they may face in future and it was not enough. One female aged 15 years said, "It is not enough. It was only 1 hour. I need more. It should be at least 3-4 hours a term." Another added, "Study in a class is not continuously." This confirms the findings of others that sex education could fail if it failed to provide information adolescents wanted and failed to help with problems when they needed (Measor, Tiffin & Miller, 2000).

6.1.2 What delivery methods and approaches did participants want?

As with other research in different countries (Allen, 2005; Measor, Tiffin & Miller, 2000), the teenagers in my study did not like the way in which the information was delivered, rather than the information per se.

Findings from interviews, focus groups and questionnaires showed that teachers generally provided information in classes. The main method used was a lecture. There were discussions in class but not often. Health personnel and personnel from other organisations provided information occasionally in some schools (Activities in schools presented in Chapter Five). Even though overall participants liked most of the sex education (as discussed earlier), fifteen of them said they did not like the way information was delivered. The message came out naturally. However, I did not assume that other participant thought the similar way; neither had they opposed these thoughts.

In general, teachers gave lectures in classes. Participants complained that information was not clear, not enough and not interesting; method of delivery was boring. They complained that "Teacher lectured in classes – it was boring." "What teachers provide in school is not enough, it takes only an hour." "Study in classroom is not continuous study." And "There is teaching about sex but not in detail."

Interestingly, no participant from 3 extended primary schools mentioned method delivery. Again, it was obviously seen that participants from extended primary schools were young (aged 13-14 years) and they were mainly from low-income families. They

might not yet be sexually active and not think much about what or how information was delivered. Older participants mentioned that they wanted practical information; they were concerned having a sexual relationship in the future.

Participants complained that they did not know the reason of what they had been told. They were told 'not do this', 'not do that' by teachers or parents. They thought that it was not a way that encouraged learning as one male pupil said, "Teaching sex education, there should not forbid or say not to have sex." Another male pupil added, "Do not open book and teach. It should be a teaching from experience, using tape, or VDO." They wanted more interactive and positive learning. They suggested information should deliver in the following forms.

• Learning from others' experiences

From focus groups, participants suggested learning from other people from outside schools. Participants wanted to learn from others' experiences (people who had problems). Few females, aged 13-15, revealed that they wanted to hear from people who had experience of having sex at school age. They said, "Give us real examples, what happens to people who have sex when they are at school age, such as getting pregnant and dropping out of school?" They thought that it was more interesting learning from people who had problems; they could ask them many questions. Few participants commented that teachers did not have experiences, might not understand situations, and might not give them answers they wanted.

Inviting experienced young people and professionals to provide sex education in schools should increase adolescents' interests and motivate active learning. Meeting somebody from outside schools often makes it more comfortable for adolescents to open up and discuss sensitive issues (Hogmark, 2002). Research evidence has shown that experienced speakers could transfer their ideas, their enjoyments and their pains through their story (Chambers, Wakley & Chambers, 2001; Markham, et al., 2000). Adolescents can have a thought through out the story of others, analyse, and get a message (Kidger, 2004). They can feel free to get information and ask questions if they want to.

Furthermore, there is evidence that a message from speakers at the same age group may reach targets easier than a message from teachers or parents who are much older as there may be a discrepancy or divergence of viewpoint between adults and teenagers (Coleman, 1992:18). Indeed, it is easier for adolescents to identify with speakers if their ages are not much different.

However, from my experiences, learning from negative experienced people (such as people with HIV/AIDS, drug users, dropped out from school) is effective but it is also sensitive and need professional assistance. A practical approach using this method is a small group discussion. Model cases must be well trained to handle unexpected sensitive questions; and professional supports are necessary.

• Using audio visuals

Eight adolescent participants suggested using audiovisuals in providing information. Audiovisuals could create more exciting learning environment. Information might include biological aspect such as "What does male organs look like?" or psychological aspect and problems that might occur after having sex such as "Teenage pregnancy". One female aged 15 said, "It should be a teaching from experience, using tape or video." Another participant suggested,

"Video about giving birth would be good; we can see what will happen, how painful it is. If adolescents do not want to be in pain, they have to think before going into that situation."

Female pupil, aged 15

Learning through audio-visuals could encourage discussions and created active learning. Evidence from researches has shown that sex education could be improved by interactive activities, such as group discussion, physical engagement in games, role-play, drama, and demonstrations (Allen, 2005; Strange et al., 2003). However, there are different dimensions of sex education adolescents can learn from audio-visuals. It is sensible choosing appropriate tools in providing sex education because adolescents have

different needs. Not all adolescents want the same information; I will discuss this further in the next part.

• Different groups – different approaches

Ten participants mentioned that teachers should look at the group. Some group may need more information than the others. One female aged 15 said, "It seems to be more depending on group, the group that leads in a good way or a bad. We have to look at the group." Even sexual health information was available and provided to adolescents in schools; some adolescents might have information more than the others (Adolescents' knowledge was presented in Chapter Five). Adolescents in different social groups have different values and they may need different approaches. The group that has risk behaviour may want information about pregnancy prevention more intensively than the group that do not have interest in having sexual relationship.

This study found that participants had different needs. Some wanted more information than the others and information they needed was also varied (Information they wanted was presented earlier in this Chapter). Effective sex education needs flexible approaches and suggests teacher training and professional development (Warwick, Aggleton & Rivers, 2005). Apart from characteristics and interests of the groups, participants also suggested a same sex- sex education class.

• Separate sex – sex education class

Learning about sexual related matter with others who are not the same gender may reduce an opportunity to ask question. Adolescents may need clarification and more information but they feel embarrass and worry about judgement from others in opposite sex. Similar to others (Strange et al., 2003; Halstead & Waite, 2001), participants in my study supported single-sex sex education class, especially the girls.

Females mentioned separate sex of students in sex education class. One female pupil aged 16 said, "It is not necessary that the one who provide information should be the same age with us, but they should separate class between male and female. It will be more comfortable to talk and discuss. It is uncomfortable to talk among different sex." In addition, learning from teacher in the same gender is encouraging. As one female pupil aged 15 said, "In sex education class, if the teacher is a male, it makes me have less enthusiasm learning." Another female added, "I cannot talk openly." Findings suggest that adolescents may have benefit from including single sex sessions in sex education class. Single separate sex education session increases an opportunity for adolescents to explore aspects of sexuality in a more 'comfortable' environment (Hilton, 2001). However, there is evidence that adolescents can also benefit from both sex-sex education classes: boys and girls can learn from each other and about each other in a respectful atmosphere (Milton, 2003).

Findings suggest that flexible approaches in providing sex education are necessary. Flexible approaches could create active learning by providing information based on adolescents' needs. There is evidence that countries that have flexible approach to sex education, such as Sweden, France, and Germany, have low rates of reproductive health problems among adolescents (Berne & Huberman, 2000); the incidence of unintended pregnancy and sexually transmitted infections among young people is lower and the age at first sexual intercourse is later when young people participate in sex education programme that are comprehensive and flexible (Kirby, 1997; UNAIDS, 1997).

Parents were mentioned as another source that adolescents wanted information from. As with teachers, some parents were more approachable and capable at delivering sex education. Much of this was dependent on parents' attitudes to sex and their own sex education. The next part of this chapter addresses how parents viewed about sex education.

6.2 Parents' views of sex education

Parents are expected to offer information to their children and help their children to grow up with skills to live in society. However, there are questions about what they offered to their children and what did they wanted their children to know about sex education. Findings from parent focus groups in School C and attitude questionnaire in School F offered what parents provided to their children and their views of sex education.

"I have never said any word about sex with my children. I do not want to talk about it. It should be better to talk about sports rather than sex with the children."

Female parent, aged 42

While other researches (Walker, 2004; Orgocka, 2004; Hughes, Cragg & Taylor, 1999; Holland, Mauthner & Sharpe, 1996) have identified a number of barriers for parent/child discussions, for Thai parents there is the additional issue of culture. Although talking about sex is not strongly prohibited, the tradition within Thailand is that talking about sex is considered inappropriate. Overall, something of a 'grab bag' perspectives would appear to justify or otherwise teaching about sexual health and sex-related matter on religious grounds (Smith et al., 2003: 17).

Most parents (70%) in the focus group thought that it was inappropriate to talk about sex (about sexual activity) with children. As with teachers, parents who did talk to their children tended to do so in a superficial manner. Some used short discussions as a means to avoid embarrassment and prevent their children asking for more information. One female parent aged 38 told the group about what she said to her daughter: "It was not necessary for you to know. You would know when it was the time." Even though they believed sexual health education was useful for their children, they also were not ready to talk about sex and sexual health, psychologically and knowledgeably.

I had an opportunity to get views of a bigger group of parents by using attitude questionnaire (methods used was described in Chapter Three). Findings showed that parents had contradictory attitudes towards sex education. Parents' attitudes towards teaching their children about sex are presented in Table 6.5.

Table 6.5 Attitudes of Thai parents towards teaching children about sex

	Number (%) of parents who agreed with this statement (n=351)*
It is necessary to talk about sexual health with children when they are adolescents	320 (91%)
Adolescents should not have a boyfriend or a girlfriend	319 (93%)
There should be reproductive health services available to adolescents	292 (83%)
Your children can talk and discuss all matters, including sex-related matters, with you	284 (81%)
Parents should punish their children if they have sexual relationships	231 (66%)
It is embarrassing when talking about sexual health with children	108 (31%)
Sex education induces adolescents to decide to have sexual experiences	93 (27%)
Sex and relationships should be taught about in school	95 (27%)
Teaching about contraception increases the likelihood of sexual relationships in adolescents	57 (16%)
Parents should be the first people to teach their children about sex and relationships	34 (10%)

There were no statistically significant differences in these responses by gender (Pearson χ^2 test). *Percentages based on number with known responses and accounting for missing data.

From Table 6.4, most parents (91%) decided that it was necessary to talk about sexual health with children when they were adolescents and their children could discuss all matters including sexual related matters with them (81%). However, 90% of them opposed the idea that parents should be the first people who taught their children about sex and relationships and 27% of them answered that sex and relationships should be taught in school. Parents might be confused by question asked; they were not sure what

information would provide to their children; or they might not want their children to know about sex and relationship.

Parents might worry that sex and relationship information would encourage the children to have a relationship. As most of them (93%) did not want their children having a relationship with opposite sex; and about one third worried that sex education might induce their children to decide to have sexual experience. In addition, 66% of parents thought that children should be punished if they had sexual relationship. Parents' value towards sex and relationship (which is discussed further in Chapter Seven) may have influence on teaching about sex and relationship to the children.

About one third (31%) of parents viewed that it was embarrassing talking about sexual health with children. They felt uncomfortable to talk with the children in opposite gender. One female aged 44 explained, "I am a female. It is difficult for me to explain to my son about his body. His father was a person who explained to him how his body should be." A father aged 42 was also struggle talking with his daughter. "It was a shame to talk about the female body, such as talking about breasts, with my daughter," he said.

Research by others (Doungjan, 2004; Nualnak, 2002) has similarly shown that Thai parents were often reluctant and unprepared to discuss sex issues with their children. There was a gap between parents and children in discussions about sex, relationships, body changes and sexual health services. Nualnak found Thai mothers did not feel able to talk about physical and emotional changes at adolescence, or topics like masturbation. Where parents experience difficulties providing sexual related information, they expect schools to be the primary source of such information.

Parents thought that biological information was good for their children. They also talked to their children about body changes, the period, and what should girls do when they have a period. However, they wanted school to provide such information to their children because they thought that teachers knew more than them. "I talked with my children, sometimes. But it would be better if school provided them with the information," one female parent aged 42 said.

More than half of parents (52%) from the focus groups mentioned that information about prevention was necessary. They did not specify what kind of prevention but talked generally about pregnancy and disease prevention. One male parent aged 41 said, "We should teach them every thing: contraception, prevention, and how to use the pill. We should teach them how to use a condom: to look for an expiration date, and how to take the pill regularly." One female parent aged 33 added by telling the story of what she taught her daughter. "I told her that 'If you had a period and you had sex, you could get pregnant'. I should talk about prevention. I told her that 'right now you should not have a boyfriend'. She (her daughter) understood about this point".

Another female parent aged 42 who claimed teaching her son about HIV prevention said, "I taught him that it was not the right time. 'You could go out but be careful about AIDS. You had to choose between AIDS and your happy life'. I did not have this experience (there was no HIV/AIDS when the parents were young). 'The others had a boyfriend or a girlfriend because they were adults. But you were at school age. You should not have a girlfriend and should not have sex. It was not the right time for you. You did not have a job. There were many people who had AIDS. How did you know that your partner was a virgin? She might have AIDS. If I die, who will look after you? You had to choose between happiness within 5 minutes and sorrow through your entire life."

It was clear that parents worried about their children getting pregnant or catching a disease, especially HIV/AIDS. As pregnancy could have an impact on their children's future, they might end up dropping out of school; and HIV/AIDS could threaten their children life, they would mention these two topics to the children (depending on they were boys or girls). However, information the parents provided was superficial. It might be because they lacked information and confidence in providing this information to their children.

There were arguments about providing sex education information to adolescents. Some worried that the children would experiment if they had information. Others argued that it would be better if the children knew about consequences of having sex. One male parent age 42 said, "They will definitely go out and experiment." A female parent aged 33 argued, "They should know what could happen if they had sex. They might think that if their friends can have sex, why should they not. So, we should let them have more

understanding about having sex." From questionnaire study, 16% of parents thought that teaching about contraception increases the likelihood of sexual relationships in adolescents.

Most parents (83%) in the questionnaire study thought that there should be reproductive health services available for adolescents. There was no agreement among parents in focus groups whether their children should know about available services. Some participants thought that information about available services was useful because adolescents could seek help when they needed it. One female parent aged 38 said, "There are many places helping them. Teenagers do not come to parents for consultancy. They are afraid." Others thought that it could increase adolescents' risk of having sex. One female parent aged 31 mentioned, "There are few places that help girls who have problems. Because the children know that there are available services that help and support them when they have problems, they are not afraid of getting pregnant and continue having sex."

Over all, parents thought that it was good that schools provided information to their children especially biological information but they were uncertain whether school should provide the children information about sex and relationship, prevention, and services.

Parents from the focus group study wanted the school to take the lead in providing information to their children and supporting parents' input. One female parent aged 33 suggested, "There should have the class once a week. School should ask the children to show their parents what they had learnt from school. We should know what they were taught about. And then, we could teach them or we could discuss with them. The school should set a parent meeting every quarter and show the parents about the topics they taught and asked the parents whether they were happy with the topics or not."

In summary, my findings suggested that parents were concerned about adolescents' problems of having sex at school age; they wanted to teach their children about problems of having sex and how to prevent problems. Parents did provide a part of information about sexual and reproductive health to their children. However,

information provided was varied by their knowledge and how comfortable did they feel about discussing sexual related matter.

What parents in my study wanted from sex education will be described below.

6.2.1 What did parents want about sex education?

• Sex education for their children

Parents considered that sexual health education was necessary for adolescents (as discussed above). From the focus groups, 91.4% of parents suggested that schools should set aside a class to teach their children about sexual health. They mentioned adolescents wanted to find out information. It should be better that they had information from reliable source such as school or health personnel than misinformation from friends or other sources. They thought that having more information was a form of prevention.

However, not all parents wanted their children to know all about sex education. From the questionnaire attitude study, almost half of participants thought sexual health information should be a matter to discuss with their children but sex and relationship should not provide in school. The conflicting findings occurred because of misunderstanding about sex education. Parents wanted their children to have information about sexual health but did not want their children to have information related to sexual relationship. Parents themselves did not understand about sex education and they had negative attitude to a sexual relationship at school age. Therefore, it is essential to provide sex education to parents as well as to adolescents.

• Sex education for parents

Findings indicated that parents did not know much about sex education. They were uncertain and reluctant to discuss about sexuality and sexual matter with their children, and they needed information and skill to discuss such matter with their children. The

parents suggested that school should provide sex education to them. One female parent aged 33 said, "We should bring the parents together and provide them with information. Some of them did not know." Parents were happy to come to school and discuss about sex education with teachers. They mentioned that they had got more information about sex education by joining the focus group. They said, "We came here today, we have more information; we can go back and teach our children. It will be the first step of prevention." Similar to studies in other countries (Milton, 2003; Berne et al., 2000), parents seek opportunities to develop communication skills in this area. Findings suggest that information session programme and discussion skills programme for parents may help parents understand adolescents, have more information, and develop skills to discuss sexual health matter with their children. However, what parents want to know about may vary.

From the focus group, six parents said they would like to know about available services. They wanted to know where they could seek help if they needed. A female parent, aged 32 said, "We do not know where to seek help. We should know about available services. In case our children have any problem, we can take them to a place for help." Another added, "We need their advice. There are family planning centre. If our children have a problem, getting pregnant, we have to consult them." They also mention they would give an advice to their friends whose children might have problems.

Not all parents wanted such information. Some were reluctant to talk but three parents made arguments. One female argued, "Go for abortion? They will do it again and again. They will think that they can have abortion if they get pregnant because mothers told them. How should we tell them? I wonder if my daughter gets pregnant, what I should tell her." Another female parent added, "Have you recognised that teenagers are not afraid of getting pregnant? It is because there are services available. They think that there are places that provide help and support if they have problems. Therefore, they do not afraid of getting pregnant and having sex."

Findings indicated that parents did not know about services, what services were available, and what benefit they could get from the services. This suggests that more work needs to be done in making services available as well as advertising and introducing available services.

Informed about what school has done about sex education

Parents in the focus groups claimed that they should be informed about what school had taught about sex education to their children. Schools should ask the children to show parents what they had learnt in class. Parents thought that it would be helpful for them to start conversation from that point; they could discuss sexual matter and provide more information to the children.

"We should know what our children have learnt about. And then we can give them more information, or we can discuss something with them. Schools should set up a parents' meeting every quarter. Schools should show the parents the topics schools have taught and ask the parents whether or not they are happy with the topics."

Female parent, aged 33

Over all parents in my study thought that school should provide sex education to their children. They also wanted to provide information to their children but they felt that they lacked knowledge and confidence. Therefore they wanted the school to provide them information and help them in working with their children. Evidence from other research has shown that parents are satisfied with school provision when they know about the timing and content of sex education the school provided (Walker, 2001; Ingham, 1998).

The findings above were from two focus groups of parents from one school that might not be generalisable to parents' views and needs about sex education. However, findings could be an example of parents' views and needs regarding to sex education that was available from one government extended primary school.

While parents wanted school to take a lead in sex education, it was important to know teachers' views about sex education. Then we can find a way to develop sex education strategy effectively.

6.3 Teachers' views of sex education

All teachers viewed that sex education as important. None of them opposed providing sex information. However, they were much concern about fitting sex education in Thai context.

Teachers mentioned providing sexual information together with education about Thai culture. A female teacher said, "It should not be only sex education. School should provide such information as well as transfer them the Thai culture." "We should give the information that is appropriate for their ages." "At adolescence, we should provide information about pregnancy: problems and prevention and convey them the Thai culture at the same time. Teach them about getting pregnant by comparing values of being parents between the past and present: how to bring up a quality baby, how parents should be. Let them see the difference."

Two teachers mentioned teaching about sex might increase risk of adolescents having sex. One female teacher said, "If teaching about sex, there is a risk. It is like a sword that has two sharp sides (which means it has both positive and negative impacts). If we teach them, they will know (about sex)." They might worry that information about sex would encourage adolescents to experiment having sex as one female teacher said, "They may want to experiment. In our culture, they taught us (Thais) to hide about sex. When we give them (adolescents) the information, they want to try. Then they experiment having sex. But for the foreigners (Westerns), it is their culture. So, it is not a big problem for them."

Findings indicated that teachers had dual values about providing sex education. Teachers knew that 'sex education is important and providing sex information to adolescents is necessary'. However, they were uncertain about sexual information and mentioned the difference of Thai and Western culture. This suggests that there are cultural barriers in providing sex education. Evidence from research has shown that providing sex education is a cultural sensitive, teachers are uncomfortable to provide sexual information and worry about social justice (Smith et al., 2003).

Providing sex education in school is related to cultural sensitivities: there are perspectives that used to justify teaching sexual matter and sensitivities that pertain to teacher discomfort. This suggests that there are questions about providing information appropriately. How sex education can be fitted within the Thai culture is a major task that policy makers and people who involved in all levels have to work out.

Even though teachers accepted that sex education is necessary, not all teachers wanted to take part in sex education. From interviews, teachers did not want to take part in providing sex education because they were uncomfortable talking about sex.

"Other teachers, especially female teachers, do not want to teach in this topic. They feel that it is shameful and are comfortable to teach about sex related matter"

Male teacher, aged 40

"All teachers in this school received sex education training. When I taught them, all of them giggled. They said that teaching about sex is a 'funny- dirty' thing. They didn't know what sex education is. They were quite after I provided them sex education information. A single female teacher said, 'I cannot accept. I cannot teach students about sexual matters. Let a nurse teacher or a health and sanitation teacher teach them this subject.' The health and sanitation teacher also denied teaching about sexual health matter. She claimed that she is a single."

Female teacher, aged 49

From interviews with teachers, female teachers were reluctant to provide sex information but did not say about male teachers. None of the male teachers in focus group and interviews complained that they were uncomfortable providing sex information either. Again, it might be because Thai males have more opportunity in discussing about sex than Thai females (Charanasri et al., 2004). However, as I did not initially aim to find out about teachers' feelings, I did not ask them a specific question. A specific study can provide an answer about differences between teachers' genders.

Both male and female teachers may have difficulties discussing sexuality with students. It has been reported that, in Thailand, as elsewhere within Asia-Pacific countries, it is difficult for a female teachers, who strives to be a model of modesty, to address issue about sex directly; it is not appropriate for single male teacher to talk to female students,

and for a single female teacher to raise the subject of sex; and married old teacher with children may consider it is inappropriate to deliver sex education at all (Smith et al., 2003).

From teacher interviews, while teachers who had hands on sex education felt that they had limitation providing sex education due to lack of information, skills, and supports, teachers who did not have direct responsibility were unsure about sex education. This suggests that sex education should be informed to all teachers, not only teacher who have to teach sex education. Otherwise, teachers who have responsibility teaching such education may lack of supports from colleagues and have to deal with justice from others.

Teachers in my study agreed that sex education should be provided and at an early age. Teachers who had hands on sex education wanted to improve sex education in schools and deliver said information to a younger pupil age group than was currently being taught.

"It is fine to specify what students should know at what ages for general education. But for sex education, I think we should prepare them earlier. Otherwise, it will be too late for them."

