CHAPTER II

LITERATURE REVIEW

Introduction

Several studies have been conducted related to adolescent health worldwide. In this chapter, fifteen areas have been reviewed to gain a better understanding of the existing adolescent health situation, and to explore appropriate strategies for an adolescent health development programme.

2.1 Definition of the Term "Adolescence"

"Adolescence" has a variety of definitions depending on the study cited. Slap, G. (1999) defined adolescence as follows: "adolescence is when you think you'll live forever. Middle age is when you wonder you've lasted so long".

The United Nations defined the global youth population as ranging in age from 15–24 years (United Nations, 1998). However, the World Health Organization (WHO, 1998a) has defined adolescence as being between 10-19 years. The WHO defines the adolescent, both in terms of age and in terms of a phase of life marked by special circumstances, which include: 1) period of rapid physical growth and development, 2) the development of physical, social and psychological maturity, but not all at the same time, 3) the development of sexual maturity and the onset of sexual activity, 4) the development of experimentation, 5) the development of adult mental processes and adult identity, and 6) the transition from total socio-economic dependence to relative independence (WHO, 1999). For the literature review, it will include adolescent, teenage, youth and young people.

2.1.1 Gender and physiological and psychological changes

The period of adolescence is characterized by rapid physical growth, significant psychological development and changes in personal relationships (King, A 2001; King,

A. *et al.*, 1996). Physical growth is accomplished by sexual maturation, often leading to intimate relationships. The individual's capacity for critical thought develops, along with a heightened sense of self-awareness and emotional independence (WHO, 1998b). There is a great diversity among adolescents of the same age, depending on the individuals' gender, level of physical, psychological and social development, and on factors in the individuals' environment and culture. In terms of physiological changes among male and female adolescents, Rajaratnam *et al.* (1997) summarized the changes in male and female adolescents, for the education of young people in India, as follows:

2.1.1.1 Male adolescents

With regard to physiological changes, the boy will see muscles where once there was only fat. Most will find the beginning of changes in skin color and texture, the growth of pimples on the face, hair growing on the chest and in the armpits and groin; a moustache and a beard will form. The voice will also change from the high-pitched voice of a child to an adult's deeper voice. The testes will start producing spermatozoa. They may notice that their penis gets erect quite often, especially in the morning when they wake up.

2.1.1.2 Female adolescents

The physical changes in girls will include enlargement of the breasts and nipples, widening of the hips, growth of hair in the armpits and the genital area, development of pimples on the face and changes in skin color and texture. Menstruation will begin, with 3-5 days of bleeding from the uterus once a month, which will occur until they are in their mid-40's. Girls begin to menstruate around the age of 9-16 years. The beginning of menstruation depends on many factors.

The definition of adolescence remains elusive. In many parts of the world, adolescence is not clearly defined. From the physiological and psychological viewpoint, it is essential that the working definition used by clinicians takes into consideration the significance of the two development transitions: from childhood to adolescence, encompassing puberty, from an increasingly protracted adolescence and dependence, to adulthood. In the USA, Barton, J, and William, J.P.(2002) categorized

adolescence into three age groups; early adolescence (11-14 years), middle adolescence (15-17 years), and late adolescence (18-21 years) to develop guidelines for adolescent health care programmes. Widening the age range of adolescence encourages the use of an alternative concept - youth, young people aged 15-24 years (WHO, 1998b).

The above statements show the variety of definitions of adolescence depends on culture and context. However, adolescents are commonly know as "teenagers", "young people", or "youth", and the age range varies, with 10–24 years being the widest definition in common use (WHO, 1993). The study by Ratana Somrongthong and Chitr Sitthi-amorn (2000), on existing health needs and related health services for adolescents in a slum community in Thailand, revealed that adolescents in Thailand are older than traditionally defined. The culture and the life-style of Thai society influences adolescents' lives. In addition, social norms and economic factors cause most young Thais to be dependent on their families until they have graduated or get married. In practice, most parents maintain both financial and social support for their children. It may be said that Thai parents encourage dependency in their children. Thus, the target population in this study ranges from the age of 12-22 years.