Male teacher, aged 40

One female instructor, aged 42 shared her views, "The fundamentals of sex education are started in the family. There are different between students. Some know more than the others. A younger student may know more than an older one. Students who watched sex VDO or the one who saw their parents having sex knew about sex more than the others. Sex education is appropriate or not, does not matter. We should provide them information. However, information provision should vary by individual basis. We cannot separate what information should be provided for what level. It is impossible. Individual students are difference."

As teachers mentioned, some adolescents may need information more than the others and how to approach each student may vary. Pupil participants also mentioned in focus group that information that adolescents in different groups needed was varied. "It seems

to be more depending on what group they are in: they are in a group that leads them in a good way (being among friends who have good behaviours- not having risk behaviours such as going out at night, drinking, flirting, or having sex) or a bad way (having behaviours above that may lead to problems). We have to look at the group."

Findings indicated that sex education needed to reach adolescents from different levels: classroom, social group, and individuals. Teachers needed different approaches in providing such information for each group/level. This suggests that teachers need to have confidence and skills to provide sex education: teachers need opportunities for professional development as well as ongoing professional, family, and community support (Milton, 2003). However, sex education seems to be schools' responsibility; it is put on teachers' shoulders rather than seen as the responsibility of schools and homes.

Findings from teacher interviews and focus group indicated that teachers expected parents' involvement in providing children information and support. Teachers revealed that even though the children got information from school, they might not understand and wanted to ask their parents some questions; they might need clarification in some matter, but parents could not explain or answer questions to the children. Teachers mentioned parents' lack of knowledge and willingness in providing sex information to the children. One male teacher said, "We provided information to children. Sometimes, the children wanted to consult their parents. But the parents do not have knowledge. The parents cannot give the children the information; they do not have accurate information. Therefore, the children do not know what to do. They may practice in a wrong way. Another thing is - parents with traditional belief (who believed that parents should not teach the children about sex) do not talk with the children; they let their children find out about sex with themselves. And that has negative impacts to the children."

Overall, teachers agreed that school and home should work together. However, findings from teacher interview and parent focus group indicated that there was less communication and coordination between school and home about sex education. School only gave general information (about activities and problems in schools, for example) to parents rather than worked with parents to educate the children. Findings suggest needs for more communication and supports between schools and parents. Research evidence

suggests that school should inform parents about school programmes and include parent information session (Milton, 2003).

Sex education has been provided in school because of national education policy. However, people who may push sex education into action are policy makers in the region. In the next part, I present attitudes and opinions of policy makers towards sex education.

6.4 Policy makers' attitudes and opinions

Interviews with policy makers indicated they followed the national sex education policy (sex education policy was describe in Chapter Two). They worked from this standpoint rather than integrating sex education within schools or creating new programmes for sexual health teaching.

Two policy makers thought that sexual health education was provided to students in schools appropriately. One policy maker said, "All schools provided sex education. It is stated in education core concepts. Teachers needed to follow the national education standard. However, information provided may vary by teachers and communities. For example, In Chiang Mai, there may provide more information about AIDS, sexual relationship and HIV prevention. But in some rural areas where AIDS is not a major problem, teacher may not teach about this topic. It depends on problems within communities. How much information provides is depending on teacher's judgement."

Therefore, quality of information would vary by individual teachers. It was not clear about how sex education in school was controlled. One policy maker aged 55 said, "There are teams from the education department to evaluate and accredit for education quality control. However, this core concept (health sanitation and physical education core concept) is not a major concept for further education. There is no standard exam for this concept. School has to set a standard for quality control. We evaluate by follow up whether school provide information cover topics stated in the core concept. In practice, it is not necessary that teacher is a person who provides information. Teacher

may invite health personal to provide information or he/she can ask students to search information from Internet."

In fact, policy makers and inspector teams would inspect whether or not schools provided such education rather than looked for quality of education schools provided. There were no signs of ambitious from policy makers to push sex education into action. They left alone to whatever happened in schools. Findings suggest that enforcement is needed for people in all levels, including regional policy makers, to improve sex education in Thailand.

I asked policy makers about their opinion and supports for sex education. They revealed that a special budget for sex education in school was not specified. One policy maker said, "There is no special budget. Teachers have responsibility to teach students, it is their job. So do nurses look after patients, we don't need to tell them what to do. However, in case that there are projects from other organisations such as public health office or NGO, there may have a budget supporting.

Even though a budget is important, it should not be a major limitation to providing sex education in school. As sex education is included in the curriculum, school has to provide information anyway. In my opinion, teachers can make sex education happen without extra budget - if they are willing to and confident enough to providing such education. I found that budget could be organized within school, as school C & E did. Therefore, there are other issues that might have an impact - such as unclear policy, no standard guideline, and lack of support from the top.

In conclusion, adolescents, parents, policy makers and parents thought that sex education is necessary. However, they misunderstood most of sex education. Parents and teachers were reluctant to discuss about sexual matters with children. Policy makers concerned about following national policy, having information provided in school, but did not have passions supporting sex education.

This chapter described what adolescents, parents, teachers, and policy makers' liked/disliked and what did adolescents and parents want from sex education. In the next chapter, values and norms towards issues of sex and relationship and adolescents' sexual behaviour in changing society will be discussed.

CHAPTER SEVEN

VALUES, NORMS, AND BEHAVIOURS

Chapter Six covered what adolescents, parents, teachers, and policy makers' thought about sex education. Chapter Seven describes values, norms, and behaviours of adolescents towards issues of sex and relationships. Both Chapter Six and Seven provide a picture of sex education atmosphere, in the Thailand situation. Section 7.1 discusses values, belief in relation to living in a transitional culture. Section 7.2 describes the views parents, teachers, and others' have of adolescents as those reflect how adolescents behave and give a broad picture of environment adolescents live in, which in turn may have influences on their behaviours.

7.1 Living in transitional culture

Rapid globalisation, advanced communication and technology spread information and culture from places to places through out the world, resulting in culture changes in many places, including Thailand (UNFPA, 2002; IPPF, 2001). Culture changes have had an impact on people life styles and behaviours (This was discussed in Chapter Two). The inside views of people in the changing society could reflect how those changes had influences on adolescents' behaviour.

"There have been many changes in Thai society. The way of life of adolescents nowadays is different from life of adolescents in the past. At present, adolescents live in a modern environment with more opportunities to get information. Plenty of sources of information and entertainments are available and easy to access. Living in an open society provides adolescents an opportunity to receive and practice other cultures."

Female teacher, aged 38

Interviews and focus group data with teachers, teenagers, and parents indicated life was different for adolescents as compared with previous generations. They viewed that today Thai adolescents had more freedom and were much exposed to western values. They thought many adolescents perceived western life styles as a modern way of life. Their behaviours were changed, and there was an increasing in numbers of adolescents having a relationship and had sex at school age.

"There were influences from the western. The Thai society was an open society. It was easy to be influenced by the western culture."

Female pupil, aged 16

"Children in this generation go out with the opposite sex even they are wearing school uniform. The boys go to pick the girls up at their front doors. The girls are braver than the boys. They go to the boys, have a kiss in the street. They go with their friends. In the past, adolescents respected and obeyed their elders. But now, they are out of control."

Female parent, aged 36

However, even though Thai people received influences from Western culture, they also hold traditional culture that has been transferred from generation to generation, as being Thais and members of society.

Modern Thai teenagers live in a society that has a unique culture, with high value placed on respect but are also strongly influenced by Western culture. Some of them can compromise and live without conflict or frustration. Others may experience conflict and uncertainty. Thai adolescents live in transitional culture which one culture may have influence on their attitudes, beliefs, and values more than another. The following part describes transition of values in relation to relationships and sexual matters.

7.1.1 Transitional values and norms related to sex and relationship

Social changes have brought about changes in cultural values and norms (UNFPA, 2002). Similar to others (Charanasri et al., 2004; Duangjan, 2004; Warakamin &

Boonthai, 2005), findings from teacher interviews, parent focus group, and adolescent focus groups indicated that there were changes in values and norms about sex and relationship among adolescents. Next, I describe what participants thought about changes in relation to adolescents' sexual relationship behaviour.

• Value of male-female relationship

Teachers, parents and adolescents revealed that Thai people, in the past, had more protective and restrictive in male-female relationship. Males and females could be friends, but they had to maintain distance in the relationship. Physical touching, being together privately, and going out privately were not considered appropriate. However, there were various views of adolescents' relationship. Some accepted male-female relationship more than the others.

Focus groups with parents indicated most accepted that adolescents could have friends of the opposite sex. However, they stressed that the relationship should be as a friend, not a lover. One female parent aged 32 said, "Today, boy and girl can be friends. When they are being together, we, as parents, should listen to what they are talking about or what they are doing. If they suppose to do something in a bad way that may end up with having a sexual relationship, we should tell them that what is right or wrong and what they should not do." More importantly, parents did not want their children having a sexual relationship. One female parent aged 33 said, "There is cultural change: girl now will go out with boy, some girls go to boy's place". Another female parent aged 46 said; "We must forbid a girl from having relationship with a boy."

From the focus groups, I found that parents could generally accept if their children had a male-female relationship at some distance (as friends and no sexual relationship, for example). Findings from parental attitude study confirmed this finding: most parents who did the attitude study (93%) answered that they would prefer if their children did not have a boyfriend or a girlfriend.

Many parents and teachers thought that having a relationship with the opposite sex and/or having a sexual relationship would be disadvantageous for adolescents. For example, they felt that adolescents would not concentrate on studying if they had a boy/girlfriend. If they had a sexual relationship, they might catch a disease, the girls might get pregnant, and the girls might have to drop out from school. One teacher shared her views about adolescents' behaviour and her concerns.

"At present, people have a sexual relationship very early. Some children at grade 7-8-9 have a sexual relationship. They are very young. Their ages are only about 12-13-14 years. This is a risky situation. If female children get pregnant, they will have a problem. They cannot have a successful family because they are too young. The girls may break up with the boys. How about a baby? What would they do with the baby? There are many problems. They are also having a risk of getting AIDS."

Female teacher, aged 49

Parents believed that premarital sex, especially at school age, was considered wrong and prohibited. Having sex at school age would be a big mistake for the female. A daughter's pregnancy outside marriage was seen as a huge embarrassment of the family. As with many cultures then and now penalties for having a relationship were more negative for females (More about punishment will be discussed further later in this chapter). Therefore, parents would teach the children (especially the girls) and expected the children to pay attention to studying and thinking about the future rather than paying attention to having a relationship.

In some cases, this value had been transferred to adolescents. One female pupil aged 15 said, "It is not the right time to have sex." Three girls from the same group added, "Thinking about the future whenhas a husband." Another female pupil added, "They should think about their future. Think about what is good and what is bad."

Ten female participants shared their conservative thinking about sexual relationship in teenage years. They thought that adolescents should not have a sexual relationship. One female pupil said, "If the boy has intention to have physical touching, the girl should tell the boy not to do that and split up with him." Another added, "There should be a discussion and agreement between them not having a sexual relationship at school age

because it was not accepted by society. If they could not make agreement, they should split up."

Findings indicated that traditional values had in some cases been passed from generation to generation. Most pupil participants had both modern and traditional values. These could be observed from findings discussed below.

While most parents did not want the children to pay attention to having a relationship, adolescents had different views. Overall, pupil participants claimed that people in their age group lived in a modern world. They had a right to make decisions and do things, including having a relationship. One female pupil said,

"In open society, adolescents could do whatever they wanted. For example, females could dress in any style, they could have the body less covered in fashion; they could go out and hold hands with the opposite sex. Many adolescents had a boyfriend or a girlfriend, some had sexual relationship."

Female pupil, aged 15

There is norm of having a relationship among adolescents. Female pupil aged 15 revealed that, "If we do not have boyfriend/girlfriend, we seem to be out off fashion or we have a problem." Another female pupil aged 16 said, "It is adolescents' life style: having a boyfriend and study at the same time." "The social is changed: having friends in the opposite sex is normal." Female pupil aged 14 said.

Even though participants viewed that having a relationship at school age is normal: many adolescents had a boyfriend, or a girl friend, their views of having sexual relationship were varied. Some participants viewed having a sexual relationship as acceptable but others did not. Therefore, even participants had open views about adolescents' life; they might perceive and practice differently varied by values they held and environment they lived in.

To find out more about what participants thought about having a relationship, I used vignettes to encourage them to talk about views on adolescents' sexual and relationship (see Chapter Three for more information on this method). 'Mali' and 'Somchai' in the following parts refer to characters of adolescents in the vignette.

Interestingly, even though participants seemed to have open mind about relationship, they held traditional gender value at the same time. Both male and female participants' responses to the vignette describing Mali and Somchai highlighted gender inequality in a relationship. What participants mentioned describe in the following.

"Male had advantages from having sex, while female was a person who lost out"

Participants in focus groups believed that the male would have advantages from a sexual relationship. Participants believed that it was natural that the male had the sex drive and that the male needed the female and wanted to win over the female by having sex with her. The male was the person who gained benefit from having sex while the female was the looser: lost her virginity and self-respect, and might be looked down upon by others. One female pupil, age 14 said, "It was natural that a male need a female and he wanted to win over her. The male had advantages from having sex while the female was a person who lost. No one would know that he had sex."

Participants thought that it was acceptable for the male to have sex but it was not good for the female. This reflected the double standard value that shape different gender roles in Thai society. Both male and female participants thought that it was hard for the female in making decision to see the male and/or having a sexual relationship, she should be concerned about her parents and her future. More often, the female was the person to be blamed in the relationship. One female participant, aged 14 said, "Is Mali kind of a good person? She went out with a boy, she should know what could have happened when going out with boy." Even a female who might not have sex but she was among friends who had risky behaviour would be viewed in a bad way. It might be assumed that she was as bad as her friends; she might be an "easy" person, a person who had less self-control and whom the male could have sex with easily.

"The female should look after herself, whatever happened – it was her responsibility."

Whether the male and the female had a sexual relationship, used a condom, or considered the consequences, the female was the person who had responsibility for such behaviour.

Focus groups indicated participants believed Mali (the girl) would bear responsibility for having sex, including worrying about the experience afterwards. They believed that Mali should be alert and knew how to protect herself from having sex. One female, aged 15 said, "Mali was a foolish girl; she went out with the male in the evening. She should know what could have happened when going out with a boy. She was the same age as us; she should have known about this." They thought that Mali should know about problems from having sex without using preventive methods. It was Mali's responsibility asking Somchai to use a condom to prevent herself from a disease or pregnancy. A female pupil aged 16 said, "Mali should think about asking Somchai to use a condom for her safety." A male pupil, aged 15 added, "If a girl loves herself, she must think about using condoms."

They thought that Mali would be a person who worried if she had sexual relationship. She might worry that others would know about her having sex and they might blame her; she might get pregnant; and she might be punished by her parents or might drop out from school (beliefs about punishment are presented in section 7.1.2, page 210).

By contrast, Somchai was not seen to be affected in the same way. It was not a taboo for him to have sex when he was a teenager. Having sex with Mali might not cause Somchai any problem. Even he might have a problem; it would not be a severe problem for him. He was not a person who would be in trouble. Hence, he would not worry after having sex with Mali.

Similarly, Thaweesit (2004) found that Thai girls had to choose between their choices, having flexible relationships, and social justices, being blamed from others. This suggests that female adolescents may have troubles in a relationship than boys do. A submissive role can drive girls into the worst situation: boys can take advantage in a

relationship. Moreover, girls may have difficulties seeking help if they have problems because they are expected to have responsibility for a relationship, for themselves, and for family.

• Value placed on female virginity

In relation to the value of sexual relationship, there is value that place on female virginity. Ideally, the male wanted to marry the female whom he was the first person having sex with. This value and belief still exists in Thai society (Rivers & Aggleton, 2001; Knodel et al., 1997) even though male-female relationships are more open than ever before.

From discussions, both parents and adolescents placed a value on female virginity (parents more so than adolescents). One female parent aged 32 said, "Virginity is important and should be maintained." Parents passed this value to their children. They taught their children not to have a sexual relationship (especially for girls) until it is the right time (which is normally when they are grown up and within marriage).

For adolescents, even though in general they accepted that having a sexual relationship is normal, they still placed value on female virginity. A female pupil aged 16 revealed; "I always think that I have to maintain virginity for a man whom I will marry. If he knows that I am a virgin, he will love me more." Another female aged 15 added, "If I am a virgin and get married with a man, he will love me very much. After marriage, he will trust me. He will believe that I will not have another man."

Not only female participants concerned about virginity, the males also mentioned female virginity. One male pupil aged 15 said, "Female should avoid having sex." Thai males still have value on female virginity but the males' having sex is viewed in the opposite way – as an experienced man.

Value on female virginity may have influence on adolescents' sexual behaviours, more or less varies by individuals. Some adolescents may have high value on virginity and

avoid having sexual relationship (abstinence is discussed further in section 7.2). Others may have value on female virginity but they have sexual relationship (especially the boys). Again, the female who had sexual relationship might frustrate and live in pain because of values and expectations that put on her virginity.

Thai men still have value on female virginity even though it is not a most important thing for a wife (Knodel et al., 1997). In case of coercive sexual relationships, this value will have more negative psychological impact on the girl. The girl may have to continue having sexual relationship because she wants to hold the relationship after losing her virginity to the boy.

Apart from values on sexual relationship and female virginity, there is a standard value, respect, which is a traditional value that makes Thai culture unique. The value of respect has passed over generation and has influences on every day life in a number of ways. The following part discussed about value of respect in relation to adolescents' sexual behaviour.

• Value of respect

In Thai culture, Thai children are expected to have high respect to parents and teachers. People who are younger should respect people who are older. In turn, people who are older should look after and help people who are younger. This value is transferred from generation to generation. It is a part of every day life and integrates in all activities, which can be observed from findings discuss in the following.

I found that value of respect was mentioned in relation to adolescents' behaviour. Findings from interviews and focus groups with teachers and parents indicated that they had high value of respect. They respected and followed their parents and the older generation. Hence, they expected their children to follow their route. They believed that parents and the elders love the children. They had more experiences than the children. Therefore, the children should show their love and respect by being a good follower.

Even though value of respect exists in Thai culture in general, there are some changes. Findings indicated that there were changes in adolescents' behaviours. Teachers and parents thought that adolescents' values and behaviours had been changed. Many adolescents listened to their friends and behaved in a way they wanted rather than followed what parents told them to do. They complained that it was difficult keeping the children on the track.

"It is difficult to keep them under control. In our generation, we were afraid of parents and teachers. Now, they do things without thinking about parents. They believe friends more than parents or teachers. It seems like we communicate with them in different languages."

Male teacher, aged 34

"I could not forbid him (her son) having a girlfriend or sleeping with her. Children in this generation do not listen to adults."

Female parent, aged 32

Both parents and teachers mentioned friends had influence on adolescents' behaviour: adolescents perceived values and norms of their age group and those had influence on their behaviours. Parents and teachers thought that many adolescents believed and followed their friends rather than believed and followed the parents. For example, parents wanted the children to concentrate on studying but the children wanted to do other activities with friends such as play games or going out with friends; parents did not want the children to have a relationship, but the children did not listen, they had a boyfriend/girlfriend, some had a sexual relationship. They mentioned adolescents had norm of having a boyfriend or a girlfriend and they wanted to show their friends that they had a relationship with the opposite sex. "Adolescents wanted to be 'a man' as their friends, then they have sex at school age," a female parent aged 42 said.

Parents and teachers recognised that adolescents would rather talk with friends than with themselves, especially talking about a relationship. Findings from the adolescent focus group also confirmed that overall adolescents talked about sex and relationships with friends more than parents or teachers (Findings of whom adolescents discussed with was presented in Chapter Five).

Findings from adolescent focus groups indicated that even though participants had modern values and norms, they respected their parents, teachers, and the elders. Participants discussed about different views of having sexual relationship between younger and older generation, however, they were concerned about their parents' feelings and expectations. They also thought that Mali should believe her parents. One female pupil aged 14 said, "Mali would not go to see Somchai because she obeyed her parents." Others said, "Mali should believe her parents, take care of herself, and know how she should behave." Again, findings showed that adolescents had dual values. What they would behave varied. A male pupil aged 15 said, "It depended on individuals."

Findings indicated that some parents and children did not understand each other because they held different views, values and norms. During adolescence, adolescents want to be more independent and be a part of a social group. They may behave in a way their group expect them to be: they follow their group norms, and group norms are used in the regulation of group members' behaviour (Ben-Zur, 2003). Therefore, even though adolescents may behave in a way the parents do not expect them to, it does not mean that they do not love or respect parents. This suggests that parents should be informed about sexuality in adolescents before expecting to be a sex educator for their children.

Parents had high expectations about respect; they judged the children's behaviours based on their own values and experiences. Some parents believed that they had power and authority in controlling children. They expected the children to follow them and interpreted the children's following as respect, which was different from respect in adolescents' views. While the children respected the parents, they also wanted to have authority in making decision. Findings from other research suggest that sex education for parents is necessary because parents lack of understanding about adolescence and do not have skills in discussing about sex (Milton, 2003; Berne et al., 2000).

As mentioned above, the value of respect is a part of Thai culture and integrates harmoniously with religious values. Participants in this study used 'respect' in identifying a 'good' or a 'bad' person. Pupil participants discussed behaviours in relation to respect and responsibility in a relationship.

About one third of participants discussed that the male should respect the female and should not have sex with the female at school age. They mentioned being a good man, not taking advantage over the female by having sex, and it was wrong to force the female to have sex. A male participant aged 16 said, "If Somchai was a human, he should feel guilty. It was wrong to have sex with Mali by forcing her. If he was a good man, he should respect the girl." Participants thought that "showing respect" represented a man's responsibility and sincerity to the woman.

"If a male really loved a female, he would not do this [have sex] to the one he loves. But if he does not love her, he would do. If he loves he must give her honour. A male who wants to take advantage of a female will act like this. If they know each other for 2 days and he asks for sex, it is dishonour to the female. Female should stay away from him."

Female pupil, aged 16

Adolescents who held strongly to this value seemed to be more traditional. This view was mentioned from participants in all age groups and all social groups, even though it appeared more often in the 'studious groups' than in the 'risk groups'. It is possible that traditional values and beliefs may have been a greater influence on adolescents' views than age.

But being responsible could also mean having sex by using a condom, or having other sexual activities Mali may like, which participants did not mention. This might be because participants did not generally view using a condom and concerns about female's sexual needs as a matter of responsibility.

Even though overall participants revealed that Somchai should use a condom because he was not ready to take responsibility in having a baby, only a few of them thought that Somchai would actually use a condom. One male pupil aged 14 said, "Somchai would use a condom. He would tell Mali that she might get pregnant if he did not use a condom, and he would have to take responsibility." Most participants (males and females) viewed that the male could have sex without responsibility; he was not a person who got pregnant. They argued that it was the responsibility of the female rather than the male in the relationship.