2.1.2 Classification of adolescents

There is enormous diversity among adolescents of the same age, depending on the individuals' gender, physical and psychological factors, and other factors in the individual's immediate environment and within the culture of their society (WHO, 1998b). Numerous factors within the wider environment influence adolescent development, including the mass media; community institutions; religious bodies; the politico-legal system; the accessibility of schooling; accessibility of health services; recreational activities; vocational training; economic opportunities; poverty. All of these may deprive adolescents of the basic elements for adolescent development and health. In this study, the researcher focuses on adolescent health. The target population is comprised of slum adolescents living in a risk environment that influences their health. Therefore, the classification of adolescents for this study is divided into 3 groups, based on health and health-related problems, as follows;

2.1.2.1 Adolescents with health problems (physical and mental problems);

2.1.2.2 At-risk adolescents;

2.1.2.3 Normal group.

2.1.2.1 Adolescents with health problems

This group is represented by young people who are unhealthy, with either physical or mental problems. In the slum community, a review of the registration record (October 1998–March 1999) at Health Center # 41, showed only 2.5% of the total clients visiting the health center were aged 12-22 years. The major health problems were gastrointestinal tract and respiratory tract diseases. These figures might be underestimated since some of them might not visit a health center when they get sick (Ratana Somrongthong and Chitr Sitthi-amorn, 2000).

2.1.2.2 **At-risk adolescents**

At–risk adolescent means an adolescent who has low self-esteem and lower-than-normal social skills. Moreover, it refers to young people who have difficulty accessing relevant information to make positive decisions about their health development. Andrew University stated that the relevant components that influence adolescent risk were divided into 4 groups; these were 1) personal, 2) family, 3) school, and 4) sociocultural (Andrews University, 2002).

I Personal. These included adolescents with the following problems: alcohol or drug use; poor self-concept; premarital pregnancy; early marriage; poor social skills; friends who are not school-oriented; lack of realistic goals; lack of supervision and lack of ambition

II Family. These comprised a) low parental education, b) negative parental attitudes or low educational aspirations, c) broken home, d) frequent family moves, f) unstable home environment (parents who fight; family violence; alcoholic parents; drug-dependent parents), g) unemployed parent and h) low economic status.

III School. These included: a) perform below potential; b) poor grades; c) low standard test scores; d) irregular attendance & frequently tardy; and e) disruptive, which referred to aggressive, poor study and work habits, lack of academic motivation, little or no participation in extracurricular activities and failure to read at grade level.

IV Socio-cultural. These included a) disadvantaged; b) welfare support; c) low educational attainment of adults in family and community; d) lack of respect for authority.

In this study, the target is adolescents who live in a slum community where the environment is risky for adolescents. The sociocultural and economic disadvantage characteristics of the underprivileged community are the leading causes of problems related to adolescent health and development (Guzman, D. A, 1999). It can be said that slum adolescents are one of the at-risk groups.

2.1.2.3 Normal group

This means young people with self-esteem and good social skills, who are clear about their basic values and have access to relevant information to make positive decisions about their health development (WHO, 1998b). They are quite healthy, cheerful as this age group should to be, and living in an area with lower risk factor levels.

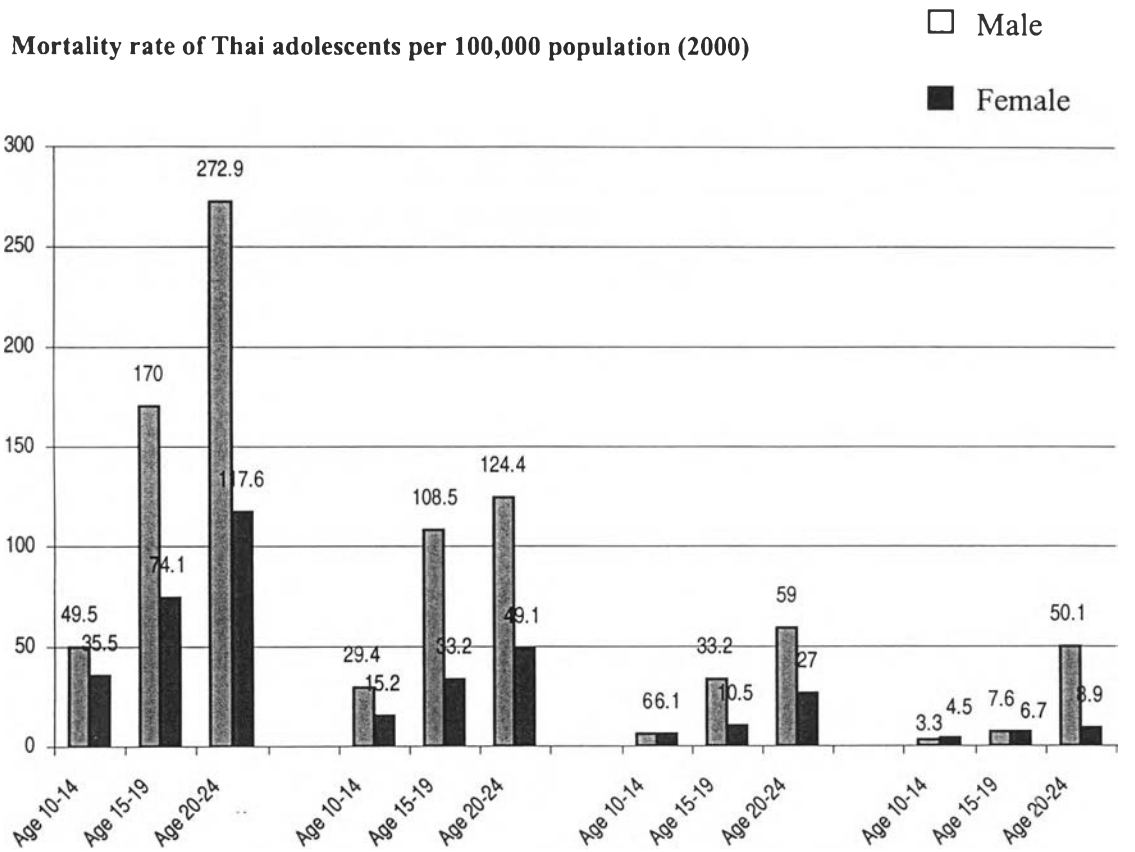
2.2 What is the Adolescent Health Situation?

Adolescents are generally thought to be healthy. In fact, many adolescents die prematurely. The major threats to adolescent health are behavioral. The WHO has estimated that every year, about 1 million young people aged between 10-19, lose their lives mostly through accidents, suicide, violence, pregnancy-related complications and preventable illnesses (WHO, 2002a).

2.2.1 Adolescent morbidity & mortality

Adolescent morbidity and mortality are caused by health risk behaviors that begin in early adolescence, for example, substance abuse (e.g. tobacco, alcohol and other drug use), early sexual behavior, and violence. The National Adolescent Health Information Center, USA (2002), indicated that three quarters of the mortality among all adolescents/young people is preventable. It also showed that the mortality rates for adolescents and young people vary significantly by gender, race and ethnicity. In 1997, the Centers for Disease Control and Prevention (CDC) reported that the overall mortality rates for male adolescents/young people were almost three times higher than those for females. Moreover, Wonder (The Wonder CDC, 2001) indicated that adolescent/young adult mortality rates increased throughout adolescence and early adulthood, and that this trend continues throughout the lifespan.

The adolescent mortality situation in Thailand is similar. Thai national statistics indicated that the mortality rates for adolescents and young people varied significantly by gender, and that the overall mortality rates for male adolescents/young adult were 2 times those for females (figure 2.1). In addition, the major causes of death were preventable, particularly accidents (Chanpen Chooprapawan *et al.*, 2000).



RATANA: Need to shift these so that they are directly below the data shown Total Accident Unintentional Death Infectious Dis.

Source: Chanpen Chooprapawan et al. (2000) report (modified)

Figure 2. 1: Thai adolescent mortality rates by age and cause of death (per 100,000)

2.2.2 Adolescents' health needs & health problems

Based on mortality rates alone, adolescence was previously considered a healthy period of life. However, there is growing recognition of the wide-ranging health problems faced by adolescents because of a combination of biological, psychological and social factors (WHO, 1999).

2.2.2.1 Global situation

The global magnitude of a wide range of health problems was illustrated by the WHO (1999), and is shown in Table 2.1. It contains a listing of health problems and unhealthy behaviors of young people that significantly affect public health in both the short and long term.

Table 2.1: Classification of health problems and health-related behaviors of young people in developing countries

Diseases particular to young people	Diseases and unhealthy behaviors that affect young people disproportionately	Diseases that manifest themselves primarily in young people, but originate in childhood	Diseases and unhealthy behaviors of young people, for which the major implications are for the young person's future health	Diseases that affect young people less than children, but more than older adults
- Disorders of secondary sexual development - Difficulties with psychosocial development - Sub-optimal adolescent growth spurt	- Maternal mortality & morbidity - STDs, HIV/AIDS - TB - Mental disorders **Behaviors** - Alcohol abuse - Other substance abuse - Injuries	- Rheumatic heart diseases - Polio	- STD, HIV/AIDS - Leprosy - Dental diseases **Behaviors** - Tobacco use - Poor diet - Lack of exercise - Unsafe sexual practices	- Malnutrition - Malaria - Gastroenteritis - ARI

Source: Goodburn and Ross, 2000. Young people's health in developing countries: a neglected problem and opportunity. Health Policy and Planning; 15(2): 137-144.

In addition, the WHO's Adolescent Health and Development Programme (WHO, 1999) identified four issues of crucial importance for global adolescent health.