• Value of love, being loved, and trust

The perception is generally that love brings two people together to have a sexual relationship. However, having a sexual relationship may bring two people to be in love sometimes (for example, via an arranged marriage). What adolescents in my study viewed about love and sexual relationships is described below.

Findings from focus group indicated having sex was a way to make an impression when adolescents were in love. They thought that having a sexual relationship was a way to show off love, trust and a way to prove love.

"Love in the past was not the same as love nowadays. Now, adolescents think that having sex is a way to show their love, to show how much they love. Motels are full on Valentines Day. Adolescents are supposed to show love by having sex."

Male pupil, aged 14

Participants mentioned that the female had sex because of love and she believed that they would get closer because of sexual relationship. One female participant aged 14 said, "Mali might love Somchai and want to be close to him." Few participants mentioned love in male. One male participant aged 15 said, "Somchai might want to be close to Mali. He might believe that Mali would love him more after they had sex."

Having sex was believed as a method of strengthening the relationship and a sexual relationship was more acceptable in relation to love. One male participant aged 14 said, "If Mali is in love with Somchai, it is fine that she had sex with him." Love could be used as a condition for having sex in adolescents' perception.

Participants pointed out that if the female did not have sex with the male, the male might be disappointed and thought that she did not love him; he might think that she did not trust him; and he might leave her. Therefore, she would have sex because she loved the male and did not want to lose him. A female pupil aged 15 said,

"Mali might worry that Somchai would not love her if she did not have sex with him. She might worry that Somchai would be angry with her and he might leave her and go out with another girl."

Findings suggested that some adolescents could not distinguish between love and sex. Pattaravanich pointed out that it was related to adolescents' attitudes towards sex. Thai boys and girls are brought up differently; they learn and practice their gender roles from family and society; those shape adolescents' attitudes, values, and beliefs (Pattaravanich, 1998). In Thai society, males have more opportunity to have relationships but females are expected to have one relationship; the males can reveal their sexual feelings and practise sexual relationships but the females cannot. Therefore, when the female believed that she should have only one boyfriend, it was possible that she would do anything that pleased her lover, including having sex with him. And again, because of social expectation that the females should not have more than one relationship, the female may have to continue having sex, even though she may not want to at the first time, to prolong her relationship.

More or less, traditional values still have influence on many Thais. If the females are involved in a sexual relationship, they seem to have a disadvantage in the relationship in various ways. Firstly, they do not have power to negotiate with the male both physically and psychologically. Secondly, they may have to continue having a sexual relationship (even though they do not want to) to maintain relationship with the males. Thirdly, they may be frustrated because of worrying about parents and not being sure what to do. Fourthly, they may face problems from unprotected sexual relationships, and lastly, they may face social injustice. In addition, some of them may have a difficult way of life such as involvement in sexual relationship for gift or for money (Chemnasiri & Plipat, 2005) or involvement in crimes (MOPH, 2000a).

However, not all participants had the same views. Some felt that if adolescents had a true love, they would not have a sexual relationship. One female participant aged 15 said, "If Somchai really loved Mali, he would not have sex with her. They would help each other in studying rather than having sex." Participants thought that adolescents could love and respect each other at the same time. They could show proof of love by not having a sexual relationship.

Participants also mentioned value of love in relation to Mali and Somchai's preventive behaviour. One male pupil, aged 15 said, "If a girl loves herself, she must think about using condoms. But if she loves the boy, she may take pills, and then the boy can feel natural." They also misinterpreted using a condom as a lack of trust in each other. One female pupil aged 15 said; "Mali might trust Somchai and believe that he only had sexual relationship with her. It would be fine." Findings indicated that adolescents were often confused and could not separate between their emotion and reasonable action; their behaviours were driven by emotion rather than knowledge.

While pupil participants discussed Mali's sexual behaviour in relation to love and/or trust, they discussed Somchai's sexual behaviour in relation to power and fun. This suggests that adolescents' views are related to gender values.

• Value of having fun in having sexual relationship

Participants thought that many adolescents at their age wanted to have sex because they believed that 'having sex is fun'. Many adolescents did not think that having sex was a serious matter. It was a natural behaviour and it was such an exciting experience. One male pupil aged 15 said, "Having sex was an exciting and new experience. Somehai should have sex with Mali, it would be fun." Value of fun and entertainment could encourage many adolescents to be involved in having sex.

It appeared to me that there were two meanings when teenagers talked about fun. 'Fun' could mean enjoyment or pleasure from having sex or a feeling of having advantages over the other. However, the male may have fun while the female may or may not be happy in the relationship. Therefore, although participants might see sex as fun, when they described the experience of Mali, it did not sound much fun for her. I observed that participants mentioned 'fun' in relation to a norm of male adolescents.

Norm of being a man and being smart among males

Gender role and gender norms have influence on adolescents' sexual behaviour (Rivers & Aggleton, 2001; Fang et al., 1998). Findings from the focus groups indicated that the males valued sexual experience and admired peers who claimed to have had sexual encounters. This apparently drove some adolescents to have more sexes to develop their 'sex scores'. They mentioned the norm of comparing 'sex scores' between friends, which was more generous in males than in females. Some wanted to show their friends their sex scores. The more sex scores they had, the more they were seen as smarter than the others.

"They thought that it was smart to have sexual experiences. They wanted to show off to their friends that they had had sex a number of times. Some would develop their sex scores. It was a shame for the others who had never had sex."

Female pupil, aged 16

"Males want to show friends and develop their scores. There is a value that 'having a lot of sex' is smart."

Female pupil, aged 15

Some adolescents might have sex because they wanted to have experience to share with their friends. They pointed out that it was a shame not having experience to share with friends.

"There was talk about sex and sexual experiences among friends. Boys always talked about the girls. They told their friends what they did with the girls; whether they enjoyed the sex; and the girls' body shape."

Male pupil, aged 15

"Somchai would show off to his friends that he was a man and doing well in having sex with a girl".

Female pupil, aged 15

Many participants thought that Somchai could do what he wanted, even force Mali to have sex. Sexual coercion might occur if the male wanted to prove that he had more power and he wanted to control over the female. One male pupil, aged 15 said, "If the girl asked for a condom, the boy would use it. However, he might not use a condom, if it was rape or if he wanted to have advantages on her."

Similar to others (McAndrew, 2000; Pattaravanich, 1998), Thai adolescents had dual characteristics, mixed between Western and typically Asian - discreet and modest. Somehai was viewed as a "smart boy" if he had sexual experiences, while Mali was viewed in negative way as "a bad girl". Finding indicated that an existing of a double standard value in Thai society had influence on adolescents' behaviour. Their values and norms are related to gender and power (Charanasri et al., 2004; Rivers & Aggleton, 2001). These suggest that sex education aimed at knowledge only might not change adolescents' behaviour.

7.1.2 Beliefs about parental punishment

Within Thai families, parents may punish the children if they do something wrong such as misbehaviour or disobedience. The children also believe that they may be punished if they do the wrong things. It is common that Thai adolescents mention worrying about parents' punishment, even though punishment may or may not occur.

Reasonable punishment is acceptable in Thai society. Traditional Thai parents believe that the children should respect and follow their teaching. The parents believe that punishment is necessary to keep the children on the track. There is a traditional proverb. It says, "Tie your ox, Beat your children; Spare the rod, Spoil the child." There are various ways of punishments. It could be physical punishment or psychological punishment. However, a way parents treats the children may vary by individuals, their beliefs, and judgments.

From questionnaire, more than 60% of parents thought that there should be punishment if children had sexual relationships at school age. If children were involved in sexual

relationships, adolescents, parents, and teachers from focus groups mentioned the females were likely to received punishment more than the males.

One female teacher told a story; "I remembered one of my students got pregnant. Her parents hit her and asked her to leave home. I went to the parents explained to them and helped them in solving the problem." Even though parents viewed that having sex at school age was not appropriate, they seemed to accept boys having sex, but not the girls. Parents might easily accept if their sons had a sexual relationship, but they were likely to refuse if their daughters having sex.

Findings from focus group indicated that adolescents worried about punishment if they had a sexual relationship because they thought that it was not the right thing to do (and not what parents wanted). Some adolescents made a decision not to go back home because of worrying about punishment. One male pupil aged 14 said, "Mali would go out with Somchai and she would not go back home because she would be afraid of parents' punishment." Even though most adolescents worry about parents' punishment, they behave differently. This will be discussed further in section 7.1.3.

Even though today parents are more flexible, they may refuse what the children ask for and may punish the children if the children do not behave properly. In turn, adolescents may react to parents' restriction in various ways. The next part presents adolescents' views of living in a strict family and their behaviours.

7.1.3 What did adolescents think about living in a strict family?

Different families have different lifestyles. In Thai families, some may be more traditional than the others. Therefore, different families, different parents have their ways looking after the children. In case that the parents have traditional values and beliefs and do not understand about adolescence, they may be viewed as strict parents.

From the focus groups, about 80% of participants mentioned living in a strict family was a cause of adolescents' risky behaviours. Adolescents would be frustrated living with

strict parents. Participants felt that parents should accept adolescents having a relationship. They thought that adolescents wanted to have modern life style, have a right to follow their needs, with less parental control. They said that many adolescents were stressed and thought that their parents put pressure on them by controlling them not having a relationship. The more parents told them or forced them not to have a relationship, the more they resisted and behaved in the opposite way.

"If you were forced to do what you did not want to, there would be a problem. The more the mother dominated, the more pressure was put on Mali. Mali might want to have a sexual relationship. Being in a strict family, the more the parents prohibited, the more Mali went out with Somchai."

Male pupil, aged 14

Participants addressed that even adolescents did not want to follow the parents (because they thought they were right); they wanted to be good children. They mentioned worry and concern about parents' upset if they did not do what parents wanted. They mentioned frustration and suffering from moral guilt of having a sexual relationship at school age.

"It depended on Mali. If she loved her family, was afraid of her mother, and was afraid of being guilty, she would say no."

Female pupil, aged 16

From the focus groups, even though most participants thought that living in a strict family would push adolescents to oppose and have risky behaviour, a few participants said they did not have any pressure living under parental control and others did not say anything. Adolescents may react to parents' restriction in various ways, some may accept but other may oppose, vary by individuals and relationship within the family.

In case of Mali in the vignette, most participants thought that Mali would hide her relationship and/or lie to her parents. One male pupil aged 14 said, "Mali would tell her parents before she went out with Somchai. She would lie to them that she would go out with her girlfriends. Another male pupil added, "She would lie to them that she would go to her friend's home for reading and she would spend a night with her friend."

Adolescents might perceive that what they did was not what the parents expected them to do. They might lie to avoid having a conflict with the parents or to avoid parents' punishment. But not all participants thought that lying to parents was the right thing to do. A minority of participants mentioned that adolescents should tell parents about their boyfriend/girlfriend if they had one. One female pupil, age 16 said, "If the parents accepted and let them have an appropriate relationship, it would be better to tell the parents about the relationship than to hide."

Findings from focus groups indicated that some adolescents might not want to have a sexual relationship because they were concerned about the family. They did not want to break the family rules or hurt their parents. This suggests that health promotion strategies for parents as those can raise parents' awareness of benefits from talking openly and developing positive communication to their children about sexual health (Walker, 2004). Research evidence has shown that 'openness' in communication about sexuality and parents' receptive communication styles are associated with less adolescent sexual risk-taking (Kirkman, Rosenthal & Feldman, 2005; Kotchick et al., 1999).

Parents also discussed that adolescents worried that the parents could not accept if they had sex and got pregnant. A female parent, aged 32 said, "Some girls are afraid that their parents would not understand or accept their mistake but in reality, parents could accept whatever happened to their children. The children worried too much about parents' punishment." Another parent added, "Too much afraid."

One female parent aged 32 mentioned that, "It depends on parents. Some parents do no accept or understand the children when they did something wrong." It may be because they have less communication within the family. Less communication between parents and adolescents is a cause of misunderstanding among them. That can put adolescents more at risk from coercive and exploitative relationships. In case that they have problems, they may not ask or discuss with the parents. One female parent aged 40 said, "They would talk to their friends and asked their friends to keep their secret and not to tell the mother."

Findings from the teacher focus group also suggested that adolescents thought that parents did not understand them; they went to their friends; and that was a cause of problems. One female teacher said, "The culture is changed. Adolescents learn and practice western culture. They have conflict because their values and norms opposed the Thai culture. They think that adults do not understand them. They consult friends. Their friends also have similar thought. Therefore, problems in relation to sex occur."

It appeared that even though the two generations lived in the same societies, shared some similar norms; there were different views and expectations between two groups. Different views and expectation of the two generations are presented in Table 7.1.

Table 7.1 Different views between two generations

Older Generation	Younger generation
Children should believe and follow parents and the older generation	Adolescents have their own beliefs, and follow friends
Expect the younger generation to have more protective behaviour (restrictive in a relationship)	Expect to have freedom in having a relationship
Expect to have power in controlling the younger generation's behaviour	Want to have self determination and make their own decision, do not want to be under the control of parents

Different views may be a cause of conflict and frustration between two generations. Adolescents have their own views and want to make their own decisions. They might act against the elders, including their parents, whom they believed living in the old culture. One female pupil aged 15 said, "Adolescents prefer to win. They do not believe adults. Thai adults always think that they are right. Adolescents also think that they are right". They would act in the way they preferred rather than following the elders. Opposing the elders is a way to prove their authority.

7.2 Participants' views of today's adolescents' behaviour

Adolescents, parents, and teachers viewed that today's adolescents had more freedom and adopted less protective behaviour. They said that adolescents were at risk. Females and males were closer and the female was more active in the relationship. There were more chances to have sex at school age.

"I have a younger brother. The girl came to see him at home. They were together in my brother's room. I did not pay attention at first. After that, I heard my brother's voice. I went to his room and saw the girl sat by him. The girl was prepared to do things. My brother told me that he did not ask her to come. She came by herself. I asked her to leave. I was worried that they would have sex if they continued to stay together. It could happen anytime."

Female parent, aged 40

Parents and teachers were upset about a situation of changing roles between boys and girls as it opposed traditional values and beliefs. They mentioned more girls had changed their behaviours. In their views, a picture of Thai girl who is modest and does not show interest or discuss about sex, had been changed. While the older generation were upset, the younger had different views.

Adolescent participants accepted that a male's sexual drive and having sex is 'natural', but not all adolescents were keen to have sex. They considered that many adolescents had sex by mistake. They did not intend to, but they did have sex after physical approaches such as hugging or kissing. One male pupil, aged 16 said, "Male might have sex drive because it was natural that male needed female, wanted to win over female. Somehai would keen to have sex because of kissing." They thought that adolescents found it difficult to stop having sex after they were aroused. They compared the male as 'fire' and the female as 'oil' that could not touch each other.

Most teenagers thought that Somchai and Mali would have sex and might not use a condom because they could not control themselves. Somchai did not want to stop doing what he wanted to do; Mali did not have a strong sense of denying and she lost of control. One male pupil aged 15 said, "Somchai and Mali would not think about using a condom. They were going to heaven. It was no point to think about the condom."

From focus group, about 70% of pupil participants thought that Somchai and Mali might not worry about any thing at that stage. Even though they might worry about catching diseases, they would not take that seriously. One female pupil aged 14 said, "They are worried about AIDS, but do not think seriously". Another male pupil aged 15 said, "No, they would not worry. They only thought about having fun. They would not worry or think about any thing until problems occur."

Finding indicated that adolescents considered that once the sex drive is aroused, the development of the sexual act could not be controlled. Such attitudes and beliefs may have influenced their perception and decision-making: they may believe that it would not be possible to control themselves, and that the same would apply to their partner. When adolescents lack skills (in dealing and controlling their own feelings or needs or to negotiate with their partner) and consider that the sexual act cannot be controlled, that may explain why there is a trend of increasing risky behaviour among adolescents.

Young male pupils (aged 14-15) thought that female adolescents were involved in sexual relationship more than male. One male pupil aged 15 said; "Females are more likely to let themselves free (to have sex) more than males." This might be because they were pre-pubescent and not involved in a sexual relationship yet. But many girls of their age are biologically mature enough to engage in sex (Roque & Gubhaju, 2001; Master, Johnson & Kolodny, 1995).

Participants from all groups (adolescents, teachers, parents, and key informants) mentioned the number of adolescents who involved in sexual relationship was increasing because they lived in risky environment, bombarded by media messages and peer pressure.

Teachers mentioned adults controlled entertainment businesses and they wanted the youngsters as their customers. One female teacher was upset about changing society. She said, "Today adolescents go out at night. They go to clubs, bars, or restaurants and those make them at risk: risk for sex, risk for drugs, and other negative behaviours. Today Thai adolescents are at risk because Thai society does not care or concern about the consequences of having plenty of night services and entertainments. It seems like adults take advantage of children. They do business, pubs and discotheques, with the

young target group. They let teenagers get into their places illegally; they promote and sell 'Sai diew'- a top less fashion. Most businesses aim at the teenagers."

Teachers blamed adults as 'inventors', who create problems for children. The same teacher continued, "'Sai diew' is not suited to our culture. It increases sexual arouse and is a cause of crime and rape. Even in the music business, companies aim the teenagers as their major target group. Overall, it sounds like 'adults destroy the children'. The problems come from adults. They do business and get money from children."

Teacher viewed that Thai society has been changed. One female teacher said, "It may be because teenagers view that the foreigners' way of life is pleasant. They are in a period of learning. They practise the new culture, Western culture, which opposes to the traditional culture. They believe that adults do not understand them. They will consult their friends—who are in the same situation—do not have a thought. Therefore, teenagers are risky to problems about sex. They listen to their friends. Try and do what they want to do."

Another female teacher added, "Most teenagers are influenced by friends. When they go to parents, the parents do not understand them. So, they go to people who understand them-friends and that cause a bigger problem. Media also takes part. It makes teenagers want to experiment. There is plenty of sex information. Teenagers get such information to hand - with no guidance from adults, and that cause more problems."

Parents and teachers viewed that living among friends who had risky behaviours might increase adolescents' risk. Risky behaviours here had broad meanings. These included going out at night, drinking alcohol, having relationships with the opposite sex, and/or having sexual relationships. They discussed that adolescents were normally gathered together in entertainment places such as clubs, bars, café, and cinemas. Adolescents had an opportunity to meet opposite sex in those places, many of them were encouraged to have alcohol drinks or drugs, and they might end up with having sexual relationship. In fact, they named a group of students that they believed having risky behaviour as a 'risky' group even though few members of that group displayed risky behaviour. They believed that adolescents gathered with their friends and shared their values; and friends had influence on adolescents' decision-making and behaviours.

Adolescents themselves also viewed the social environment as a major influence on adolescents' risky behaviours. Pupil participants revealed that people in their age group received information from various sources. They mentioned that many books, magazines, including entertaining videos and CDs are aimed at the young age group customers. One male pupil aged 16 said, "Not all adolescents think about sex. But there are plenty of lewd resources, for example: sex cartoons, movies, and CDs that are on sale to youngsters. Those increase adolescents' sex drive."

Teachers and parents blamed media messages as those encouraged adolescents' sexual relationships. They said that adolescents watched movies or music shows; they liked their superstars and followed their superstars' story. A male principal mentioned that adolescents perceived their superstar as a model. The superstars' behaviours were viewed as a modern life style. "They were news about singers' and movie stars' sexual relationships. They saw their superstars smoked, got drunk, changed partners. Some teenagers thought that it was a modern way of life. They copied such behaviours." Sometimes, they practiced characters of actors in movies. One female parent, aged 38 mentioned, "Some teenagers practised a character of the superstars from the movies."

According to the National Campaign to Prevent Teen Pregnancy in the United States, this is a common worry of parents. However, the evidence suggests that teens are informed by media but do not copy it blindly (National Campaign to Prevent Teen Pregnancy, 1999). Those who are more influenced tend to have less parental support and communication, less parental monitoring and less sex education (DiClemente et al., 2001; IPPF, 2001; Meschke, Bartholomae & Zentall, 2000).

Advertising and news presenting were mentioned as a cause of teenagers' misbehaviour. A male principal mentioned mobile advertising, criminal news, and celebrity's news had influences on adolescents. His comments on news and advertisings are presented in Box 7.1.

Box 7.1 Examples of comments on news and advertisings

A female superstar went to see a tennis superstar' playing at the tennis race.

"It was not a news to promote the game, but to raise an attention to two superstars' relationship. The newspaper posted a picture of a female superstar watching the game at the front page. While his parents went to support him, the newspaper did not raise news. They just wanted to write news to get attention but never thought about placing a new value to the children. They closed up to the female superstar picture, not the game. Moreover, the two of them had a rumour about having an affair with other people before. They did not think of what teenagers might perceive. Teenagers might think that changing partners or having affairs are normal."

Mobile phone advertising: a teenager was busy talking on a mobile phone.

"On television, teenagers were very busy talking on mobiles, in various positions. They raised a value of having mobile phone in teenagers. Today, many teenagers have a mobile phone. Others want to have one because their friends have. I have heard more news about there were some female teenagers involved in sexual relationship for a mobile phone or for expensive gifts. What did they call?............ 'Louise'. I do not know what it is liked. I have heard that it is very expensive. I did not understand why they wanted to have that kind of bag and admitted in a sexual relationship. There was news about teenagers having problems with parents because the parents did not buy a mobile phone for them."

Nine male teenagers were in custody: they raped a teenage girl.

"Criminal news is presented without carefully thought of negative impact on teenagers. I understand that it is important to present news. However, a way of presentation is important. I observed that there was more news about teenagers' cruel behaviours. It seemed like some boys perceived that it was a fashion and they wanted to be in the news to showed off his misbehaviours. Some of them smiled and did not show any worry or upset of their behaviours after catching by polices."

Male principal, aged 56

There was news about the teenagers involved in crimes and rapes more often than in the past. He viewed that a way news was presented might encourage some adolescents to involve in crimes. He worried that some adolescents might perceive in negative way. They might view that doing badly was a way to show of power and catch attention from others. He worried that repeating criminal news would encourage criminal behaviours in some adolescents.

"Most news in newspapers was crap. Some teenagers behaved as what the news said. The news and the way they presented had negative impact in adolescents' norm and behaviours. There should be more careful in presenting news, including advertisings."

Male principal, aged 56

Findings indicated that teachers perceived that media messages could have negative impact on adolescents. Media messages could create attitudes and perceptions of audiences and could have negative impact on some audiences as it produced such activities very much more common in reality (Coleman, 1992). In contrast, adolescents might not view the media messages in negative way. Buckingham & Bragg found that even though adolescents in their study were exposed to many messages about love, sex and relationship in the media, they did not perceive the media to be encouraging them to have sex prematurely. And in many instances, the predominant tone appeared to be one of moral warning (Buckingham & Bragg, 2004). However, research evidence has shown that the media can be an effective channel to promote sex education (de Fossard & Lande, 2008). Positive and accurate messages about sex through the media can reach many adolescents and may change their attitude and perception about sexuality, sex and using methods of pregnancy and disease prevention. Again, to develop this strategy, sex education policy needs to be clear, political support is a 'must have', and public support is essential.

Advanced technologies such as computers and mobile phones are useful and effective ways to deliver information and have been used to deliver sex education messages as well as deliver poor messages (inaccurate and encourage sex information messages). Adolescents may use these forms of technology for information as well as for communication with friends, including searching for partners and dating.

Teenage participants mentioned many adolescents looking for sex information from Internet. They mentioned plenty of sex information was available. One male pupil, aged 15 said, "There is plenty sex information available on the Internet. Many boys looked for sex pictures." They did not mention adolescents searching (useful) sex education information in the discussions. Similar to teachers, they thought that adolescents looked for sex information from the Internet.

Findings indicated that apart from searching information from the Internet, adolescents used technologies to communicate with friends and other purposes. Participants mentioned some adolescents arranged to meet up with boyfriend/girlfriend and/or stranger by sending messages via emails and mobile phones. On one hand, using advanced technology is useful and effective way of communication. On the other hand, it can be dangerous if misuse to arrange meeting up with unknown person. One female participant aged 16 gave an example. She told a story: "I received a pop up message while searching the Internet, asking me whether I felt lonely. The messenger said that I could release my stress and would not be lonely by meeting up with him."

None of them mentioned receiving sex education through advanced technologies such as Internet, mobile phones, or ipods. It might be because they themselves did not search for such information, did not know about it, or forgot to mention. I found that available sex education information on Thai websites was limited (in comparison with the global picture). Findings indicated that adolescents might not get most of their sex education information through high technologies. Therefore, sex education through different channels and through new technologies is encouraged.

Teachers mentioned there were signs of adolescents having more materialistic views. Many adolescents perceived that having a mobile phone seemed to be a fashion. There were adolescents involved in sexual relationship for an object they wanted. Some might involve in crimes. A male principal said, "There is trend of searching partners and arranging meeting up using the Internet and mobile phone, especially among girls. As we see from the news: college students, university students, having sex for money and gifts."

A female teacher aged 42 mentioned that, "Adolescents today are brave. They can do many things. They can give a talk in front of class; some can give a talk in front of many people, such as in a competition. They can do many things that adolescents in our generation cannot do, such as acting in a model competition, which is good in some way. But many of them are brave in negative ways. Some wear fewer clothes. Others are flirting, holding hands or kissing, even in public places. They are shameless." This showed that while the older was conservative and had restrictive way of life, the younger generation had less restrictive behaviour and had more confident in doing things.

The changing role of girls, being more optimistic in a relationship, seems to sit oddly with Thai culture. Girls may view it as liberal, but others in society may not. Thai society does not support the girls' sexual invasive manners. Girls' practising active sexual behaviour is viewed as misbehaviour rather than as an indication that the position of women is becoming stronger.

Parents believed that adolescents defined having sex as a way to prove their identity as being grown up. They discussed how male adolescents wanted to prove that they were 'a man'; they had sex as their friends did. A female parent aged 32 said, "Adolescents wanted to be 'a man' as their friends, they had sex at school age."

Pupil highlighted how adolescents are exposed to western values and cultures through the media and Internet. "There were influences from the West. Thai society was an opened society. It was easy to be influenced by the western culture," a female pupil aged 16 said.

Even though parents, teachers, and some adolescents viewed behaviours such as wearing fewer clothes, drinking, having a relationship, having sexual relationship, not using a condom, including using technology to communicate for a relationship as risk behaviours, other adolescents did not view such behaviours as risks. Other researchers have shown that while others may view particular adolescents are at risk, the adolescents did not view themselves as having risky behaviours (Hockaday et al., 2000).

There were different points of view and values between two generations. Parents and teachers thought that protective behaviours (such as do not have a boyfriend/girlfriend,

do not have a sexual relationship at school age) could safeguard adolescents' future. But adolescents thought that they could have a good future with their ability, they could study and had a relationship at the same time. Findings suggest that adolescents may behave differently according to their own personal values. Adolescents may do what the parents suggest; they may oppose the parents and have conflict with the parents; or they may do what they want behind the parents' back.

Findings from parent and pupil focus groups indicated a trend of "adolescents' do things behind parents back". Pupil participants mentioned Mali's lying and hiding her parents about a relationship with Somchai. This matter was discussed in all focus groups. Few parents mentioned adolescents might lie and hide the relationship, especially when they did have problems such as pregnancy. One female parent aged 32 said, "They talked with friends and helped each other to cover the story." Such attitude may cause a problem in parents-children relationship. It may cause less trust and less respect in each other. The gap between parents and children will be wider. And that may increase opportunities for adolescents to taking risks.

Shifting of culture by advanced technologies and global communication has major influences on adolescents' behaviour (MOPH &WHO, 2003; UNFPA, 2002). My findings indicated that adolescents felt comfortable with modern culture, which is well matched with adolescent development in learning about themselves and their sexuality. But they lived in the culture that had more control and tendency to cover up sexual matters. Adolescents were confused and were not sure what to do; sex education did not give them clear understanding about culture, sexuality, and sexual relationship. More importantly, parents and teachers did not understand about adolescence and adolescent development and they were struggling in overcoming cultural taboos about sex. Communication between parents and children was limited, as normally occurs in adolescence. Some adolescents thus lived in a relatively unsupportive environment (in term of adolescent development); and that there was a gap between adolescents' learning and sex education. That might help explain why some adolescents had risk behaviour, but other did not.

Even though pupil participants thought that many adolescents were involved in sexual relationships, they believed that 30-40% of adolescents might never have had sex. They

thought that adolescents who remained abstinent had high self-value and self-confidence. They believed that adolescents could prevent themselves from having a sexual relationship by having future expectation, being among good friends, and having skills such as self-control, negotiation skills, and decision skills. One female pupil described how some adolescents did not get involved in sexual relationships. She said, "They protect themselves; do not get close with opposite sex, thinking before doing, think about their parents' concern, being themselves, and know how they should behave." They might avoid having sex by doing other activities such as music, sport, game, or practicing masturbation.

Findings indicated that even though adolescents held some similar norms and values of people in their age group, they behaved differently. Adolescents behave differently, vary by their personal values – values that related and influenced by parental values, closeness with parents, parent-child communication and support (Meschke, Bartholomae & Zentall, 2000; Rodgers, 1999; Miller, 1998). This suggests that interventions that aim to strengthen personal values may reduce inappropriate behaviours among adolescents.

This chapter described values, norms related to sex, and behaviours of adolescents. This chapter also provided reflections of parents', teachers', and teenagers' views towards today's adolescents. The next chapter presents conclusions and discussions of the study. It summarises the main findings and further discussion; gives a reflection on methods used; provides suggestions for future research and redesign of sex education policy.

CHAPTER EIGHT

CONCLUSIONS AND RECOMMENDATIONS

This chapter offers a conclusion of the thesis. It includes a reflection on methods, main findings, discussions, and recommendations. Section 8.1 summarizes the thesis. Section 8.2 reflects on the strengths and limitations of the methods used. Section 8.3 discusses the main findings and conclusions from the research conducted for the thesis. Section 8.4 provides suggestions for further sex education research. Section 8.5 presents recommendations for sex education policy. And lastly, section 8.6 provides recommendations for sex education practices in Thailand particularly. These recommendations are appropriate for adoption in other country settings.

8.1 Summary of thesis

This thesis described a research study into sexual health education in Chiang Mai, Thailand. This study aimed to inform the redesign of sex education policy in Chiang Mai by exploring the knowledge, attitudes, norms, and values of teenagers, parents, teachers, and policy makers and placing these in the wider social, cultural, educational, and economic context of modern-day Thailand.

The thesis was divided to eight chapters. Chapter One introduced the research study and provided details of contents covered in each chapter. Chapter Two provided background information and literature review of adolescents and sex education in Thailand. Thailand's demographic information and social issues were described, together with information about adolescents, their sexual behaviours and sexual health problems. It also presented general information about sex education and discussed school based sex education and sex education in Thailand.

Chapter Three described the philosophical basis of research and provided a review of different research designs and methods. The strengths and disadvantages of various methods used in health research were discussed. It also described the necessity of using mixed methods in gathering a variety of data from various sources in researching sensitive issues, which includes sex education. Because this was a mixed method study, a variety of analytic methods were used and methods of data analysis were also summarised and presented in Chapter Three.

Chapter Four described the present sex education policy, the context of sex education delivery, and interventions provided in schools. A provisional assessment of sex education in Thailand based on data from the review of documents, teacher handbooks, leaflets, videotapes, and interviews of key informants, teachers, and policy makers in both the preliminary phase and main phase of the study was presented.

Chapter Five described characteristics of studied schools, including demographic data on research participants. An assessment of adolescents' sexual health knowledge based on the results of questionnaires, focus groups, and interviews was described. It provided pictures of what information was provided in school, and adolescents' sexual health knowledge, including their information resources.

Chapter Six described adolescents' views of sex education: what they thought about sex education, what information they wanted, and how they wanted information delivered. It also presented teachers, parents, and policy makers' views about sex education. Chapter Seven explained the factors that could influence on adolescents' behaviour. It provided a broader picture about living in a transitional culture, values and norms in relation to gender and sexual relationships, including the reflections of today's adolescents by parents, teachers, and pupil participants. This concluding chapter offers a summary of the thesis, suggestions for future research, and recommendations for policy and sex education practices.

8.2 Reflection on methods used

As an exploratory study that was not designed to test the effect of a specific intervention, and only investigated what participants say they do rather than what they actually do, this thesis can only generate hypothesis about key influences on sexual risk taking in Chiang Mai teenagers. Its main strengths were the inclusion of me, a native Thai health-care worker, as the researcher; extensive preliminary fieldwork to build relationships with participating schools; a large and heterogeneous sampling frame; mixed quantitative and qualitative methods; and an analytic approach that contextualised the findings in a wider frame of rapid social transition. Its main limitations were that several of the schools and most parents interviewed were relatively affluent, and the study was (for practical reasons) limited to a single region within Thailand. So the generalisability of findings to Thai teenagers more widely has not been established.

More studies in other regions and across a wider social spectrum are needed to generalise a whole picture of sex education in Thailand and develop appropriate strategies for effective sex education. With the important limitation of this study described above in mind, further studies are now needed to develop appropriate interventions aimed at addressing the critical factors suggested by this study, and to test these systematically.

8.3 Discussion and Conclusion

Using interviews and focus groups, combined with reviewing documents, I have shown three main possible reasons that could make school-based sex education in schools in Chiang Mai less effective. First, I found that there were misunderstandings about sex education at the policy level. There was no sex education policy in provincial and school levels. It is necessary to provide clear messages about sex education, culture, and development to all sectors. This was not happening because there was no instruction in the national level of how to make sex education effective and accessible to young people. There was no requirement, no instruction, and no policy development in

provincial and school levels. The lack of a clear national policy has led to unproductive strategies and practices, so there are no practical standard guidelines for providing sex education in schools. Sex education relies on individual teachers: their knowledge, awareness, values and 'emotional baggage', leading to information being delivered in inconsistent and tentative ways. The empirical findings of this study confirmed that a lack of a clear policy has resulted in a number of negative impacts on policymaking and practice at all levels (Measor, Tiffin & Miller, 2000). It is necessary to develop a clear policy at national, provincial and school levels, but a lack of instruction has resulted in confusion and in places only the very basic biological information being covered, often inadequately and incorrectly.

There should be a requirement for schools to have sex education policy, which is made available for inspection and to parents (DfEE, 2000). Encouraging parents, teachers, and young people to involve and work together in developing sex education policy in school can improve communication between teachers, parents, and young people. Teachers and parents can work together and support each other to improve sex education for young people. This can reduce teachers' worrying of parent acceptance and help teachers to overcome personal barriers in discussing sexual matters with young people. Involving young people in developing a sex education policy at school level can make sex education more effective. In the UK, the principle that underlying the standard of the National Healthy School is, a whole school approach (involving parents, carers, teachers, and pupils in the school's policy) is appropriately set for effective sex and relationship education (ibid.). In USA, this approach and innovative approach to increase parent-child communication about sexuality have been encouraged (Guilamo-Ramos & Bouris, 2008; SIECUS, 2005). In Australia, openness in communication about sexuality between family members has been encouraged (Kirkman, Rosenthal & Feldman, 2005).

Second, there are still barriers of culture, teachers' lack of knowledge and skills, and limitations from politics and politicians that need to be overcome. Coordination, collaboration, and support from all sectors are needed in developing sex education strategies that align with Thai culture, to suit diverse needs of adolescents, and meet the aim of effective sex education. Sex education requires overcoming entrenched cultural conservatism and securing parental and community support at community and national

levels (International Women's Health Coalition, 2004). It is unrealistic to expect any education in any area to be effective if it is working against the grain of social realities and developments (Archard, 2000). Widespread public information, making clear how sex education can reduce the problems of unplanned pregnancy or sexually transmitted infections (including HIV) and why sex education is needed can do changing negative attitudes of people against sex education. The political will to take on the 'moral' majority and redress the balance in respect of what is acceptable in sex education is needed (Toynbee, 1998). This suggests that a political battle based on research findings is needed to improve sex education in Thailand. Successful of reducing teenage pregnancy and STIs in Netherlands and Scandinavia and progressive of sex education initiatives in the UK are examples of successful debates based on research findings (Measor, Tiffin & Miller, 2000).

The study's findings indicate that strong head teacher support greatly enhanced the delivery and uptake of school sex education; that Thai teachers sometimes did not have adequate knowledge or confidence to deliver sexual health advice; talking about sex sometimes conflicted with teachers' personal or professional values or with classroom culture, and that teachers sometimes censored or adapted evidence-based intervention packages in the light of personal beliefs or past experience resulting in limitation of quality and inconsistency of information. Others have demonstrated similar obstacles to the provision of effective sex education in Thailand (Oshi & Nakalema, 2005). This suggests that targeted training, support, and mentoring of teachers are probably a prerequisite for the effective and consistent delivery of a broader sex education curriculum.

Third, there is no adolescents' input into sex education programmes. Throughout Asia and Southeast Asia, the popular view of sex education among parents, teachers and people in society is it is unnecessary or even morally dangerous for young people because they believed that sex education may encourage young people to experiment having sex (Bott et al., 2003). Findings from this study affirm that this negative view exists in Thai society. Parents and teachers struggled to provide information and discuss sexual matters with young people. Teenagers had less opportunity to ask questions. Sex education implementation was mainly from school, varied by teacher's wills and skills rather than providing information teenagers wanted to know or asked for. Teenagers

complained about boring sex education. As with other studies in other countries (Allen, 2005; Measor, Tiffin & Miller, 2000), sex education that does not address adolescents' needs could fail. Consultation with young people about the content of sex education classes can greatly improve sex education programmes (PRB & Advocates for Youth, undated; Sex Education Forum, 1994).

Using a combination of questionnaires and focus groups, and drawing heavily on narrative methods (especially the structured vignette technique); I have shown five important influences on Chiang Mai teenagers' sexual attitudes and behaviour. Ambiguous social roles leading to confused identity; heightened sexual awareness and curiosity; critical gaps in knowledge and life skills; limited parental input, and as a consequence, an impulsive and volatile approach to intimate encounters. Similar to Varga's (2002) study, idealised gender roles (the "smart boy" whose status depends on stories of sexual performance and conquests, and the "sweet girl" who despites her western dress and willingness to have relationships, retains traditional submissiveness and lacks negotiating skills) might put adolescents to take risks to achieve their sexual identity. Increased opportunities for privacy may create the preconditions for coercive, unprotected sex as they try to pursue sexual roles model from peer pressure.

As with others (Archard, 2000; Measor, Tiffin & Miller, 2000), I also found young people received mixed messages from various sources about sex and relationships. Resulting in confusions and frustrations among young people about how to behave. They noticed discrepancies between messages (from the media, the Internet, magazines, and peers) and parents, teachers, and society expectations.

This study showed that Chiang Mai teenagers have reasonable knowledge of biological issues from sex education, but are confused and uncertain about how to obtain or use contraception, avoid pregnancy and STIs, negotiate personal and intimate relationships and find sources of support and advice. Findings indicated that available services did not reach a majority of young people due to limited places, poor promotion, and not welcoming young people to use the services. Information, contraception, and other family planning services should not be restricted to married couples. Even though there are some changes, this still appears to be a major target group of the implementation at present. Instead services should be accessible to all age groups,

including young people. I also found many parents lack the knowledge, confidence, and contemporary skills to be able to give meaningful support to their children. Providing information, involving, and coordinating with parents in providing sex education can minimise the problems.

The largely didactic and biological Thai sex education curriculum fails to meet pupils' expressed need for more applied knowledge, life skills, and confidence training. Boys seem likely to misunderstand and forget key issues, while being overly concerned about sexual performance and conquests. Girls seem to receive more sex education than do boys, but this difference may support existing stereotypes, in which girls are assigned responsibility for managing sex (although many do not actually have the power to do so). These findings are similar to those from other countries (Measor, 2004; Hilton, 2001; Measor, Tiffin & Fry, 1996). Encouraging young people to speak loudly about their views, perceptions, and needs regarding gender respects can improve in developing effective sex education (PRB & Advocates for Youth, undated).

Existing sex education programmes in Chiang Mai are popular with teenagers. However, findings suggest a need for a substantially broadened sex education curriculum that addresses and challenges gender stereotypes, develops practical and life skills, explicitly considers situations in which sexual coercion may arise, and is delivered consistently across different schools and by different providers.

8.4 Suggestions for further research

First, with a limitation of this study was a focus on one location, which limits in part information about sex education across Thailand. More studies in relation to sex education are needed to provide broader picture of sex education in Thailand. This includes more specific research from sex education policy to interventions; from the curriculum to sex education delivery, from different providers to receivers, and from schools to health organizations and communities. Researching local authorities and using critically evaluated evidence based approaches in planning and developing sex

education materials and strategies are encouraged. Those findings can provide useful information for developing effective sex education for Thailand.

Second, I found peers were the preferred source of information by all age groups and by both genders, and both parents and teachers experienced limitations as sex educators. Peer-led sex education has some theoretical advantages (especially acceptability and influence) but has not been consistently shown to produce better outcomes (Kirby, 2002; Campbell & MacPhail, 2002). Findings suggest that teenagers in Thailand do not have the relevant life skills and could be sources of misinformation (for example about a non-existent "safety period") and entrenched values (such as the "smart boy" ideal). With these caveats in mind, the input of teenagers themselves to sex education interventions should be explored further. In addition, findings from this study showed that teenagers chose to get different information from various sources. This suggests that integrate programmes that include school, parent, and peer led sex education could be effective.

Third, I found that there was no systematic evaluation of sex education in Thai schools. Evaluation of programmes and interventions should look for effectiveness in term of meeting the needs of teenagers and inform their choices for developing into healthy adulthood rather than look for activities provided or (sound) knowledge. Research-based materials that provide the kind and format of information which teenagers want, that tackle key problems and barriers of sex education, are essential for developing sex education (Measor, Tiffin & Miller, 2000).

8.5 Policy recommendations

First, invest in quality sex education rather than focusing on the quantity of work delivered, to ensure that young people receive practical and useful information they need. Listening and responding to the views of young people will strengthen their confidence and self esteem within this process enabling them to speak out about their wants and needs (DfEE, 2000). The gap between two generations can be narrowed by good communication from both parties. Government should involve young people in decision-making bodies that directly affect policies and programmes on sex education

at local, provincial, and national level. For example, encourage young people's representatives to speak out for their groups in school meetings, in provincial seminars, and in national conferences or encourage and support young people committee to involve in sex education provision. Encouraging and involving young people in policy development can make sex education more effective (SIECUS, 2005; Measor, Tiffin & Miller, 2000).

Second, illustrate the collaboration from all sectors: teachers, parents, young people, including other professionals and local communities. Develop public policies that encourage parents and health personnel to become involved in school-based sex education programme (SIECUS, 2005). Collaboration from all sectors, sharing resources and funding in HIV prevention community planning programme can be adapted in sex education programme both within school and outside school (see HIV prevention community planning in Thailand in Vuttanont, 2000). Multi level approaches: individual, family, school, medical, and community approaches to improve sex education should be developed.

Third, ensuring gender equality in the classroom. Sex education should involve all aspects of interpersonal and social relationships that have to do with sex/gender (Mullen & Cancienne, 2003:158). Developing a national sex education framework that promotes gender equality, moral perception, and responsibility and ensuring that young people responsible choices will be made. More public debates are needed for changing views towards gender, sexuality, and sex education to reduce barriers and change negative attitudes towards sex and sex education. Providing information about situations and adolescents' sexual health problems to raise public awareness and understanding that actions need to be taken to reduce the problems. Information such as up to date teenage pregnancies and consequences, teenagers' sexual norms and behaviours, and teenagers' cultures and perceptions are essential for parents, teachers, health personnel, and communities. Such information can provide through different channels and formats, for example, through the media, the Internet, leaflets, or posters; it can be delivered in various forms such as novels, music, or information sheets; or via discussions, seminars, talks in schools, community meetings, or other organizations.

A 'morality framework' regarding sexuality, gender equality, and responsibility in relationships needs to be developed within and around sex education provision including the media, books, magazines, and other sources (DfEE, 2000; Measor, Tiffin & Miller, 2000). All sources need to deliver the same messages that do not create confusions for young people. For example, issue about coercive sex, sex with no consent, or rape. A message young people receive from society, parents and teachers is, such behaviour is wrong and immoral, but a message young people receive from their peers and the media may be different. My findings showed that some adolescents confused and frustrated about how to act in a relationship. Their perceptions were 'a male is strong' and 'a boy achieves a male identity by proof of having power over a female'. They mentioned forced sex as expected behaviours rather than mentioned that as wrong or immoral behaviour. This confirms that public policies to encourage morality and responsibility in providing information to young people are necessary; encouraging young people to speak out about their perceptions of received massages can help to improve sex education. Indeed, sex education policy should illustrate collaborations of all sectors to take actions in developing framework of sex education provision to improve sex education for young people.