- ***Sexual and reproductive behavior:*** it was stated that unsafe sex is a major threat to adolescent health. The WHO estimated that every year, 1 in 20 adolescents worldwide contracts an STD, and that every day over 7,000 young people aged 10–24 become infected with HIV. Moreover, pregnancies that are too early are also dangerous for both mother and child.
- ***Tobacco use***: one of the most damaging behaviors for the long-term health of young people is tobacco use. Many studies have found that most adult smokers began during adolescence.
- ***Suicide***: this is the third leading cause of death of adolescents. The WHO estimated that at least 100,000 adolescents commit suicide each year, worldwide.
- ***Road traffic accidents***: this is the main cause of death among young men worldwide. Road traffic accidents are often related to the use of alcohol or other drugs.

More than half of the world's population is under 25 years of age (WHO, 1999, Report of WHO/UNFPA/UNICEF). The United Nations estimate of the global youth population was 10.3 billion in 1998 (United Nations, 1998), and this figure is increasing. The majority of these groups live in developing countries, and their numbers are expected to increase well into the 21st Century. At the request of The Action for Adolescents and Youth by the United Nations: realizing the importance of young people, the United Nations designated 1985 the "International Year of Youth". Later, in 1989, the World Health Assembly focused its discussion intensely on youth. Changing conditions are bringing about changes in the behaviors of young people, the multiplicity of health problems associated with specific types of behaviors (e.g. unsafe sex, abortion, STDS, HIV/AIDS, traffic accidents, etc.).

2.2.2.2 Adolescents: Regional situation

Approximately 157 million or about 9.5% of the total global adolescents aged between 10-24 years live in the Southeast Asian Region, and the numbers in this group are increasing rapidly (WHO, 1999). The WHO (1998a) indicated that around 30% of the total population in this region is made up of young people. In addition, persons 15–19 years old contribute 4-15% of the total fertility rate in the Southeast Asian Region. Moreover, under-nutrition in adolescent girls is a major public health problem in developing countries. Adolescent girls, especially in South Asia, are often the last to be given food, even when they are pregnant. The WHO Report also revealed that nearly 40–50% of girls in some countries of South Asia are married and become pregnant before they are 20, which causes high-risk pregnancies, maternal mortality and low birth weight babies. Table 2.2 shows the population profile of adolescents in the WHO /SEARO area (WHO, 1997).

Table 2.2: Population profiles: age 10-24 years in WHO/SEARO countries

Countries	Population Ages 10-24 (Million)	Population Ages 10-24 (% of Total) 2000	% Enrolled in Secondary School 1996		Average Age at First Marriage	Total Fertility Rate	% Currently Married (Female) Age 15-19
			Male	Female			
Southeast Asia		30					14
Cambodia	3.3	29	25	13	23	5.3	5
Indonesia	63.6	30	48	39	19	2.8	17
Laos	1.7	31				5.6	
Malaysia	6.5	29			24	3.2	8
Myanmar	14	31	71	75	22	3.7	16
Philippines	24	32			22	3.7	8
Singapore	0.7	19			27	1.5	1
Thailand	17.3	29	38	37	23	1.9	17
Viet Nam	25.3	32			21	2.5	8

Source: The World's Youth, 1996, cited in WHO, 1997

2.2.2.3 Adolescents: Thailand situation

In January 2002, the Thai population numbered about 62.3 million persons. One out of five people were adolescents in the age group 10-19 years, and about 27% of the total population was young people aged 10-24 years (MoPH, 2002b). Adolescents, therefore, are a large and important group and they have specific needs.

Education and Thai adolescents

Thailand is well-known for having relatively low levels of educational attainment among the countries of Southeast Asia (WHO, 1998a). The government is trying to improve the educational status of Thai children, and currently the education of Thai children is compulsory to at least junior secondary level for the nine-year education program. However, the report of the National Children and Youth Survey, conducted by the Social Statistics Division, National Statistical Office, Office of the Prime Minister (1998) indicated that 39% of the samples did not continue their education (some finished grade 6, and some finished grade 10). The MoPH (2000) indicated that only one out of 20 continued their education at university level. In

addition, around half of Thai youth are outside the formal education system. Amongst them, the major reason (59.1%) for discontinuing their education is that they have to help to earn the family income; this is particularly true for Bangkok youth. Regarding the recreation of Thai youth, the results revealed that most (over 80%) preferred watching TV or videos and 50% preferred listening to the radio. Few of them liked to read books (Social Statistics Division, National Statistical Office, Office of the Prime Minister, 1998). This indicates that it is the nature of young Thai people to pay less attention to their education. Moreover, the study of Venus Udomprasertgul, *et al.* (2002) found that among secondary school students in Bangkok, 88.5% spent their leisure time watching TV, and only 64.2% spent it reading.