Fourth, ensuring sexual health services are made available for young people, easy to access, and welcome them to use the services. Findings from this study indicated that available services for adolescents were limited; adolescents, parents, and teachers lack information about services. Illustrate a widespread public information about adolescents' sexual health and available services; condom and contraceptives availability and social marketing; counselling services for young people; treatments of STIs, HIV, drug and alcohol abuses, including referring systems and supports for young people in a package of sex education are necessary. It is essential to ensure that rights of young people in receiving information and services will be met and to make the importance of adolescent reproductive health to be recognised to the publics (ACPD, 2001; UNFPA, 1997). As with others (Wilson & Williams, 2000; Pecham, 1997), young people in my study required friendly, confidential, non-judgemental and where people talk to them in a way they understand. 'Drop in' centres that locate in a way home and open around school closing time can be services that meet the needs of young people (Weyman, 2003).

8.6 Recommendations for practice

First, the popularity and success of the vignette scenario in prompting discussion and critical reflection about sexual health in this study shows the potential value of storybased methods in sex education. Story-based discussion methods have been shown to be successful in health education settings (Greenhalgh, Collard & Begum, 2005). Evidence from other countries suggests that thinking through the range of consequences (both positive and negative) of a potential encounter can lead to a reduction in risk-taking behaviours (Ross, Ekong & Ogungbade, 2005). Since the story is inherently both chronological (it unfolds over time) and malleable (there are several possible endings to an unfinished story), it is well suited to the delivery of consequence-based education. I found that young people were keen to learn from others' experiences rather than from teachers' lecture. A value of story-based method can add into a value of peer education strategy to enhance sex education. In addition, different media, such as film, magazine articles, and popular music might be used creatively for active learning through a vignette scenario. Studies have recently shown that entertainment based sex education has impact on people's behaviour concerning family planning, reproductive health, and HIV prevention (de Fossard & Lande, 2008). Health education and theatre for and by young people has been found to be an effective strategy to deliver sex education (Berlin & Hornbeck, 2003).

Second, I found that because of the coexistence of traditional and contemporary cultures and value systems; Western sex-education materials cannot be transferred comprehensively or directly to the Thai context. Materials that are locally developed and that draw critically and eclectically on Western resources and images may be a productive way of creating and developing quality materials for improving sex education, since materials produced in western countries often draw on an extensive evidence base. There were arguments about materials used in providing sex education within and outside schools. I found that some materials had been withdrawn from schools because morality problems (even though teachers and young people did not agree with such misperceptions). This suggests involving parents and community in materials development may minimise misunderstandings; integrate recommendations and involve young people in developing sex education materials for their peers. Which

in turn may improve quality of sex education? The effective participation of young people in all steps of the project cycle is a means to improve sex education (Østergaard, 2003). In addition, information should be distributed through different communication formats as those could enhance learning (Mitchell et al., 2001).

Third, in this study, pupils, parents and teachers used me, a researcher, extensively as a source of knowledge and advice. This finding suggests a potential intervention in the form of a trained professional who is confident and comfortable with delivering sex education support to a range of audiences. Such an individual could work flexibly with pupils, parents, and teachers to address knowledge gaps and develop skills and confidence in areas identified by them. He or she could act as an acceptable and effective mechanism, for example, for delivering a school-based sex education curriculum to parents (Nualnak, 2002). Training sex educators under collaboration between health sectors and schools should be encouraged. Involving trained and supervised medical, nursing, and public health students in sex education can add number of sex educators and improve sex education. Advantages of peer education led by medical students have been found in studies in many countries around the world (Bencevic, 2003).

Fourth, I found that sex education was a major parental concern. There were parents who wanted to talk about sex with their adolescent but did not know what, where, and how to do so. Findings suggest that school should develop parent-teenager sex education scheme. As other researchers have argued (Milton, 2003; Meschke, Bartholomae & Zentall, 2000), a parent-teenager sex education scheme could be developed, emphasising learning together and practising communication skills in delivering sex information. Such schemes could be evaluated to determine the efficacy of different programmes and approaches. A worksite- based parenting programmes designed to help adolescents develop communication and parenting skills could provide a way to reach busy parents, strengthen parent-adolescent processes in promoting healthy adolescent sexual behaviour, integrated the Bronfenbrenner's ecological model in programme development and evaluation, and community involvement have been suggested and found to be effective approaches (Eastman et al., 2005; Meschke, Bartholomae & Zentall, 2000).

In conclusion, the findings from this study affirm the huge amount of work already done in Chiang Mai to develop and deliver appropriate HIV awareness and school-based sex education programmes in the context of rapid cultural transition and overwhelming media pressure on teenagers. I have also identified several possibilities that could help sex education teams and researchers to refine existing interventions and develop support for sex educators. The study design is potentially transferable to other contexts in developing and transitional countries.

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APPENDICES

Appendix1_interview guide.pdf

Appendix2_school characteristics.pdf

Appendix3_pupil questionnaire.pdf

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Appendix5_parent attitude questionnaire.pdf

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Appendix 9 Vuttanont 2006 Smart boy sweet girl.pdf

APPENDIX I INTERVIEW GUIDE

INTERVIEW GUIDE

Part 1. Demographic data

Age	years		
Sex	Male	Female	
Status	SingleMarried	Widow	Separate
Religious	BuddhistChri	stIslam	Hindu
Education	Primary school .	Secon	ndary school
	Technical / commercial	school	
	University	Post	graduate
	Others (Please write)		
Occupation	n Pos	tion	

Part 2. Interview guide

Introduction and warm up

2.1 Today adolescents and sex education

What do you think about adolescents' behaviour?

Probe for adolescents' sexual behaviour

Do they have any risk behaviours?

What behaviours do they have?

What do you think about their sexual behaviours?

What consequences adolescents would have from those behaviours?

How can we prevent those problems?

Probe for sex education

What information do you think adolescents should have?

Probe for information about sexual relationship, contraception and protective sexual intercourse)

Who should provide information to adolescents?

Probe for attitude towards providing sexual health information.

If you have a chance, will you tell/teach/give any information about sexual health to adolescents (your children, your students)?

What do you want to tell them?

How do you feel if you have to talk about sex and sexual health topic?

What do you think about sex education in school?

Probe for attitude towards sex education in school

Will you support sex education programme? How?

2.2 School sex education

Topic Focus	Core questions	Additional questions or prompts
School sex education -quantity and quality	Have relationship, sex and / or contraception ever been spoken about in school? What information has been given out at school? What issues / topics have been spoken about?	Who taught it? Did other from out of school come and talk to students? When was it taught? Was this the right time for students? How was it taught? What teaching methods were used? Single sex / small group discussions / videos / drama etc. What was it like? How did you feel about it? How did you think students feel about it? Did you feel students could ask questions? Was the information appropriate / relevant to students? Did they learn anything new? Was the information given adequate? Were the classes taken seriously? By whom? What were you over all impression? Could it have been better / improved upon? How? Why?

Topic Focus	Core questions	Additional questions or prompts
Sex education – attitudes and norms	For those who did not provide any sex education in schools	Do you feel you would have liked to teach or provide information at school? Why? Do you think school should teach about such issues? Why? What issues would you have liked to provide at school? When students should be taught? At what age? How should the issues be approached? Which teaching methods do you think should be used? Who should provide the classes? Single sex / small group discussions / videos / outside speakers / drama etc.
Sex education – attitudes and norms	For those who have provided sex education in schools	What issues did you provide to students? At what age? How did you feel about providing information at school? Why? Do you think school should teach about such issues? Why? What issues would you have liked to provide at school? What information would you liked to provide? When students should be taught? At what age? How should the issues be approached? Which teaching methods do you think should be used? Who should provide the classes? Single sex / small group discussions / videos / outside speakers / drama etc.

2.3 Sexual health services

Topic Focus	Core questions	Additional questions or prompts
Awareness of services	Can you list for me all the places and people you know of which young people are able to visit and talk to, to find out about relationships, sex, contraception, STIs etc?	Health centres, youth club and organizations etc. Did school ever teach students about the local services? Did you ever teach students about local services?
Views about the services	What are your general knowledge / or impression of the services provided for young people?	What do you think are the most important features of a sexual health service for young people? What do you think are the essential elements of a service? What will make young people go? Are there differences in the needs of young men and women? How can they both be provided for? Where do you think young people's sexual health services should be held (location)? Why? Who should provide the information and advice? What do you think are the best ways of adverting and promoting services? How do you think the services in your locality could be improved upon? What do young men / women in your area need? What do you need?

Remarks: This interview guide was used to interview teachers and was adapted to interview service providers, religious leaders, and others. It was also adapted to use in focus group of teachers and parents.

APPENDIX II SCHOOL CHARACTERISTICS

SCHOOL CHARACTERISTICS

The school system in Thailand consists of four main levels: pre-school, primary, secondary and tertiary level. At age 6, children enter a primary school for six years of compulsory schooling, and then three years of lower secondary schooling. And three years upper secondary schooling follows this.

Government school

Government school means school that operated by government. In general, parents do not have to pay for education of their children. Under the law, all children have to received and being in education system until finish Year 9. After Year 9, many children might drop out from school because their parents could not afford for school travelling or some might have to work for supporting family. The government tries to encourage people to finish level 12, but it is still in the process- not under the law yet.

There are government schools that provide compulsory schooling (Year 1-6) and some expanded primary school (Year 7-9) in all sub-districts. Most of students who study in this type of schools are from low-income families. Many of compulsory government schools are located in temples. However, the schools are operated under education system by Ministry of Education - not religious organization.

There are bigger government schools (similar to state government school) that provide education in higher school level (Year 7-12). There are more students; and economic status of parents is upper-lower income to middle income. There is one state government school in one district.

Private school

There are fee paying private schools, which provide both primary and secondary school level. These are organised by the Department of Primary School and follow the national education policy. Many students come from middle to upper income families. Some private schools are also organized and supported by religious organization or charity.

APPENDIX III SEXUAL HEALTH QUESTIONNAIRE

Dear all

I am a Thai researcher. I am asking for your help to complete a questionnaire, which will form part of my PhD Thesis for the University College London.

Your co-operation in answering all the questions will be greatly appreciated. Your answers will be treated confidentially for the purpose of academic research. The purpose of the research is to help to design more appropriate health services for people of your age. By answering these questions, you will help me to find out more the knowledge that adolescents have about sexual and reproductive health issues.

Your identity will remain a secret. We will not tell your parents, your teachers, or your friends. Do not write your name on the questionnaire, so you can be sure that nobody will be able to identify who wrote the answers. After you have filled in, you can put in the envelope provided and seal it.

Take your time to read each question carefully in turn and answer it as best as you can.

Thank you very much for your help and cooperation.

Your sincerely

Uraiwan Vuttanont

PhD student in Primary Care University College London

SEXUAL HEALTH QUESTIONNAIRE

This questionnaire is about your sexual and reproductive health knowledge. It is divided into 5 parts

- Part 1: You and your family
- Part 2: Information on and knowledge of sexual health
- Part 3: Your awareness of contraception and condom knowledge
- Part 4: Your ideas about HIV / AIDS and sexually transmitted infections, and
- Part 5: Awareness of health services.

This questionnaire has 30 pages. Questions are only on one side of the paper. Please read through and try to answer all questions. Circle the number that you want to answer, or fill in the blanks. Examples of how to complete this questionnaire are shown at the start of each section.

Example Question

1	In general, how do you feel about your life at present?		
	1 I feel very happy	2	I feel quite happy
	3 I don't feel very happy	4	I'm not happy at all
(S	o the person who completed this question felt quite happy	and c	ircled choice two).

2 Have you ever smoked a cigarette?

(The person who completed this question had smoked a cigarette when they were fourteen).

It should take about 30 minutes to finish this questionnaire. Take your time to read each question carefully and answer it as best as you can. All answers will be kept confidentially, and nobody else will ever know what you have written.

Part 1 You and your family

Questions in this part are about your personal information. Please read through all questions, circle the number or fill in the blanks by the statement that suits you and your family.

1.1	Gender		1	Male	2	Female
1.2	What month	and year were you bo	orn?			Month / Year
1.3	How old wer	e you at your last birt	hday?			Years
1.4	What level an	re you studying in?		Year		
1.5	How many m	nore years of education	on do y	ou expect to receive	?	Years
1.6	Is the school	that you attend run b	y a par	ticular religion?		
	1	Yes	2	No	3	Don't know
1.7	The school th	nat you attend include	;			
	1	Boys and girls	2	Only boys	3	Only girls
1.8	What is your	religion?				
	1	Buddhist	2	Catholic	3	Protestant
	4	Muslim	5	Hindu	6	None
	7	Other (Specify)				

1.9 How often do you usually att	end religious services?
1 Less than once	e 2 At least once a week
3 Every day	4 At least once a month
5 At least once a	a year 6 Never
1.10 How important is religion in	n your life?
1 Very importan	t 2 Important 3 Not important
1.11 Is your father alive?	
1 Yes	2 No \rightarrow Go to Q 1.13
1.12 Does he live in the same ho	usehold as you?
1 Yes	2 No
1.13 Is your mother alive?	
1 Yes	2 No \rightarrow Go to Q 1.15
1.14 Does she live in the same he	ousehold as you?
1 Yes \rightarrow Go to	o Q 1.16 2 No
1.15 Who also lives with you?	
1 Grandfather / g	grand mother 2 Step father / Step mother
3 Aunt / uncle	
4 Others (Specify	ÿ)
1.16 Do you have any older broth	hers?
1 Yes	2 No \rightarrow Go to Q 1.18
1.17 Do any live in the same hou	isehold?
1 Yes	2 No

1.18 Do you have any older sisters?

1 Yes

2 No \rightarrow Go to Q 1.20

1.19 Do any live in the same household?

1 Yes

2 No

1.20 Have you ever discussed sex and relationships related matters with the following people? How often?

Circle the answer that matches your experience (You can answer more than one answer)

	Yes Often	Yes Occasionally	Never
Mother / stepmother	1	2	3
Father / stepfather	1	2	3
Older brother or sister	1	2	3
Teacher	1	2	3
Boyfriend or girlfriend	1	2	3
Friends of my age	1	2	3
Older friends	1	2	3
Doctor	1	2	3
Nurse	1	2	3

Part 2 Information on and knowledge of reproductive health

Read through all questions. You can answer more than one answer. Write numbers 1 for the most important, 2 for the second most important, and 3 for the third most important statement that you want to answer.

Example

1 Do you ever drink alcohol?



If Yes, please indicate alcoholic that you drink most often, second most often and third most often. Label your choices, 1, 2, or 3 in the blanks.

...... High / extra-strength beer

...... Normal-strength beer

...... liqueurs, or cocktails / mixers (cocktails / mixers are mixers of spirits with soft drinks or fruit juices)

...... Sherry or martini (including port)

...... Wine, or champagne

...... Cider

(The person who completed this question does drink alcohol, choosing wine / champagne most often, normal strength beer second most often, and thirdly cocktails).

	School teacher		Mother		Father
	Brother		Sister		Other family members
	Friends		Doctor/Nurse		Book/ magazines
	Films/ Videos		Internet		Nobody
	Others (Specify)				
2.2 Mal	i is 14 years old and her	r body	is changing. Ple	ase in	dicate the 3 most likely
people/pla	nces she will go for this in	formati	ion? Label your o	choices	, 1, 2, or 3 in the blanks
	School teacher		Mother		Father
	Brother		Sister		Other family members
	Friends		Doctor/ Nurse		Book/ magazines
	Films/ Videos		Internet		Nobody
	Others (Specify)				
2.3 Som	chai wants to know where	e eggs a	and sperm are ma	ade and	d how pregnancy occurs
Please inc	licate the 3 most likely peo	ople/pl	aces he will go fo	or this	information? Label you
choices, 1	, 2, or 3 in the blanks.				
	School teacher		Mother		Father
	Brother		Sister		Other family members
	Friends		Doctor/Nurse		Book/ magazines
			Internet		Nobody
	Films/ Videos		Internet		riobody

Please indicate the 3 most likel	y people/places she will	go for this information? Labe
your choices, 1, 2, or 3 in the bla	nks.	
School teacher	Mother	Father
Brother	Sister	Other family members
Friends	Doctor/Nurse	Book/ magazines
Films/ Videos	Internet	Nobody
Others (Specify)		
2.5 Somchai wants to know h	ow boys should act in a	a relationship with girls. Pleas
indicate the 3 most likely p	people/places he will go to	for this information? Label you
choices, 1, 2, or 3 in the bla		·
School teacher	Mother	Father
Brother	Sister	Other family members
Friends	Doctor/Nurse	Book/ magazines
Films/ Videos	Internet	Nobody
Others (Specify)		
2.6 Mali wants to know how g	irls should act in a relatio	nship with boys. Please indicate
the 3 most likely people/places s	she will go for this inform	nation? Label your choices, 1, 2
or 3 in the blanks.		
School teacher	Mother	Father
Brother	Sister	Other family members
Friends	Doctor/Nurse	Book/ magazines
Films/ Videos		Nobody
Others (Specify)		•
······· - · · · · · · · · · · · · · · ·		

2.4 Mali wants to know where eggs and sperm are made and how pregnancy occurs.

2.7 Have you had any classes at school, which have given information and / or discussed the following topics?

Circle the answer that matches your experience

	No	Yes, once	Yes, a few times	Yes, many times	Don't remember / don't know
1. How to act in a relationship	1	2	3	4	5
2. Sexual feelings and emotions	1	2	3	4	5
3. How our bodies develop	1	2	3	4	5
4. Pregnancy and having a baby	1	2	3	4	5
5. Contraception and birth control	1	2	3	4	5
6. How to use a condom	1	2	3	4	5
7. Abortion	1	2	3	4	5
8. HIV / AIDS	1	2	3	4	5
9. Other sexually transmitted infections	1	2	3	4	5
10. Being a gay (men who find other men sexually attractive)	1	2	3	4	5
11. Being a lesbian (women who find other women sexually attractive)	1	2	3	4	5
12. Being bisexual (someone who finds both men and women sexually attractive)	1	2	3	4	5

2.8 Below are list of topics about sex and relationships.

Circle the answer that matches what you think about being taught about each issue.

	Should have more classes	Should have fewer classes	About right	Shouldn't have classes	Don't know / No idea
1. How to act in a relationship	1	2	3	4	5
2. Sexual feelings and emotions	1	2	3	4	5
3. How our bodies develop	1	2	3	4	5
4. Pregnancy and having a baby	1	2	3	4	5
5. Contraception and birth control	1	2	3	4	5
6. How to use a condom	1	2	3	4	5
7. Abortion	1	2	3	4	5
8. HIV / AIDS	1	2	3	4	5
9. Other sexually transmitted infections	1	2	3	4	5
10. Being a gay (men who find other men sexually attractive)	1	2	3	4	5
11. Being a lesbian (women who find other women sexually attractive)	1	2	3	4	5
12. Being bisexual (someone who finds both men and women sexually attractive)	1	2	3	4	5

2.9 Are there any topics that you want to know about, and whom do you want to get information from about those topics?

Topics you want to know more about	Who you would like them to tell you about it?

Part 3 Your awareness of contraceptive methods and condom

This section of the questionnaire asks about condoms and contraceptive methods. Circle the number in the box that you think is true, false, or don't know, or fill in the blanks.

Examples

	True	False	Don't know
1 Taking the contraceptive pill could protect you against sexually transmitted infections?	1	2	3

(So the person who completed this question didn't think that taking the contraceptive pill could protect against sexually transmitted infections)

2 Do you usually go out with your friends?

1 Yes, 2 No

If Yes, what do you usually do with your friends? Please write

We usually go to cinema and pub

(So the person who completed this question did go out socially with their friends to the cinema and pub).

Below are questions asked about Somchai and Mali, who are the same age as you. Somchai and Mali want to have sex but do not want to have a baby. How could they prevent Mali from getting pregnant?

		True	False	Don't know
3.1	Mali can get pregnant on the very first time that she has sexual intercourse.	1	2	3
3.2	Somchai can pull out of Mali before he comes (ejaculates), to prevent her getting pregnant.	1	2	3
3.3	They can avoid sex on days when pregnancy is most likely to occur.	1	2	3
3.4	Mali can take a pill every day to stop her having a baby.	1	2	3
3.5	Mali can have an injection every 2 or every 3 months to stop her having a baby.	1	2	3
3.6	Somchai can put a condom on his penis before sex to protect Mali getting pregnant.	1	2	3
3.7	Mali can take a pill soon after sex to stop her getting pregnant.	1	2	3

3.8	Do you kno	ow wł	nere you c	ould get contr	aceptives	s?			
	1	Ye	es	2	No		3 No	t sure	
3.9	Have you below.	heard	of any o	other methods	of cont	raception?	If so, pl	ease list	them
									· • • • • •
3.10	What metl	hod do	you thin	k Somchai and	d Mali ar	e most likely	y to choos	se?	
						•••••			

Below are questions about condoms

3.11	Have you ev	ver seen a condom	?				
	1	Yes		2	No		3 Not sure
3.12	Is condom b	peing an effective i	meth	od of	preventing p	preg	nancy?
	1	Yes	2	No		3	Don't know/Not sure
3.13	Can condon	n be used more tha	n on	ice fo	r sex?		
	1	Yes	2	No		3	Don't know/Not sure

Questions below ask about Somchai and Mali, who are the same age as you. Somchai has sex with Mali. How do you think they would use condoms? Circle the number in the box what you think about sentences below.

Example

	Strongly agree	Agree	Neither agree disagree	Disagree	Strongly disagree
1 Mali is too young to have sexual relationship.	1)	2	3	4	5

(The person who completed this question felt strongly that Mali was too young to have sex).

		Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
3.14	Mali could suggest to Somchai that he use a condom.	1	2	3	4	5
3.15	Somchai could suggest to Mali that he use a condom.	1	2	3	4	5
3.16	It would it be too embarrassing for someone like Somchai to buy or obtain condoms.	1	2	3	4	5
3.17	If Mali suggested using a condom, Somchai might think she did not trust him.	1	2	3	4	5
3.18	If Mali suggested using a condom, Somchai might think Mali had relationship with others.	1	2	3	4	5
3.19	If Somchai and Mali want to have sex before marriage, they could use condoms.	1	2	3	4	5
3.20	Condoms are an effective way of protecting against HIV/AIDS.	1	2	3	4	5

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
3.21 Condoms are suitable for steady, loving relationships.	1	2	3	4	5
3.22 Condoms reduce sexual pleasure.	1	2	3	4	5
3.23 Condoms can slip off the boy and disappear inside the girl's body.	1	2	3	4	5
3.24 Condoms are an effective way of protecting against sexually transmitted diseases.	1	2	3	4	5

Part 4 Knowledge of HIV / AIDS and Sexually transmitted infections

This section is about HIV / AIDS and other sexually transmitted infections. Please read through all questions, circle the number in front of the statement you want to answer, or fill in the blanks.

4.1	Have you heard of HIV?	

1 Yes 2 No 3 Not sure

4.2	Have you near	rd of AIDS?				
	1	Yes	2	No	3	Not sure
4.3	Can people pr	rotect themselves from	ı HI	V?		
	1	Yes	2	No	3	Not sure
4.4	Is it possible t	to cure AIDS?				
	1	Yes	2	No	3	Not sure
4.5	Does a person	with HIV always loo	k un	healthy?		
	1	Yes	2	No	3	Not sure
4.6	Can people ta	ke a blood test to find	out	whether they have HIV	V?	
	1	Yes	2	No	3	Not sure
4.7	Apart from H	IIV/AIDS, are there a	ny o	ther diseases that boys	s and	l girls can catch by
havi	ng sexual inter	rcourse? Circle the n	umb	er in front of the disea	ases	that you have ever
hear	rd of.					
	1	Diabetes	2	Gonorrhoea	3	Genital warts
	4	Malaria	6	Syphilis	7	Chlamydia
	8	Herpes	9	Hepatitis B	10	Measles
	11	Other (specify)				
4.8	How would a	boy know if he has g	ot a	sexually transmitted in	nfecti	ion?

4.9	How would a girl know if she has got a sexually transmitted infection?
••••	
••••	
	If a friend of yours needed treatment for a sexually transmitted infection, where
coul	ld they obtain such treatment? You can answer more than one answer
	1 Pharmacy
	2 Private doctor/ nurse/ clinic
	3 Government hospital / health centre / clinic
	4 Other (specify)
4.11	What ways do you know about that can help protect people against
	Sexually transmitted infections? Write them in space below.

Part 5 Awareness of health services

Questions in this part are about your personal information. Please read through all questions. Circle the number in front of the statement you want answer, or fill in the blanks.

5.1 What do you think about the services (family planning clinic, STIs/HIV clinic, or counselling clinic)?

		Yes	No	Don't know / Not sure
1	I don't know where they are.	1	2	3
2	I don't know what services they provide for adolescents.	1	2	3
3	They do not have services for adolescents.	1	2	3
4	I worry people who work there will judge me.	1	2	3
5	I don't think they are very useful.	1	2	3
6	It is difficult to get to them. If you answer YES , it is difficult to get to them because	1	2	3

5.2	What types of services do you want to have for sexual health?			
You can circle the number in front of statement more than once.				nan once.
	1	Counselling service		
	2	Telephone advice		
	3	Providing contraceptives		
	4	Transfer system for proper management		
	5	Out of hour clinic		
	6	Others (specify)		
5.3	When did you last see a doctor?			
	1	Last week	2	Last month
	3	Last 3 months	4	Last 6 months
	5	Last year	6	More than one year
	6	I have not seen a doctor or a nurse.		
		How long? (Please write)		\longrightarrow Go to Q 5.6
5.4	When the last visited the doctor, what was your reason for going?			
	1	Skin problem	2	Fever
	3	Legs / arms	4	Chest problems
	5	Ear / eye / nose / throat	6	Weight
	7	Allergies	8	Sexual health
	9	Personal issues		
	10	Others (Please write)		

5.5 Have you ever seen any poster about the topics listed below in the place where you saw a doctor?

	Yes	No	Don't know / Not sure
1 Healthy Eating	1	2	3
2 Smoking	1	2	3
3 Drugs	1	2	3
4 Alcohol	1	2	3
5 HIV / AIDS	1	2	3
6 Contraception	1	2	3
7 Condom	1	2	3
8 Pregnancy	1	2	3

If you are a girl, answer 5.6 (a). If you are a boy, answer 5.6 (b).

5.6 (a) **GIRLS**Have you ever had problems with the following?

	Yes	No	Don't know / Not sure
1 Irregular periods	1	2	3
2 Painful periods	1	2	3
3 Worrying about having sexual intercourse	1	2	3
4 Getting a Sexually transmitted infections	1	2	3
5 Unwanted pregnancy	1	2	3
6 Having discharge from your vagina	1	2	3
7 Size and shape of your vulva / vagina	1	2	3
8 Other problems (Specify)			

5.6 (b) **BOYS**Have you ever had problems with the following?

	Yes	No	Don't know / Not sure
1 Worrying about having sexual intercourse	1	2	3
2 Getting a Sexually transmitted infections	1	2	3
3 Your girlfriend getting pregnant	1	2	3
4 Having unusual discharge from penis	1	2	3
5 Size and shape of your penis and testicles	1	2	3
6 Other problems (Please write)			

5.7 Have you ever attended a talk by doctor or nurse on topics given below?

	Yes	No	Don't know / Not sure
1 Sexually transmitted infections	1	2	3
2 How babies are made	1	2	3
3 How to avoid getting pregnant	1	2	3
4 Did you have any question that you wanted to ask but felt shy / embarrassed about?	1	2	3
5 If you asked any questions during the consultation was they answer question adequately?	1	2	3

5.8	If your friends ask you about what it was like talking to the doctor about personal things, what would you tell them?
• • • • •	
• • • • •	

5.9	Did you	ı feel t	he talk was private?				
		1	Yes	2	No	3	Don't know
	Why?		write				
				EN	D		

I remind you that all answers will be kept confidentially and will be used for research only. Now you have finished this questionnaire. We will give you an advice sheet that has lots of helpful contact organisations that you can call if you need help or advice. If you have any questions you would like to ask about this questionnaire or your health you can ask the researcher.

PLEASE PUT THIS QUESTIONNAIRE IN THE ENVELOPE PROVIDED AND SEAL IT

THANK YOU VERY MUCH FOR YOUR CO-OPERATION

APPENDIX IV FOCUS GROUP GUIDELINE

FOCUS GROUP GUIDELINE

There are two parts to complete focus group discussion. Part 1 is a questionnaire about your and your family including geographical data, and part 2, discussions between group members

Part 1 You and your family

Questions in this part are about your personal information. Please read through all questions, circle the number or fill in the blanks by the statement that suits you and your family.

1.1 Geno	der	l Male		2 Female		
1.2 Wha	ıt day,	month and year were you	bor	n? Month	/ Ye	ar
					/	
1.3 How	old v	vere you at your last birth	day?			Years
1.4 Wha	t leve	l are you studying in?		Level		
1.5 How	many	y more years of education	do y	ou expect to receive?		Years
1.6 Is the	e scho	ool that you attend run by	a pai	rticular religion?		
	1	Yes	2	No	3	Don't know
1.7 The	schoo	l that you attend include				
	1	Boys and girls	2	only boys	3	only girls
1.8 Wha	ıt is yo	our religion?				
	1	Buddhist	2	Catholic	3	Protestant
	4	Muslim	5	Hindu	6	None
	7	Other	(S	pecify)		

1.9 How ofter	n do you usually attend religi	ious	service	s?	
1	Every day		2	At least once a week	
3	At least once a month		4	At least once a year	
5	Less than once a year		6	Never	
1.10 How imp	portant is religion in your life	e?			
1	Very important	2	Import	ant 3 Not impo	ortant
1.11 Is your fa	ather alive?				
1	Yes	2	No -	Go to Q 1.13	
1.12 Does he	live in the same household a	ıs yo	ou?		
1	Yes	2	No		
1.13 Is your n	nother alive?				
1	Yes	2	No -	→ Go to Q 1.15	
1.14 Does she	e live in the same household	as y	ou?		
1	Yes \rightarrow Go to Q 1.16			2 No	
1.15 Who also	o lives with you?				
1	Grandfather / grand moth	ner		2 Step father / Step moth	ner
3	Aunt / uncle				
4	Others(Specify)	
1.16 Do you h	nave any older brothers?				
1	Yes	,	2 No	\rightarrow Go to Q 1.18	
1.17 Do any l	ive in the same household?				
1	Yes	2	2 No		
1.18 Do you h	nave any older sisters?				
1	Yes	,	2 No	\rightarrow Go to Q 1.20	
1.19 Do any l	ive in the same household?				
1	Ves	,	2 No.		

	Yes	Never
1.20 Do you ever go to	1	2
clubs or parties where	How many times in last month?	
young people dance?	times	
1.21 Do you ever go to	1	2
the movies?	How many times in last months?	
	times	
1.22 Do you ever drink	1	2
alcohol?	How many days in the last month have	
	you drunk alcohol?	
	times	
1.23 Do you ever smoke	1	2
cigarettes?	How many have you smoked in the last 7	
	days?	
	cigarettes	

Part 2 Group discussion

Researcher reads the following out to the group

Welcome and thank you for joining this group discussion, where we will talk about what people of your age group think about sex. Before we talk about what people of your age think, please answer the following questions, which ask about you and your family. This discussion will help healthcare staff understand the views and behaviours of adolescents relating to sexual and reproductive health. This will help us plan more appropriate services for people of your age. Everything you say will be treated in confidence. So, nothing we will talk about will be told to others, including your friends, your teachers, or your parents.

We will talk about two teenagers, Mali and Somchai.

2.1 Mali is the same age as you. Her parents are very strict and they tell her that she must not get a boyfriend until she has finished her secondary school.

[Prompt: How do you think Mali would feel? What do you think she would do?]

2.2 Mali meets a boy, Somchai (meaning "handsome boy") at school and he invites her to meet him in the evening.

[Prompt: How do you think Mali would feel? What do you think she would do?]

2.3 She goes to meet Somchai, and he suggests that they go together to the fair outside the village in the evening. He indicates that he likes her very much (and they will have a great time being together).

[Prompt: How do you think Mali would feel? What do you think she would do? How do you think Somchai would feel? What do you think he would do?]

2.4 After the fair, they go to the park, and they begin kissing. Somehai is very keen to have sex with Mali.

[Prompt: How do you think Mali would feel? What do you think she would do? How do you think Somchai would feel? What do you think he would do?]

2.5 Later. Mali is also keen to have sex.

[Prompt: How do you think Mali would feel? What do you think she would do? Do you think Mali would think about using a condom? Do you think she feel strongly about using a condom? Why do you think she would feel that way? Do you think Somchai would think about using a condom? What do you think he would do? Why do you think he would do that?]

2.6 Somchai says he has no condom.

[Prompt: How do you think Mali would do next? Why do you think she will do that way? What do you think Somchai would do?]

2.7 Finally, they have sex.

[Prompt: What do you think they will be worried about? Why do you think he / she will think that way?]

2.8 Mali and Somchai have friends. They always chat with each other.

[Prompt: Do you think Mali will talk with her friends about sex? What do you think Mali and her friends will talk about? Do you think Somchai will talk with his friends about sex? What do you think Somchai and his friends will talk about?]

2.9 Do you think young people of your age need to know more information about sex?[Prompt: What do you think they would like to know about?(Write on paper provided, put in a box)]

2.10 Can you think of 3 words that can be used in advertising and promoting sexual health services for young people?

(Write on paper provided, put in a box)

2.11 Many people believe that people of your age are sexually active.

[Prompt: Do you agree with this? Why do you think that way?]

2.12 Do young people of your age actively abstain from having sex?

[Prompt: Do they have techniques / ways of obtaining satisfaction whilst maintaining abstinence?] (Write on paper provide, put in a box)

2.13 Do you think young people of your age are worried/concerned about pregnancy or HIV/AIDS and other sexually transmitted infection?

[Prompt: Do you think they worry about the risks seriously?]

APPENDIX V ATTITUDE TOWARDS TEACHING SEX EDUCATION IN SCHOOL

Dear all

I am a Thai researcher. I am asking for your help to complete a questionnaire, which will form part of my PhD Thesis for the University College London.

Your co-operation in answering all the questions will be greatly appreciated. Your answers will be treated confidentially for the purpose of academic research. The purpose of the research is to help to design more appropriate sex education and services for your children. By answering these questions, you will help me to find out more what you think and want from sex education in school.

Your identity will remain a secret. Do not write your name on the questionnaire, so you can be sure that nobody will be able to identify who wrote the answers. After you have filled in, you can put in the envelope provided and seal it.

Take your time to read each question carefully in turn and answer it as best as you can.

Thank you very much for your help and cooperation.

Your sincerely

Uraiwan Vuttanont
PhD student in Primary Care
University College London

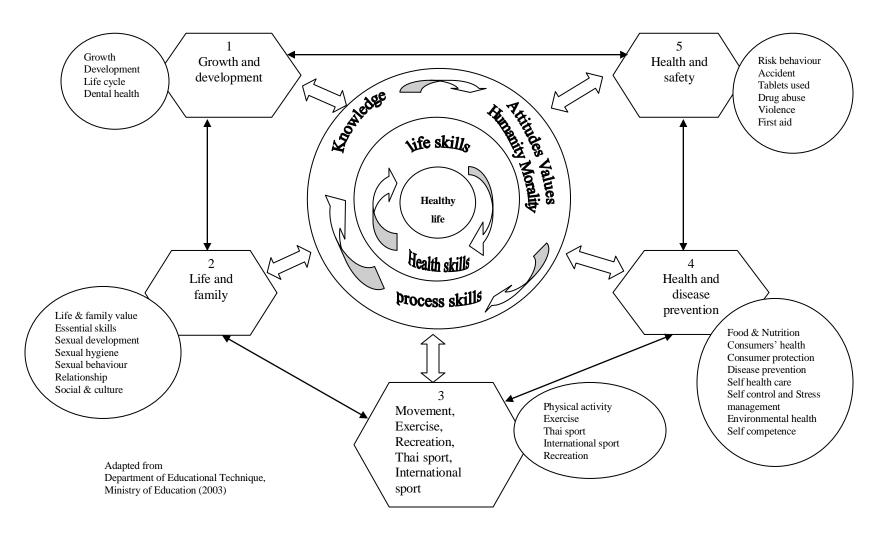
ATTITUDE TOWARDS TEACHING SEX EDUCATION IN SCHOOL

Circle a number in the box that match you

		Agree	Strongly agree	Disagree	Strongly disagree	Neither agree nor disagree
1.	Sex education induces adolescents' decision in trying sex experience.	1	2	3	4	5
2.	It is necessary to talk about sexual health with kids when they are adolescents.	1	2	3	4	5
3.	It is embarrassing when talking about sexual health with kids.	1	2	3	4	5
4.	Sex and relationship should be taught in school.	1	2	3	4	5
5.	Teaching about contraception increase sexual relationship in adolescents.	1	2	3	4	5
6.	Adolescents should not have boy friend or girl friend.	1	2	3	4	5
7.	Parents should punish kids if their kids have sexual relationship.	1	2	3	4	5
8.	Parents should be the first people who teach their kids about sex and relationship	1	2	3	4	5
9.	Your kid can talk and discuss with you in all matters (include sex related matter).	1	2	3	4	5
10.	There should have reproductive health services to adolescents.	1	2	3	4	5

APPENDIX VI THE HYGIENE AND PHYSICAL EDUCATION PERSPECTIVE AND CORE CONCEPT

The hygiene and physical education perspective and core concept



The hygiene and physical education perspective and core concept:

Mattayom 2 (Year 10)

1. Growth and development

Growth &Development – Internal & external factors that have influences on human growth and development

Growth & development stages Adolescent growth & development Following self growth & development

2. Life and family

Life & family value - Life & family planning

Essential skills -Avoiding sex -decision making skill

Sexual development - Adaptation for physiological, psychological, and sexual changes

Sexual hygiene – Reproductive health analysis

Sexual behaviour - Sexual equity, Risk behaviour to unwanted pregnancy

Relationship – How to behave with people in the same sex/opposite sex

Social & culture - Content is modifiable and applicable to suit students, parents, and local community

3. Movement, Exercise, Recreation, Thai sport, International sport

Movement - Basic physical activity

Game & recreation – Games and traditional playing

Physical ability - Physical test & development

Sports – Individual

Team – Sport skills, playing, racing, rules, regulations, and safety

Attitude – Choose to exercise, involve in physical activity and sport regularly

Characteristic – Sportsmanship, playing sport attempt

4. Health and disease prevention

Food & Nutrition -Food for vary age group, food for specific health problem

Consumers' health – Important and value of health

Mental health - Healthy behaviour

Consumer protection – Consumer rights, legal rights, nutrient analysis

Disease prevention – Health behaviour, preventive behaviour, and health

Self health care – Self care and first aid, using health service

Self control and Stress management – Emotional and stress management

Environmental health - Content is modifiable and applicable to suit students, parents, and local community

Self competence – Activity plan, exercise and sport benefits, self efficiency evaluation

5. Health and safety

Risk behaviour - Risk factors, risk behaviours, and safety (tablet /substance use & accident)

Accident – Practicing for safety, responsibility to follow social rules, dangers, dangerous medium analysis Tablets used – Safety taking tablets

Substance and drug abuse - Substance and drug abuse in community, Behaviour and risk factor, how to say no

Violence - Conflict and fighting problem solving

First Aid

Details of information covered in each topics are varied for students in different levels – see Department of Educational Technique,

Ministry of Education (2003).

APPENDIX VII GLOSSARY

GLOSSARY

AIDS: Acquired Immune Deficiency Syndrome

ACPD: Action Canada for Population and Development

AVERT: AIDS Education and Research Trust

BPAS: British Pregnancy Advisory Service

CDC: The Department of Communicable Disease Control (Ministry of Public Health)

CIA: Central Intelligence Agency

HIV: Human Immunodeficiency Virus

ICPD: International Conference on Population and Development

IPPF: International Planned Parenthood Federation

DOH: Department of Health

MOPH: Ministry of Public Health

NGO: Non-governmental organisation

PATH: Programme of Appropriate Technology in Health

PE: Physical Education

PHLS: Public Health Laboratory Service

PPAT: The Planned Parenthood Association of Thailand

PRB: Population Reference Bureau

SIECUS: Sex Information and Education Council of the United States

STIs: Sexually Transmitted Infections

UNAIDS: Joint United Nations Programme on HIV/AIDS

UNESCO: United Nations Educational, Scientific and Cultural Organisation

UNFPA: The United Nations Population Fund

WHO: World Health Organisation

APPENDIX VIII RESOURCES

RESOURCES

Organisations

AIDS & STIs Control Centre

Chiang Mai Public Health Office 10 Suthep Road, Maung, Chiang Mai Tel: (053) 211048-50 Ext. 131, 139, 141

Counselling Clinic

Nakornping Hospital, Chotana Road, Maerim, Chiang Mai Tel: (053) 890755-64 Ext.125

Chiang Mai Education Administration Office

Chiang Mai Government Centre, Chotana Road, Chiang Mai Tel: (053) 210348

Chiang Mai Hotline

Tel: (053) 850270

Chiang Mai Youth Centre

Health Promotion Centre, Region 10 (Maternal and Child Hospital) 51 Prachasumpun Road, Tumbon Changklan, Maung, Chiang Mai Tel: (053) 272740, 274015, 276856 Ext. 112, 227

Chiang Mai Youth Health Centre

The Department of Communicable Disease Control, Region10, Maung, Chiang Mai Tel: (053) 271021, 281551

Family Planning and Reproductive Health Development for Northern Population

The Planned Parenthood Association of Thailand 200/3 Bumrungraj Road, Chiang Mai Tel: (053) 249406, 262859

Rotary Hotline

Anonymous Clinic, Fang Hospital 30 Chotana Road, Fang Chiang Mai Tel: (053) 382789

Suanprung Psychiatric Hospital

131 Changloa Road, Tumbon Haiya, Maung, Chiang Mai

Tel: (053) 276153

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APPENDIX IX

PUBLICATION IN LANCET

Appendix 9_Vuttanont 2006 Smart boy sweet girl.pdf

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"Smart boys" and "sweet girls"—sex education needs in Thai teenagers: a mixed-method study

Uraiwan Vuttanont, Trisha Greenhalgh, Mark Griffin, Petra Boynton

Summary

Lancet 2006; 368: 2068-80

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Background In Thailand, rapid increases in economic prosperity have been accompanied by erosion of traditional cultural and religious values and by negative effects on sexual health of young people. We investigated knowledge, attitudes, norms, and values of teenagers, parents, teachers, and policymakers in relation to sex and sex education in Chiang Mai, Thailand, with a view to informing sex education policy.

Methods We selected six secondary schools for maximum variation in socioeconomic background, religious background, and location. Methods were: narrative interviews with key stakeholders, and analysis of key policy documents; questionnaire survey of 2301 teenagers; 20 focus groups of teenagers; questionnaire survey of 351 parents; and two focus groups of parents. Qualitative and quantitative data were assessed separately with thematic and statistical analysis, respectively, then combined.

Findings We noted five important influences on Thai teenagers' sexual attitudes and behaviour: ambiguous social roles leading to confused identity; heightened sexual awareness and curiosity; key gaps in knowledge and life skills; limited parental input; and impulsivity and risk-taking. Male teenagers aspire to be "smart boys", whose status depends on stories of sexual performance and conquests. Female teenagers, traditionally constrained and protected as "sweet girls", are managing a new concept of dating without their parents' support, and with few life skills to enable them to manage their desires or negotiate in potentially coercive situations. School-based sex education is biologically focused and inconsistently delivered.

Interpretation Results of this large exploratory study suggest five approaches that could be developed to improve sex education: targeted training and support for teachers; peer-led sex education by teenagers; story-based scenarios to promote applied learning; local development of educational materials; and use of trained sexual health professionals to address learning needs of pupils, teachers, and parents.

Background

In November, 2005, Thailand's Social Development and Human Security Minister Watana Muangsook suggested that police officers should be stationed outside motels to prevent teenagers meeting for sex during a public festival. The decision provoked intense public debate and an editorial in Thailand's national newspaper, *The Nation*:

"Hardly a day goes by without a new, sensational study or opinion poll informing us about how youths are beginning to have sexual intercourse at an ever-younger age... Agonising parents, teachers and social workers express outrage, lamenting Thailand's cultural degradation and start blaming permissive Western influences for young people's 'loose sexual behaviour'. Such moral indignation does nothing to reduce the widespread hypocrisy toward sex that has always existed in this society. These sermonising adults are inclined to paint an idyllic picture of a puritanical Thai society, which probably has never existed, where dutiful sons and daughters grow up under the watchful eyes of their role model parents, keeping vows of celibacy until their marriage."