Nowadays, young people in Thailand live in a very complex environment due to global change. This includes being exposed to various communications media, such as TV, radio, the Internet, other mass media, and books. Interaction with friends, pressure from peers, and media advertisements have a strong influence on growing adolescents. Besides, the age at marriage of Thai women and men is becoming older. But increasingly early sexual maturation has contributed to a substantial increase in the duration of functional adolescence (UNESCO, 1999a). Furthermore, changes in the social and economic situations have various health impacts on adolescents and youth in Thailand. National statistics (MoPH, 2001) indicated that around 3,000 adolescents die from accidents annual, and that one out of four Thai youth face mental health problems. Regarding sexuality and reproductive health, the MoPH (2002b) reported that 37% of total STD clinic clients were young people (aged < 25 years), and that 29% of total STD patients were in this age group. In addition, 12.5% of HIV/AIDS patients were aged under 25 years. The report of the Family Planning Division, MoPH (2002b), indicated that 46% of induced abortions were among young females under the age of 25 years. As a result of the above findings, the MoPH is presently working collaboratively with various organizations, including government and non-government, the private sector, and with communities, on the problems of adolescent health development.

2.3 Existing Adolescent Health Programmes / Services

As young people are currently one of the world's major concerns, the United Nations, through governments, international organizations and voluntary associations, is working to ensure that development activities reach youth. However, many countries are faced with problems arising from the changing global situation. Each country has a variety of problems, including: limited physical and financial resources for funding youth programmes and activities; inequities in social, economic and political conditions; racism and gender discrimination; high levels of youth unemployment; armed conflict; continuing deterioration in the global environment; increasing incidence of diseases; changes in the role of the family; and inadequate opportunities for education and training (United Nations, 1998). These factors have created conditions that have made the development of adolescent health programmes more difficult.

2.3.1 Global adolescent health programmes/services

Currently, a particular concern is that the economic difficulties experienced in many developing countries are often more serious for young people. In this regard, the World Action for Youth to the Year 2000 and Beyond (United Nations, 1998) identified ten priority areas for action aimed at improving the situation and wellbeing of youth. These priority areas consist of: a) education; b) employment; c) hunger and poverty; d) health; f) environment; g) drug abuse; h) juvenile delinquency; i) leisure time activities; j) girls and young women, and k) the full and effective participation of youth in the life of society and in decision–making.

In the health area, the World Programme proposes action to:

- develop or update country plans or programmes to ensure universal, non–discriminatory access to basic health services, including sanitation and clean drinking water, to protect health, and to promote nutrition education and preventive health programmes.
- Develop programmes focusing on available and affordable primary health care services for youth, including sexual and reproductive health care, as well as educational programmes, including those related to sexually transmitted diseases, HIV/AIDS.

- Promote healthier lifestyles in cooperation with youth organizations; inform young people about the adverse effects of drug and alcohol abuse and tobacco addiction; and investigate the possibility of adopting policies to discourage drug, tobacco and alcohol abuse.
- Take steps to protect children, adolescents and youth from neglect, abandonment and all types of sexual exploitation and abuse.

2.3.2 Existing adolescent health programmes/services: Thailand

There are various organizations, in both the government and non-government sectors, which have been involved in implementing child and youth development programmes in Thailand for several years. In the area of youth health development, the Ministry of Public Health (MoPH) plays an important role in health promotion, prevention, medical treatment and rehabilitation. The MoPH applies a holistic health approach in coping with adolescent health problems in the country (MoPH, 2000). Both government and non-government sectors have implemented numerous programmes and activities in various places, including schools, communities, shopping malls and public areas. The following are examples of conventional health programmes.

2.3.2.1 Adolescent health clinics

The Department of Health (DoH) has been aware of the need to make services more user-friendly since 1998, when it began to introduce Health Promoting Hospitals. There are now 350 such hospitals, committed to health promotion and responding to local communities. A number of these hospitals have launched programmes in youth-friendly health services. In addition, a number of university hospitals have launched adolescent clinics. Many medical staff and medical NGOs have realized the significance of addressing, implementing and providing friendly health services to adolescents. However, underutilization of the above services has been observed.

2.3.2.2 School programmes

Sex education and life skills training

The DoH and the Department of Mental Health (DMH) have developed guidelines for the Sex Education curriculum and have submitted it to the Ministry of

Education for revision. At present, its content has been integrated into two subjects: Health Education and Fitness. The DoH has also implemented a programme to build the capacity of health staff to further train teachers in sex education. Along with the training programme, a package of sex education teaching manuals was developed. Currently, this countrywide program is being completely evaluated (MoPH, 1999).