Thailand is a country in the midst of rapid social, economic, and cultural change. In one generation, it has changed from being dependent mostly on agricultural exports to having one of the most successful economies in southeast Asia, reaping the benefits of an expanding

manufacturing sector and international tourism. These changes have been accompanied and underpinned by urbanisation, westernisation, moderation of cultural and religious norms, and the expansion of Thailand's infamous sex industry. A substantial (and largely undeveloped) rural economy remains (details of sources available from authors on request). Sexual health is an increasingly important public health issue.²⁻⁴ In a recent cross-sectional survey, 43% of Thai girls aged 17 years or younger reported having sexual intercourse; one in five of these reported this experience as coercive, and one in four became pregnant.5 Other studies in Thailand have documented increasingly early sexual debut, low rates of contraceptive use by adolescents, a growing burden of HIV and other sexual transmitted diseases in young people, rising rates of teenage pregnancy and illegal abortion, and the exchange of sex for money or gifts. 6-9 These trends are similar to those in other countries in transition and worldwide.10-12

The coexistence in a society of traditional and contemporary values and lifestyles produces a complex context for the transition from child to adult and for the development and evaluation of sexual health education interventions for teenagers (panel 1). The teenage period in any society is characterised by tension, transition, risk-taking, and conflict.¹³ Traditionally, Thai teenagers

have been expected to move smoothly from childhood into adulthood while respecting their parents and their religion; girls are required to be docile, submissive, modest, and disinterested in sex until marriage. Male and female individuals (especially the young) should not be alone together. The relative permissiveness towards teenage culture, identity, and risk-taking seen in more developed (western) societies is not present in many transition countries, especially where religious norms are strong in the older generation.¹³ Parents in such countries may overtly reject and even stigmatise their own teenagers' values and behaviour, leading to failure of communication and loss of family support at the time when it is most needed.¹⁴

Systematic reviews of randomised trials of teenage sex education (mostly done in western countries) have shown that although improvements in sexual health knowledge and specific skills were commonly achieved, very few interventions had a significant effect on sexual behaviour or outcome. 15-17 The largely disappointing outcomes of school-based sex education are probably due to the fact that few programmes: were firmly based on theoretical models of behaviour change; assessed what the target population of teenagers actually know, believe, and do; acknowledged and addressed the emotional and interpersonal aspects of sex as well as the biological ones; were appropriately tailored to the child's health literacy and stage of development; took full account of cultural values, practical constraints, and other contextual issues; were of sufficient intensity and duration; were implemented as intended; and had been optimised in a formal pilot phase before the trial began. 18-25 We aimed to address how sex education was delivered within Chiang Mai and focus particularly on the successes and problems of school-based sex education in relation to this existing evidence.

Panel 1: Thailand in transition

Political system

Feudal→Neo-capitalist

Information

Restricted→Widespread

Religion

Buddhist→Multi-faith or secular

Religiosity

High→Low

Geography

Rural→Urbanised

Social values

Respects the old→Celebrates youth Collectivist→Individual Trusting→Sceptical Modesty→Self-expression Male dominated→Gender equality

Structural factors (ie, economic resources, policy supports, social norms, government and governance, businesses, workforce organisations, faith communities, justice systems, mass media, educational systems, and healthcare systems) have an important effect on teenagers' sexual choices and their response to sex education.26 Where influences such as homelessness, abject poverty, lack of basic education, or subjugation of women predominate, sex education is often difficult or impossible to implement.^{27,28} In less extreme situations, strong arguments exist for sex education interventions being explicitly holistic, and being developed and evaluated within this wider structural frame.²⁹ Countries undergoing rapid social and economic transition offer a shifting baseline of structural influences, raising the likelihood that an intervention aimed at changing teenage sexual behaviour will fail to have the anticipated effect.

Research that seeks to explore the effect of several dynamic and conflicting cultural and social influences on the perceptions, standards, and actions of teenagers, parents, teachers, and policymakers should have a broad scope and methods. We aimed to inform the development of sex education policy in Chiang Mai by finding out: what teenagers know, believe, and value about sex and sexual health; what parents, teachers, and policymakers believe and value; what areas of dissonance and tension exist within and between groups; how perceptions and behaviours are shaped and constrained by prevailing cultural influences; and what is currently being delivered in terms of school-based sex education and how it is perceived by all stakeholders.

Methods

Study design and setting

We did a mixed-method study based in six secondary schools in Chiang Mai, the largest of the six provinces in the upper north region of Thailand with a population of about two million, of which 11·2% are teenagers. Concern about HIV/AIDS in this region has led to the introduction of a wide range of intensive interventions, including school-based interventions that represent some of Thailand's most progressive policies on the provision of sex education.

The study had five components: preliminary field study to gather background data and seek institutional consents; questionnaire survey of secondary-school-age pupils (ages 12–21; median age 15; total 2301); focus group study of pupils (total 185 in 20 groups of eight to 12 pupils); questionnaire survey of 351 parents; and focus group study of parents (total 23 in two groups).

Procedures

Ethics approval was obtained from University College London research ethics committee, and all data were obtained and stored according to requirements of the UK Data Protection Act 1998. Approval, consent, and input to the design of the study were obtained from the governing

body or equivalent of the individual schools during an extensive consultation phase (in 2002) before the main fieldwork (2003–05). A summary of the main phase of the project was prepared in Thai and provided to all participants to introduce the research. Participants in the focus groups gave verbal consent after reading the information sheets or consented by completing their questionnaires. Questionnaires were distributed to pupils with an emphasis that completion was voluntary and that one option was to return a blank questionnaire in the sealed envelope.

In the preliminary phase, UV (previously a sexual health nurse from Chiang Mai) interviewed six sex education teachers and policymakers known to her. A snowball technique was then used, in which each interviewee referred the researcher to one or two further colleagues for possible interview.

In selecting the six secondary schools, we aimed for maximum variation in socioeconomic background of pupils, prevailing cultural norms, religion, and religiosity, geographical location (urban or rural), and current approach to providing sex education. Within schools, we offered the questionnaire to an entire year group (which, in Thailand, includes children of different ages, since skipping or repeating a year is not uncommon) and asked teachers to help identify individual pupils with particular characteristics (such as "sporty", "studious", "beautiful", or [general] "risk-takers") for focus groups. We recruited parents for the questionnaire survey through the schools, and a subsample of these participants volunteered for two focus groups.

In the preliminary field study, we aimed to map key structural influences and stakeholder perspectives on sexual health issues for teenagers in Chiang Mai. Our data sources are shown in panel 2. We summarised these data to provide an outline of the key social, political, economic, and technological context in which teenage

Panel 2: Data sources for preliminary field study

15 narrative interviews with public health specialists, sex education policymakers, local religious leaders, and schoolteachers, in which individuals were invited to give personal accounts of their work in this area. 14 of these 15 participants were unknown to the investigator (UV) at the start of the study and were recruited via a snowball technique, which allowed identification of key professionals working in this area to be identified.

Analysis of national and local policy documents on sexual health and sex education, including public health literature

Analysis of school resources on sex and relationships (curriculum summaries, videos, audiotapes, teacher handbooks, and sex education leaflets)

A literature review on sexual health and sex education in Thailand (and, where relevant, internationally)

sexual health choices are made (and in which sex education interventions are delivered).

For the questionnaire surveys, we modified the WHO questionnaire²⁹ in accordance with its creators' instructions: "This instrument is intended to be no more than a point of departure for investigators wishing to study the sexual and reproductive health of young people. It should always be adapted to local circumstances and priorities and, wherever possible, be used in conjunction with qualitative methods of investigation". Other sexual health projects in different countries have successfully used and adapted this measure. ^{30,31}

Following the guidelines produced by the questionnaire's authors, we adjusted the questionnaire to create a 73-item self-completion pen and paper instrument that included yes or no, Likert scale, and open-ended questions. Items covered knowledge of sexually transmitted infections (STIs), safer sex, condom use, awareness of sexual and reproductive health services, communicating about sex, and reproductive health knowledge.

We did additional analyses to assess internal validity and check that participants demonstrated consistency of responses amongst other similar questions on the questionnaire. For example, the following levels of agreement were identified: κ =0·314 for how to act in a relationship and sexual feelings and emotions, κ =0·631 for using contraception and condoms, κ =0·505 for contraception and abortion, κ =0·475 for condoms and abortion, κ =0·244 for whether respondents had heard of HIV and knew you could have a blood test to check for the infection, and κ =0·219 for where respondents had heard of HIV and recalled being taught about preventing infection

Questionnaires were piloted in English and in Thai, and further refinement of questions was undertaken to produce a definitive instrument that was acceptable and comprehensible to the target respondents and which produced reliable responses. Detailed psychometric properties of the instrument will be published separately.

Most pupils chose to complete the questionnaire at school; a few chose another private place of their preference, such as their home. Parents were recruited through their child's school (eg, after a parent-teacher meeting) and asked to complete a ten-item pen and paper questionnaire that assessed their sexual health knowledge, attitudes towards sex education, and views about teenagers and sex on a five-point Likert scale. The researcher (UV) was present during distribution and completion of questionnaires in schools to provide additional support or information to participants. Participants sealed questionnaires in envelopes before giving them to the researcher.

Focus groups for teenagers (20 groups of eight to 12) were held in school and facilitated by UV. We asked them in more detail about their sexual and reproductive health knowledge, views about sex education and suggestions for improvements to their current sex education. To encourage discussion, we used a structured vignette (panel 3); we

had developed this projection instrument in a previous research study to promote discussion on sensitive topics.³² Focus group participants are told a story about an individual of the same age and sex as themselves. The story is told in short sections, and after each section the storyteller stops and asks the group "what would this person do or feel at this point?".

Parent focus groups were also held on school premises and facilitated by UV. They were asked about their own memories of sex education, their views about the sex education their teenagers were receiving, and their suggestions for changes and improvements to current sex education.

Data analysis

Numerical data were entered into SPSS version 12. Descriptive data were produced for sex, age, level of education, and religion. Responses to the questionnaire were compared between male and female teenagers with the χ^2 test.

Qualitative data were audiotaped, transcribed in Thai, and translated into English. A sample from each qualitative data source (teen focus groups, parent focus groups, narrative interviews) was analysed and coded independently by UV, PB, and TG, and discussions were held between the three researchers to explore key themes further and resolve discrepancies in interpretation.³³ On the basis of this discussion, we developed coding matrices for thematic analysis based on Ritchie and Spencer's framework approach,³⁴ and entered data from all transcripts into these. This allowed us to identify key themes, explore discourses, compare these across respondents, and generate hypotheses where appropriate.

Once preliminary data had been generated from the various empirical sources, a further phase of data synthesis was undertaken, in which we sought to build up a rich picture of the area of study. This phase required considerable discussion amongst the authors, re-analysis of data sources as new hypotheses emerged, and progressive focussing to refine emerging themes.³³

Role of the funding source

The sponsor of the study had no role in study design, data collection, data analysis, data interpretation, or writing of the report. The corresponding author had full access to all the data in the study and had final responsibility for the decision to submit for publication.

Results

Table 1 shows the characteristics of the six schools and the different samples for the questionnaire survey and focus groups that were drawn from each school. Overall, 2301 pupils and 351 parents completed the questionnaire (with response rates ranging from 84% to 100%). In some schools, pupils encouraged each other to complete the questionnaire in classroom settings, which explains the high response rates shown in table 1; in other schools

Panel 3: Structured vignette story used in teenage focus groups

Mali (meaning "flower") is the same age as you. Her parents are very strict and they tell her that she must not get a boyfriend until she has finished her secondary school.

[Prompt: How do you think Mali would feel? What do you think she would do?]

Mali meets a boy, Somchai (meaning "handsome boy") at school and he invites her to meet him in the evening.

[Prompt: How do you think Mali would feel? What do you think she would do?]

She goes to meet Somchai, and he suggests that they go together to the fair outside the village in the evening. He indicates that he likes her very much (and they'll have a great time being together).

[Prompt: How do you think Mali would feel? What do you think she would do? How do you think Somchai would feel. What do you think he would do?]

After the fair, they go to the park, and they begin kissing. Somchai is very keen to have sex with Mali

[Prompt: How do you think Mali would feel? What do you think she would do? How do you think Somchai would feel? What do you think he would do?]

Later, Mali is also keen to have sex.

[Prompt: How do you think Mali would feel? What do you think she would do? Do you think Mali would think about using a condom? Do you think she feel strongly about using a condom? Why do you think she would feel that way?]

Somchai says he has no condom.

[Prompt: What do you think Mali would do next? Why do you think she will do that way? What do you think Somchai would do?]

where there was less discussion of the questionnaire, response rates were slightly lower (but still 84% or greater). Table 2 shows demographic details of the study participants. Because of the mixed methods used in this study, the qualitative and quantitative findings are reported together to present a detailed picture of each topic.

The most prominent theme to emerge from the preliminary background phase was the coexistence of several conflicting social and cultural influences on Chiang Mai society as a whole and on teenagers in particular, especially in widespread media images of sex and sexuality. HIV/AIDS was a matter of great concern to policymakers and much effort was put into developing programmes to raise awareness and promote safe sex messages. Although the question of how sex education ought to be delivered was a popular topic in local and national media, no national consensus or strategy existed, resulting in uncertainty and institutional inertia.

Sex education curricula and methods of delivery differed widely between schools, but biological issues (bodily changes, differences between the sexes) were prioritised over practicalities (eg, how to put on a condom) and there was almost no formal teaching about emotional issues or negotiation skills. Homosexuality was sometimes mentioned briefly. Public-health advisers supported school-based sex education in principle, but they were rarely proactive in working with, or advising, schools.

	School type	Number of secondary- school-age pupils	Location	Religious affiliation	Ongoing sexual-health initatives	School populat	School population Question		School population Questionnaire sample Focus group sample(s)		Questionnaire sample		up sample(s)
						Socioeconomic status	Sex	Age range (years)	Number (response rate)	Characteristics	Number	Characteristics	
A	Government expanded primary*	100	Suburban	Located in Buddhist temple area	HIV prevention project in collaboration with local NGO	Mostly poor	Mixed	6–18	53 of 55 (96%)	M and F aged 12-18 years	1 groups	M "high risk" group	
В	Government expanded primary	200	Suburban	None	HIV prevention in collaboration with GOs and NGOs	Mostly poor	Mixed	6–16	67 of 72 (93%)	M and F aged 12–16 years	2 groups	1 M "sporty" group, 1 mixed general group	
С	Government (municipality) expanded primary	200	Urban	Located in Buddhist temple area	HIV prevention and sex education in secondary school pilot project	Mostly poor	Mixed	6–17	96 of 96 (100%)	M and F aged 13–17 years	2 groups	1 M and 1 F general group	
D	Government (district)	2000	Urban	None	HIV prevention in collaboration with GOs	Mixed poor and middle income	Mixed	13-18	691 of 889 (78%)	M and F aged 13–21 years	2 groups	1 M and 1 F general group	
Е	Government (provincial)	2300	Urban	None	HIV prevention in collaboration with GOs	Mixed poor and middle income	Mixed	12–18	869 of 1002 (87%)	M and F aged 12–19 years	4 groups	1 mixed "high risk" group, 1 mixed "studious", 1 F and 1 M "sporty".	
F	Private	1300	Urban	Supported by Protestant charity	HIV prevention in collaboration with GOs and NGOs	Mixed poor and middle income	Mixed	6-18	525 of 623 (84%)	M and F aged 12–19 years	9 groups	1 M and 2 F general groups, 1 M "sporty", 1 mixed "beautiful" M and "charming" F, 1 mixed "studious", 1 mixed "high risk"	
Total		6100							2301	779 M, 1522 F aged 12–18 years	185	80 M, 95 F aged 13-15 years	

GO=governmental organisation. NGO=non-governmental organisation. M=male. F=female. Expanded primary means that the school began as a primary school and subsequently added additional year groups to make up for limited local secondary provision. Two parent focus groups were recruited from schools B and E; 351 parents were recruited from school F.

Table 1: Characteristics of schools and field studies by school

Teachers admitted feeling uncomfortable delivering sex education. Curricula were widely modified, and sometimes overtly censored, by the individuals charged with delivering them; such decisions were strongly affected by personal values (about the immorality of sex), beliefs (especially that sex education leads to sex), knowledge of sexual health, and past experiences (especially memories of their own sex education).

"It depends on the head teacher and teachers in each school. Head teacher or teachers who are enthusiastic and keen to give information about HIV/AIDS to their students asked us to go to school and preparing students for us. But in some schools, when we asked for giving education in their schools, they refused and said, 'There is no HIV in our students—no need to go to our school'."

Public health adviser, Chiang Mai, PH2

The focus group and the questionnaire data revealed a number of recurring and inter-related sub-themes related to the effect of rapid social and cultural transition on sexual knowledge, attitudes, and behaviour, which we grouped under five broad headings: role ambiguity and confused identity; awareness, curiosity, and desire; knowledge and skills gaps; limited parental input; and impulsivity, risk taking, and coercion. Each theme was affected very strongly by pupils' sex, and to a lesser extent by their age, school background, and personality (eg "studious", "sporty", or identified by teachers as [general] "risk takers"). We consider these themes in turn below.

Teenagers in this study had a dual value system and conflicting aspirations. On the one hand, they aspired to modern relationships and gender roles, in which boys and girls can date, show public affection, and experiment with sex before marriage is permitted. On the other hand, teenagers frequently stated that they valued modesty and virginity (in girls) and respected, and sought to obey, their parents. They were pulled towards traditional norms through their religion, kinship ties, and sometimes school culture; and towards western norms by mass

	Teenagers (n=2301)*	Parents (n=251)
Sex	. cc.iugeis (ii 2302)	
Male	918 (40·1%)	146 (41-6%)
Female	1373 (59.9%)	205 (58.4%)
Age (years)	13/3 (33 370)	203 (30 470)
Teenagers		
12	7 (0-3%)	
13	249 (10.9%)	
14	449 (19.7%)	
15	466 (20.4%)	
16	456 (20.0%)	
17	418 (18.4%)	
≥18	231 (10.0%)	
Parents	3 (* * *)	
20–30		8 (2.3%)
31-40		140 (39.9%)
41-50		186 (53%)
≥51		17 (4.8%)
Grade†		-, (1 ,
Teenagers		
8 (age ≥12)	482 (21%)	
9 (age ≥13)	575 (25%)	
10 (age ≥14)	404 (17-6%)	
11 (age ≥15)	455 (19.8%)	
12 (age ≥16)	381 (16.6%)	
Parents	, ,	
Primary 1‡		61 (17-4%)
Primary 2		93 (26.5%)
Secondary 1		75 (21-4%)
Secondary 2		44 (12.5%)
Technical		25 (7.1%)
University		45 (12.8%)
Postgraduate		3 (0.9%)
Other		5 (1.4%)
Religion		
Buddhist	2183 (95·2%)	324 (92·3%)
Catholic	19 (0.8%)	16 (4-6%)
Protestant	73 (3.2%)	1 (0.3%)
Muslim	7 (0.3%)	10 (2.8%)
None	1 (0.0%)	0
	• •	

*Denominators vary slightly because of missing responses. †Because it is common for children to repeat school years, there is no upper age limit for any grade. ‡Primary 1 refers to years 1–4, primary 2 to years 5–7, secondary 1 to years 1–3, and secondary 2 to years 5–6.

Table 2: Demographic data on research participants

media influences (especially fashion) and perceived peer pressure. Pupils from very traditional and religious schools expressed somewhat more traditional values than did those from cosmopolitan and secular schools, but role confusion was evident in all groups.

Many teenagers, especially girls, experienced these inherent conflicts as confusion or personal stress, as

shown by their comments about the fictional characters in the vignette scenario.

"If we do not have boyfriend or girlfriend, we seem to be out of fashion or we have a problem".

Female pupil, aged 15 years, focus group TF9

"Mali would go to see Somchai. She would be stressed and uncomfortable, she was under pressure".

Male pupil, aged 14 years, focus group TF15

The teenagers' response to the structured vignette revealed very traditional and stereotypical constructions of gender. Mali, as a traditional Thai girl, was expected to be modest, quiet, sweet natured, and obedient. Participants acknowledged and approved of Mali's role as a modern, fashionable teenager with a boyfriend. They described her as "in love" with Somchai and wanting him to love her, but many believed that Mali alone was responsible for moral aspects of the relationship, for urging restraint, and for the provision and proper use of contraception.

"She was the same age as us; she should have knowledge about this. It depended on Mali [if] she wanted to have sex or not. Mali should tell Somchai that it was not right".

Female pupil, aged 14 years, focus group TF18

Boys projected their gender identities onto the male character Somchai, expressing the high value they placed on "being a man" and "being smart" (ie, sexually aware, sexually proficient, and with several sexual partners). This male identity was expected to be enacted, displayed, and rehearsed in discussions with other boys.

"Somchai would show off to his friends that he was a man and doing well in having sex with the girl. They would think that it was smart to have sexual experiences. They would want to show off to their friends that they had a number of sexual partners. Some would develop their scores. It was a shame for the others who had never had sex."

Male pupil, aged 15 years, focus group TF3

Although sexual competitiveness and performance were widely viewed as a central aspect of masculinity, this perception coexisted with more traditional views, in which young men were required to respect and protect girls, and not "take advantage" of them or get them pregnant. Somchai's physical coercion of Mali was seen as both "natural" (because the character was viewed as an ideal type "modern" male with particularly uncontrollable urges) but at the same time morally unacceptable.

"If Somchai was a human, he should feel guilty. It was wrong to having sex with Mali by forcing her. If he was a good man, he should respect the girl."

Male pupil, aged 14 years, focus group TF12

In the parents' focus groups, parents expressed concern about the effect of rapid social change on their children's sexual awareness and behaviour. They remarked on the earlier age of puberty, and felt that this, along with media pressure, had made their children sexually aware before they were psychologically ready for sexual relationships. They were saddened at the perceived decline in morality amongst teenagers, but confused about how to protect their children from the moral and physical dangers of premature sex.

"Children in this generation go out with the opposite sex even when they are in school uniform. The boys go to pick the girls up at their front doors. The girls are braver than the boys, they go to the boys, have a kiss by the road! They will go with their friends. In the past, adolescents respected and obeyed the elders. But now, they are out of control".

Father, focus group PF1

Most parents expressed clear disapproval of their children having sex before marriage. But they accepted that teenage boys' sexual impulses were increasingly powerful and that their sons "probably would" have sexual encounters at a young age. Their approach to their daughters was less permissive. In the past, even if a teenage girl wanted a dating relationship, social norms and strict parenting would have limited her opportunities to do so. Parents in our focus groups recognised that dating is now a fact of life, but saw it as conflicting with family values and with the ideal type "sweet girl" who is modest, obedient, and respectful of her parents.

Almost all the teenagers in this study showed a high degree of awareness of, and curiosity about, sex and sexuality. An aspect of the field work that we did not foresee was the extent to which the teenagers in the focus groups seized the opportunity to ask questions of the researcher. Boys' questions centred on what happens in the sexual act and how to perform sexually. Girls wanted to know how get and keep a boyfriend and how to manage a sexual situation. Younger pupils in particular were preoccupied with the mechanics of sex.

Questions typical of those asked by teenagers younger than 16 years were:

"We wanted to know how boys think about girls and how girls think about boys."

"Is it true that the females have vaginal discharge when they have sex needs?"