With the close coordination and collaboration of the DoH and the DMH, the programme of Life Skills (LS) on AIDS prevention has been implemented. The capacity of regional health trainers was strengthened to enable them to train schoolteachers and health staff in the areas of this specific LS. The teaching manual was designed for participatory learning and focuses on the skills needed to prevent HIV infection and to promote safe and responsible sex. It is targeted at those aged 11-20 years old in school, and those out of school through informal education. However, it has been noted that there were some limitations to this program, including difficulties in changing traditional teaching methods, lack of support from parents and continued emphasis only on academic outputs from school.

2.3.2.3 Community programmes

Two major programmes for adolescents were initiated at the community level, the Counseling and Friendly Health Services, and Safe and Supportive Environment in the School and the Community.

Counseling and friendly health services

In 2001, the Youth Friendly Health Services Programme was promoted. The DoH placed emphasis on the outreach approach by setting up a "Friends' Corner" outside government premises, such as shopping malls, rented townhouses, etc. The Friends' Corner is a place youth can visit to get health information, counseling, basic health care such as skin care, condoms, an education programme on contraceptives, and referral services. It aims to increase the access of young adults to friendly health services. Recently, Provincial Health Offices and Regional Health Promotion Centers in 24 provinces were operating 26 Friends' Corners throughout the country (MoPH, 1999). Currently, the programmes are in the process of monitoring and evaluation.

Safe and supportive environment in school and community

The Department of Health first launched the Health Promoting Schools Programme in 1998. More than 10,000 schools have been participating in this programme, accounting for 32% of total schools nationwide. In Bangkok, the DoH had conducted a pilot training project to enable families to communicate with their children on sexual issues, based on the principle that families should be able to be open, honest, and consistent in discussions with teens about sexuality. The lessons learned and experiences gained from this project were integrated into the conventional programme of teaching parents sex education (MoPH, 2000), which is being implemented in 50 districts. Unfortunately, these do not cover the slum community. At present, these programmes are in the process of evaluation.

2.4 Adolescents' Health Needs, Accessibility of Health and Services Provision in Thailand

Currently, Thai adolescents are considered a large and important group with specific needs. The literature review uncovered several studies related to adolescents' health needs and the accessibility and utilization of health services. The major health needs of adolescents include 1) sexuality and reproductive health, 2) substance abuse, 3) mental health/suicide, and 4) injury and violence.

2.4.1 Sexuality and reproductive health

Pimpawan Boonmongkol *et al.* (2000) conducted a study of Thai adolescent sexuality and reproductive health and the implications for developing adolescent health programs in Thailand. The results indicated that the most serious problems among Thai adolescents were substance abuse and sexual and reproductive health problems (unwanted pregnancy, unsafe abortion, sexually transmitted diseases (STD) and reproductive tract infections). The study clearly showed that adolescents were unlikely to seek care for the latter problems. The adolescents relied on non-prescribed emergency contraception and self-medication for STD and reproductive tract infections. The adolescents expressed a strong opinion that they needed adolescent health centers that offered comprehensive health services. The adolescents considered that they would use health services for both unmet sexual health problems and less

threatening issues if the services had a comfortable atmosphere, which would enhance beauty, promote fitness and relieve emotional stress. There were no existing health services available to meet these needs.

The study of Chanpen Chooprapawan (2000) found that most male youths had had sex experiences with prostitutes, and that six out of ten of those did not use a condom when they had sexual activity. In addition, the study indicated the age of first sexual experience in male youths was 15 years. For urban female youth, 50% of the correspondents had had pre-marital sex, and 60% of them never used a condom with their sex partners. According to traditional Thai culture and gender mores, it is not surprising to find that most of them did not dare to discuss safe sex with their sexual partners. Consequently, some of them were confronted with unwanted pregnancies and induced abortions.

The changing global situation, including changing social and economic situations, has a direct impact on young people. They gain more independence economically, in their living arrangements and in their own lifestyles. In addition, the rapid growth of urbanized popular youth culture becomes an important factor influencing their sexual lifestyle (Chai Podhisita, U Pattaravanich, 1995; Ford and Kittisuksathit, 1996 cited in Pimpawan Boonmongkol et al., 2000). The norms and values about sexuality have changed. Clear evidence from various studies has shown that the age and pattern of first sexual intercourse has changed. Sex is initiated at a younger age. Sharma R. (2003) conducted a study on contraceptive use among university undergraduate students. The findings reported that 20% had had sexual experience, and 70% of the sexually active procured contraceptives from drug stores. The MoPH (2000) stated that the average age for the first sex experience of young Thai people is 14-18 years old, and that males initiate their sexual experience earlier than females. Their sex partners are lovers, friends, colleagues in their workplace and acquaintances. Condom use is not popular among them. This is the leading cause of STD and HIV/AIDS transmission.

The results of a Durex-sponsored global profile of sexuality and sexual practices indicated that about 29% of unmarried adolescent Thai men claimed to be sexually active, with four partners in the last 12 months. As a result of this survey, teenagers were found to have had their first sexual experience at the age of 15–16. In addition, access to sex information was found to be hindered by laws, regulations, policies and public opposition. Young people learned about sex from their friends, schoolbooks, sex partners and parents (Anjira Assavanonda, 2000; Durex, 1999).

2.4.1.1 Unintended pregnancy

Rapid social change, such as migration due to education, industrialization, economic advancement, modernization, social networks and peer influence, encourage young people to engage in unsafe pre-marital sex. The results of the study by Chai Podhisita and Pattaravanich (1995) showed that an increasing number of young people entered into sexual activities with little knowledge of sexuality or family planning. Many of them thought that pre-marital sex was acceptable (Ratana Somrongthong and Chitr Sitthi-amorn, 2000). The report of the Family Planning Division, Ministry of Public Health (MoPH, 2000) indicated that, in Thailand, teenagers account for about 16% of unwanted pregnancies. In addition, Yu Feng (2003) conducted a study in one high school, and the results revealed that 56.7% of high school students had positive attitudes toward induced abortion.

2.4.1.2 Sexually transmitted diseases

Information from the Statistics Service of the Ministry of Public Health, for the period October 2000-September 2001, indicated that 37% of the clients of VD clinics countrywide were people under 25 years of age. Most of them were aged 20-24 years. Twenty-nine percent of the infections were STDs (MoPH, 2001). Nowadays, the STD situation among adolescents is distressing.

2.4.1.3 HIV/AIDS

Government statistics for the year 1996 showed that half of the Thai HIV cases were in the age group 15–25 years. Currently, the Department of Health, Ministry of Public Health (2001), has revealed that 12.5% of (symptomatic) AIDS cases are young

people. Many studies have indicated that young Thai people have good knowledge of HIV/AIDS prevention and control. However, improving HIV/AIDS knowledge did not actually improve the usage of condoms. On the contrary, because of changes in adolescent norms and values about sexuality, they are having more sex with less knowledge about safe sex. The study by Simon *et al.* (2000) on sexual behaviors of Thai college students indicated that students have greater knowledge about HIV/AIDS, and have a number of sex partners, but these did not affect their perception of HIV risk. The majority of students believed that they had no or little risk of contracting the disease.

The above statement reveals that sexuality and reproductive health problems of Thai adolescent are caused by the changing norms of young people regarding premarital sex. Meanwhile, most of them lack knowledge about sexuality and reproductive health and possess inadequate life skills for safe sex.

2.4.2 Substance abuse

Consistent with the rapid growth and development of the country, young Thai people tend increasingly to use substances that are affordable and readily available, such as tobacco, alcohol, and illicit drugs. Particularly, young people who live in Bangkok slum communities are an at-risk group due to their being easily exposed to a variety of substances of abuse, and illicit drugs (Hi-class, 2000).

2.4.2.1 Tobacco

The recent national study by Dr. Chuchai Supawong and his team found some 85% of Thai smokers took up tobacco before they were 25 years old, and that 600,000 people start smoking annually, with nearly all the new recruits being teenagers and young adults. The study also found that slightly more than 33% of Thai males had tried a cigarette by the time they were 15 years old, compared with 10% of females. According to the WHO, half of all smokers will die prematurely--mostly in middle age--losing around 22 years off their normal life expectancy. Sixty-eight percent of Thai adult smokers have started smoking by their 19^{th} year. In addition, medical research suggests that people who begin smoking in adolescence and continue to smoke

regularly have a 50% chance of dying from tobacco-related diseases (Tanida Siroratrtanakul, 1998).

Adolescents usually experiment with a variety of new things, but they rarely seriously consider the long-term consequences of their actions. For them, the risks of tobacco use are outweighed by the immediate "feel-good factors". Adolescents view smoking as an adult activity, so they may smoke in an attempt to appear more grown-up. In addition, the effect of peer pressure is one of the most noticeable in the transition from experimental smoking. Consequently, they tend to ignore the addictive properties of nicotine.