"Is it true that the male will leave the female after he has sex with her?"

"How can I manage my desire while I am with the opposite sex?"

"How should girls act when having relationships?"

A common topic of curiosity was masturbation. Pupils wanted to know if it was right or wrong, could be potentially harmful, and whether there was a right way to

masturbate. Their confusion illustrated the mixed messages of traditional Thai culture (masturbation is a taboo topic, sinful, dirty and unhealthy, and does not occur in women and girls) and western culture (masturbation is normal, harmless, and useful in learning about our bodies, especially for women and girls).

Whereas male sexual desire was expressed in terms of activity and performance, female desire was often given legitimacy and explained in the context of "love", in which sex was a means of confirming feelings for, and trust in, a partner. This posed a dilemma for girls; if they did not have sex, their partner might be angry or feel they did not love or trust them. Many focus group participants believed that Somchai would use this argument to persuade Mali to have sex, and that Mali's fears of losing her boyfriend would lead her to have sex against her true wishes. Some male participants believed Mali would "love Somchai more" after a good sexual performance.

The findings from the questionnaire (full details available from the authors; table 3) showed that teenagers' knowledge of sex and sexual health issues was highly variable. Some questions, such as "have you heard of AIDS?" received "yes" responses, indicating that students had noticed many of the HIV campaigns being run in the region. However, responses to questions on many other topics (especially condom use) indicated that fewer students believed that these issues had been taught. For example, although school curriculum and HIV prevention classes claim to cover condom use as integral to sex education, some participants who indicated that they had heard of HIV stated later in the questionnaire, and in focus group discussions, that they were not confident about condom use. Most respondents recalled basic biology and awareness of the term "HIV", but many recalled no coverage of homosexuality, the practicalities of condom use, the details of what HIV actually is, and sexually transmitted infections (STIs) other than HIV, even though all these topics were part of the school sex education curriculum. Half the pupils recalled sex education on how to act in a relationship, even though this topic was not on the curriculum—perhaps because the issue had been discussed informally in class, or because they had misunderstood the question. Girls recalled receiving more education than did boys, and overall, their knowledge was greater.

The shortage of practical sessions, life-skills training, or discussion about emotional issues in sex education probably explained pupils' widespread confusion about the risks and options in the different stages of the vignette scenario. For example, although most pupils' questionnaire responses suggested that they knew that any sexual encounter could result in pregnancy or STI, they nevertheless felt that Mali was unlikely to get pregnant if this was her first time, Somchai was unlikely to have a sexually transmitted disease if he did not have sex very often, and Somchai and Mali would not need a condom if they were in a "safety period" (a vague and inconsistent

	Girls		Boys			
	Observed frequency	Expected frequency	Observed frequency	Expected frequency		
Have you heard of AIDS?	observed medocine)	zapecica nequency	observed medocine)	zxpected medocine)		
Yes	1327 (99.0%)	1319-8	849 (97-6%)	856-2	0.01	
No	11 (0.8%)	12.7	10 (1.1%)	8.3		
Don't know	3 (0.2%)	8.5	11 (1.3%)	5.5		
Can people take a blood test to find ou			11 (1 5%)	33		
Yes	1313 (97.7%)	1308-7	836 (96.9%)	840-3	0.23	
No.	8 (0.6%)	11.6	11 (1.3%)	7.4	3	
Don't know	23 (1.7%)	23.7	16 (1.9%)	15.3		
Can people protect themselves from HIV?	-5 (-7:-)	-37	(_ 3)	-5 5		
Yes	1288 (96.1%)	1283	828 (95·2%)	833	0.55	
No.	17 (1.3%)	18.2	13 (1.5%)	11.8	0.55	
Don't know		38.8				
How our bodies develop	35 (2.6%)	20.0	29 (3·3%)	25.2		
Yes	1125 (84·1%)	1069.9	655 (73-8%)	710.1	<0.0001	
res No	94 (7%)	113		710·1 75	<0.0001	
No Don't know	94 (7%) 119 (8·9%)		94 (10.6%)	75 102·9		
What HIV/AIDS is	113 (0.3%)	115.1	139 (15·7%)	102.3		
Yes	875 (65%)	766.1	396 (44-6%)	504-9	<0.0001	
No		•	415 (46.8%)		<0.0001	
Don't know	421 (31·3%)	503.9	76 (8·6%)	332·1 50·1		
Contraception and birth control	50 (3.7%)	75.9	70 (8.0%)	20.1		
Yes	848 (63%)	727·1	358 (40·4%)	478.9	<0.0001	
No.	432 (32·1%)	524·5	438 (49.4%)	345.5	<0.0001	
Don't know	65 (4.8%)	93.4	90 (10.2%)	61.6		
Sexually transmitted infections other t		33'4	90 (10-2 %)	01.0		
Yes	836 (62.5%)	732-9	379 (43·1%)	482.1	<0.0001	
No	435 (32.5%)	510.9	412 (46.8%)	336.1	<0.0001	
Don't know	67 (5%)	94.1	89 (10·1%)	61.9		
Pregnancy and having a baby	07 (5 %)	94.1	09 (10.1%)	01.9		
Yes	830 (61-9%)	698-8	331 (37·3%)	462-2	<0.0001	
No	452 (33.7%)	564	485 (54.7%)	373	<0.0001	
Don't know	452 (33·7%) 59 (4·4%)	78·2	71 (8.0%)	51·8		
How to act in a relationship	JJ (4 ⁻ 4 ⁻ / ₂)	70.2	7 1 (0.070))1·0		
Yes	800 (59.4%)	724-2	403 (45·3%)	478.8	<0.0001	
No	394 (29·3%)	437	332 (37·3%)	289	.5 5001	
Don't know	152 (11-3%)	184.8	155 (17.4%)	122.2		
How to use a condom	-J- (J/v)	207.0	+55 (+7 47%)			
Yes	747 (55·5%)	729-3	464 (52-2%)	481.7	0.0002	
No	530 (39.4%)	523·3	339 (38·1%)	345.7		
Don't know	69 (5·1%)	93.3	86 (9.7%)	61.7		
Sexual feelings and emotions	. 5 (5)	333	(3 /)			
Yes	668 (49.6%)	731-4	546 (61-5%)	482.6	<0.0001	
No	473 (35.1%)	391.6	117 (19.9%)	258.4		
Don't know	205 (15.2%)	222.9	165 (18.6%)	147.1		
Being bisexual (someone who finds bo			103 (10 070)	-7/ +		
Yes	612 (45·5%)	574-7	342 (38-6%)	379-3	0.001	
No	589 (43.8%)	607-2	419 (47.2%)	400.8		
Don't know	143 (10.6%)	162.1	126 (14-2%)	106.9		
	173 (10 070)		120 (17 2/V)		ntinues on next pa	

,	find other women sexually attr				
es	575 (42.8%)	469	203 (22-9%)	309	<0.0001
l o	670 (49·8%)	747-6	570 (64-3%)	492-4	
Don't know	100 (7-4%)	128-4	113 (12-8%)	84-6	
Being gay (men who find otl	her men sexually attractive)				
Yes	529 (39·5%)	460-3	236 (26-6%)	304.7	<0.0001
No	707 (52-8%)	750-9	541 (61-0%)	497.1	
Don't know	104 (7.8%)	128-8	110 (12-4%)	85-2	
Abortion					
Yes	510 (37-9%)	428-3	201 (22-6%)	282.7	<0.0001
No	755 (56-1%)	815-6	599 (67-5%)	538-4	
Don't know	80 (5.9%)	101-2	88 (9.9%)	66-8	
Does a person with HIV alwa	ys look unhealthy?				
Yes	481 (35.9%)	539-8	409 (47%)	350-2	<0.0001
	335 (25%)	314.8	184 (21-1%)	204-2	
No		486-4	277 (31-8%)	315.6	

notion of a time in her menstrual cycle when Mali could not get pregnant) or if they used the withdrawal method or a vaginal pessary. Participants also did not know where Somchai and Mali might actually obtain condoms or access sexual health services locally.

Overall, girls seemed to recall more information from lessons than did boys, whereas boys were more likely to respond that they did not recall or had not been taught many sexual health topics (table 3). For example, girls were more likely than boys to recall being taught about pregnancy and having a baby, abortion, and how our bodies develop. This difference might have arisen because sex education for girls is linked to informing them about menstruation, often taught in a context of fertility, meaning that topics such as pregnancy, birth, abortion, or physical development might also be taught in these lessons. Boys might be excluded from classes in which menstruation is discussed, or perhaps are discouraged from paying attention to something that is constructed by teachers as a girl's issue. This discrepancy could also explain why, within the qualitative data, both boys and girls were more likely to see negative consequences of sex as being the fault and the responsibility of a girl.

Interestingly, boys seemed to recall more often than expected, and more often than did girls, that they had been taught about sexual feelings and emotions. This topic did appear in the curriculum, but interviews with teachers suggested that it was often not taught because the teacher's lack of skills or confidence. Although boys recalled being taught this information in class, they might have actually learned about feelings and emotions through the media or peers. The qualitative accounts from boys did mention emotions relating to sex,

particularly desire, lust, and frustration. Girls also mentioned desire, but were equally likely to discuss love or anxiety over the future of a relationship. Traditionally girls are expected to be more interested in and taught more about feelings and emotions than are boys. We believe that these findings are more a reflection of boys' interest in sex and a desire to have sex, than a wider view or awareness of the diverse range of feelings and emotions that can accompany a sexual relationship.

Although a high proportion of participants of both genders said they had heard of HIV/AIDS, more girls than boys recalled being taught what HIV/AIDS is, possibly because girls' teaching addressed this topic, or because girls were more interested or concerned about the issue. Other research has shown that boys might receive less information or pay less attention to sex education programmes^{35–36} than do girls, which might be reflected in our findings.

More girls than expected recalled being taught about sexuality (being lesbian or gay). In a country where homosexuality is taboo, boys in particular might be unwilling to reveal that they recall being taught about being gay. Evidence from teacher interviews indicated that sexuality was not always discussed, because of teachers' discomfort, religious beliefs, or a fear that mentioning homosexuality might lead to young people "becoming gay".

Evidence suggests that girls worldwide are often given education on sex (particularly menstruation, pregnancy, and birth), but in many societies (including Thailand) because of unequal status girls are unable to put this education into action, particularly in sexually coercive situations.^{17,18,22,35,36} Boys are assumed to be "naturally" sexual and so might not be offered sex education, or

might be expected to be less attentive to it than are girls. ^{35–36} Additionally, boys might not be taught gender-specific issues associated with girls (such as pregnancy or menstruation), which again places more responsibility for learning about and controlling sexual activity with girls.

Teenagers were most likely to talk to their peers or relationship partners about sex, with mothers (for girls) and older friends (for boys) the next preferred source (figure). Traditionally, Thai parents do not discuss sex with their children, although mothers may prepare their daughters for menstruation. Pupils were highly unlikely to seek conversations about sex with teachers, doctors, or nurses, possibility because of fear of punishment and respect for authority, or lack of access to services.

Teachers and young people expressed additional concerns about training materials and information on sex education. Teachers were provided with school text books with a main focus on the biological aspects of sex, and little focus on relationships or feelings. Some teachers found these materials unhelpful and reported that their pupils often asked for information that was outside these texts. Pupils noted that they used other materials where available, particularly the internet, films, or magazines, to access information about sex. They often used these materials to fill in the gaps in their sex education—specifically how to act in a relationship, or what to do in a romantic situation. Parents and teachers raised a concern that these other source materials were often westernised and were not always suited to traditional Thai culture or appropriate for the ages of the children using them. We observed tensions caused by exposure to multiple messages from existing materials, which do not always include information that pupils want, and informal education by the media, which might not be accurate or appropriate to a transitional culture.

Throughout the research, teachers, policymakers, healthcare staff, pupils, and parents all used the principal investigator (UV) as an informal source of sex information and advice. They asked her advice on what they should be teaching young people, or how to act in relationships. They wanted her to recommend resources, evaluate existing sex education programmes, and supplement existing materials. Young people in particular used UV as someone to add to the gaps in their existing sex education, and this research became an informal (and unplanned) means of doing this.

Overall, Thai teenagers were enthusiastic about sex education and requested more of it, especially around managing relationships and negotiating in potentially sexual situations. Most pupils did not plan to have sex after sex education, but they wished to be forearmed with knowledge, especially practical knowledge about what to do and how to act. Pupils also wanted meaningful information on the consequences of having

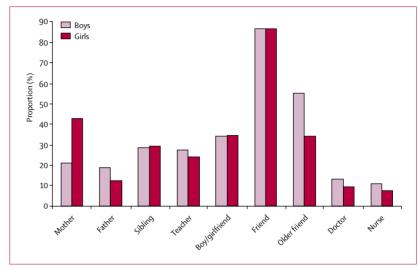


Figure: To whom do Thai teenagers talk about sex?

sex and the availability of sexual health and termination of pregnancy services.

"Give us real examples, what happens to people who have sex when they are at school age, such as getting pregnant and dropping out of school?"

Female pupil, aged 13, focus group TF1

Questionnaire data about parents' attitudes to sex education (table 4) showed several important inconsistencies. Although more than 90% of parents believed that sex education and reproductive health services should be available to teenagers, and almost as many felt that their children could talk about any sex related matters with them, a similar proportion also felt that adolescents should not have a boyfriend or girlfriend, and three-quarters said they would punish their child for having a sexual relationship. More than 70% of parents did not believe that sex education should be taught in schools, but only 10% were prepared to be the first source of information about sex for their children. Almost a third felt that sex education leads to sex.

Parents in the focus groups generally acknowledged the importance of sex education, and felt that it should focus mainly on biological facts and the practicalities of contraception (possibly, parents with more liberal attitudes might have been more willing to take part in focus groups than were those with traditional views). But they admitted they were uncomfortable talking about sex with their son or daughter, and only did so superficially and occasionally. This situation was attributed as much to lack of factual knowledge as to embarrassment:

"I did not know how to answer about periods. I only told her that if a girl had a period and had sex with a boy, she could get pregnant. 'You should not have a sexual relationship with anybody. If you had sex you would have a baby as I had'. This was what I told my daughter."

Mother, focus group PF2

	Number (%) of parents who agreed with this statement (n=351)*
It is necessary to talk about sexual health with children when they are adolescents	320 (91%)
Adolescents should not have a boyfriend or a girlfriend	319 (93%)
There should be reproductive health services available to adolescents	292 (83%)
Your children can talk and discuss all matters, including sex-related matters, with you	284 (81%)
$Parents\ should\ punish\ their\ children\ if\ they\ have\ sexual\ relationships$	231 (66%)
It is embarrassing when talking about sexual health with children	108 (31%)
Sex education induces adolescents to decide to have sexual experiences	93 (27%)
Sex and relationships should be taught about in school	95 (27%)
Teaching about contraception increases the likelihood of sexual relationships in adolescents	57 (16%)
Parents should be the first people to teach their children about sex and relationships	34 (10%)
There were no statistically significant differences in these responses by sex (I number with known responses and accounting for missing data.	Pearson χ² test). *Percentages based on

One or two parents saw sex as a taboo subject and did not plan to raise it at all. But most gave strict warnings to their children about becoming involved in what they saw as premature sexual relationships, and saw no reason for them to understand sex until a definitive adult relationship was imminent. Some parents said they would welcome group sex-education lessons themselves, covering factual knowledge and lessons on how to talk with young people about sex.

In summary, teenagers sought information that was clear, non-judgemental, and non-prescriptive to help them make complex choices in a modern world, but the data from parents indicated a high degree of confusion and ignorance about sex and sexual health, a lack of confidence in addressing sexual issues with their teenagers, and a perception that their main role in sex education was to instruct their child not to have sex.

The themes discussed above seemed to contribute to a pattern of behaviour characterised by mutual mistrust between adolescents and parents, secrecy and disobedience, impulsivity, risk taking, and (sometimes) sexual coercion of girls by boys. Teenagers viewed strict and traditional Thai parenting as having negative consequences:

"Mali would escape from home. She would lie to [her parents] that she would go to her friends' home for reading".

Male pupil, aged 14 years, focus group TF10

Focus group participants explained the unfolding vignette scenario in terms of an impulsive and irresistible passion on the part of both the male and female characters, whose ability to think and plan rationally about their sexual relationship was diminished by

cognitive dissonance around their conflicting identities, intense sexual desire, limited knowledge and skills, and resistance to parental domination. The very contemporary scenario of Somchai and Mali finding themselves alone together (traditionally, boys and girls would not have had the opportunity to be alone together) was seen as a powerful catalyst for sexual intimacy. Pupils used metaphors depicting explosive natural phenomena and loss of control—describing male and female individuals, for example, as "fire and oil" that should not be mixed.

"Let it be, they could not wait. In that stage, they would not think about anything. They were in the mood. They would lose their [desire] if they were worrying about using the condom."

Male pupil, aged 15 years, focus group TF7.

These descriptions suggest that when physical separation is traditionally the main way of controlling the sexual act, self-restraint is not expected and condom use is routinely and explicitly avoided. These are important messages for sex educators.

Discussion

In this study we aimed to inform the redesign of sex education policy in Chiang Mai by exploring knowledge, attitudes, norms, and values of teenagers, parents, teachers, and policymakers and placing these in the wider social, cultural, educational, and economic context of modern-day Thailand. Using a combination of questionnaires and focus groups, and drawing heavily on narrative methods (especially the structured vignette technique), we have shown five important influences on Chiang Mai teenagers' sexual attitudes and behaviour: ambiguous social roles leading to confused identity, heightened sexual awareness and curiosity, critical gaps in knowledge and life skills, limited parental input, and (consequent on all these) an impulsive and volatile approach to intimate encounters. Idealised gender roles (the "smart boy" whose status depends on stories of sexual performance and conquests, and the sweet girl who despite her western dress and willingness to have relationships, retains traditional submissiveness and lacks negotiating skills) and increasing opportunities for privacy create the preconditions for coercive, unprotected

Chiang Mai teenagers have reasonable knowledge of biological issues from sex education but are confused and uncertain about how to obtain or use contraception, avoid pregnancy and transmission of STIs, negotiate personal and intimate relationships, and find sources of support and advice. Many parents lack the knowledge, confidence, and contemporary values to be able to give meaningful support to their children. The largely didactic and biological sex education curriculum fails to meet pupils' expressed need for more applied knowledge, life skills, and confidence training. Boys seem likely to misunderstand and forget key issues, while being overly

concerned about sexual performance and conquests. Girls seem to receive more sex education than do boys, but this difference may support existing stereotypes, in which girls are assigned responsibility for managing sex (although many do not actually have the power to do so). These findings are similar to those from other countries.^{35,36}

Existing sex education programmes in Chiang Mai are popular with teenagers. However, our findings suggest a need for a substantially broadened sex education curriculum that addresses and challenges gender stereotypes, develops practical and life skills, explicitly considers situations in which sexual coercion may arise, and is delivered consistently across different schools and by different providers.

As an exploratory study that was not designed to test the effect of a specific intervention, and that only investigated what participants say they do rather than what they actually do, the research reported here can only generate hypotheses about the key influences on sexual risk taking in Chiang Mai teenagers. Its main strengths were the inclusion of a native Thai health-care worker, trained in sexual health research, as the principal investigator; extensive preliminary fieldwork to build relationships with participating schools; a large and heterogeneous sampling frame; mixed quantitative and qualitative methods; and an analytic approach that contextualised the findings in a wider frame of rapid social transition. Its main limitations were that several of the schools (and most parents interviewed) were relatively affluent, and the study was (for practical reasons) limited to a single region within Thailand, so the generalisability of findings to Thai teenagers in general has not been established. With this important limitation in mind, further studies are now needed to develop appropriate interventions aimed at addressing the critical factors suggested by this study, and to test these systematically.

First, our findings indicated that strong head-teacher support greatly enhanced the delivery and uptake of school sex education, that Thai teachers might not have adequate knowledge or confidence to deliver sexual health advice, that talking about sex might conflict with teachers' personal or professional values or with classroom culture, and that teachers might censor or adapt evidence-based intervention packages in the light of personal beliefs or past experience.³⁷ Targeted training, support, and mentoring of teachers is probably a prerequisite for the effective and consistent delivery of a broader sex education curriculum.

Second, we found that peers were the preferred source of information by all age groups and by both sexes, and that both parents and teachers have limitations as sex educators. Peer-led sex education has some theoretical advantages (especially acceptability and influence) but has not been consistently shown to produce better outcomes.^{38,39} Our findings suggests that teenagers in

Thailand do not have the relevant life skills and could be sources of misinformation (for example about a non-existent "safety period") and entrenched values (such as the smart boy ideal). With these caveats in mind, the input of teenagers themselves to sex education interventions should be explored further.

Third, the popularity and success of the vignette scenario in prompting discussion and critical reflection about sexual health in this study shows the potential value of story-based methods in sex education⁴⁰ Evidence from other countries suggests that thinking through the range of consequences (both positive and negative) of a potential sexual encounter can lead to a reduction in risk-taking behaviours.⁴¹ Since the story is inherently both chronological (it unfolds over time) and malleable (there are several possible endings to an unfinished story), it is an ideal vehicle for the delivery of consequence-based education. Different media, such as film, magazine articles, and popular music might be used creatively for active learning.

Fourth, we found that because of the coexistence of traditional and contemporary cultures and value systems, western sex-education materials cannot be transferred comprehensively to the Thai context. Materials that are locally developed and that draw critically and eclectically on western resources and images are probably essential to the success of a complex intervention.

Fifth, in our study, the researcher (UV) was used extensively by pupils, parents and teachers as a source of knowledge and advice. This finding suggests a potential intervention in the form of a trained professional who is confident and comfortable with delivering sex-education support to a range of audiences. Such an individual could work flexibly with pupils, parents, and teachers to address knowledge gaps and develop skills and confidence in areas identified by them. He or she could act as an acceptable and effective mechanism, for example, for delivering a school-based sex-education curriculum to parents.

In conclusion, our findings affirm the huge amount of work already done in Chiang Mai to develop and deliver appropriate HIV awareness and school-based sexeducation programmes in the context of rapid cultural transition and overwhelming media pressure on teenagers. We have also identified several possibilities that could help sex-education teams and researchers to refine existing interventions and develop support for sex educators. The study design is potentially transferable to other contexts in developing and transition countries.

Contributors

U Vuttanont conceptualised the study and undertook the field research in Thailand, with methodological support from the other authors.

P Boynton, U Vuttanont, and T Greenhalgh analysed the qualitative data.

PB, U Vuttanont, and M Griffin analysed the quantitative data.

P Boynton, T Greenhalgh, and U Vuttanont synthesised the data from different sources and wrote the paper.

Conflict of interest statement

We declare that we have no conflict of interest.

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