2.4.2.2 Illicit drugs

A staff-member of the Narcotics Control Board Office stated that, in the year 1999, about 190,000 school students, or 1.4% of Thai students nationwide, were drug addicts (Pennapa Hongthong, 2002). The Bangkok Post newspaper quoted a survey of the Thai Farmers' Research Center, which assessed students' attitudes towards economic, educational, political and social problems. The finding indicated that 69.2% felt that their schools and colleges were not drug-free (Oana-Xinhua, 2001). A retrospective study on factors associated with amphetamine use in students who were undergoing treatment in one hospital in Thailand (Wasana Pattanakamjorn, 1999) found that the mean age when the students first used amphetamines was 17 years. As adolescence is a period of experimentation, there is a serious need for intensive education about drug abuse. Furthermore, the results of a focus group discussion of young people in Klong Toey Slum community have shown that one of the most important public health problems of the Thai youth in this community was substance use (Ratana Somrongthong and Chitr Sitthi-amorn, 2000)

2.4.3 Injury and violence

The study by Chanpen Chooprapawan (1997) revealed that urban youth tended to have higher levels of risk behavior than rural youth regarding violence, anxiety and mental health problems. The report of road accidents from 1992–1997 indicated that the rate had increased from 10/100,000 to 12/100,000. The highest mortality was in the

ages 15–24, with approximately 11 deaths per day (Samai Arpapirum, 1997). Government statistics for the year 2000 showed that unintended injury was the main cause of death in young people. Statistics of the Department of Health, Ministry of Public Health (MoPH 1999)) estimated that youth deaths caused by accidents numbered around 10 per day. Statistics of the Medical Institute of Accident and Disaster, Department of Medical Service, Ministry of Public Health (2000) showed that young people aged 20-24 had the highest mortality rate for road traffic accidents (29.9/100,000 population). In addition, a paper of the Department of Family Planning and Population, Ministry of Public Health (2001) indicated that the numbers of guilty verdicts in juvenile courts have been increasing annually. Drug abuse cases had increased 6 times, crime and robbery 5 times, and rape 2 times (MoPH, 2000).

Statistics from the Thai Criminal Law Institute showed an alarming increase in the number of juvenile offenders over the six years since 1996. There has been an increasing number of guilty verdicts in juvenile courts, from 29,691 in 1998 to 32,333 in 1999 (Subhatra Bhumiprabhas, 2001). These figures show that problems are at a critical level and that prompt action is required.

2.4.4 Mental health/suicide

The study by Chanpen Chooprapawan (1996) revealed that urban youth tended to have higher levels of risk behavior than rural youth regarding fear and mental health problems. This study also showed that 1 out of 4 young people had a mental health problem. Most of the mental health problems were related to stress from study or were emotional. The documentary review by her team found that the highest rate of suicides was amongst those aged 15–24 years.

The Bangkok Post newspaper quoted the Thai Farmer Research Center's result of its survey on children in Bangkok, conducted with the aim of assessing their attitudes towards economic, educational, political and social problems. The research found that 60.2% of the 920 Bangkok children interviewed said they had family problems. It also revealed that children in Bangkok were living under pressure due to family, love and financial problems (Oana-Xinhua, 2001).

Ms. Orasom (2000), who conducted in-depth interviews of 10 young criminals for her book "Dek Phan Mai Wai X" (New Generation Children X), said loneliness, lack of family contact and poor guidance helped to explain the juvenile crime rate. In her study of the lifestyles of Thai teenagers, she also found that 90% of teenagers who spent their time at entertainment venues were suffering from loneliness. They felt that their parents and teachers did not understand them. One schoolteacher said the education reform policy had forced teachers to do more paperwork. Teachers had no time to listen to students' problems (Sirikul Bunnag, 2002).

Manote Lortrakul (1998) studied suicide trends in Thailand: categorized by age and gender, by reviewing the suicide statistics during the years 1992-1996. In that period, there was an economic crisis in Thailand. The results showed that the highest rate occurred in young people, particularly in males aged 20-24 years, for whom the suicide rate was 21.7 per 100,000. In addition, females aged 15-19 years showed the highest female rate of suicide (6.6 per 100,000).

The study by Sommana Chumpoothaveep *et al.* cited in MoPH report (MoPH, 2001) pointed out that adolescents needed counseling clinics, including hotline counseling. Furthermore, a qualitative study conducted by the MoPH (MoPH, 2001) found that adolescents agreed at a high level with the establishment of "adolescents' centers or adolescents' corners" where they could get access to information, counseling services and other health services. The services should be located in communities where transportation is available. The adolescent center or corner should attract its clients with a bright, warm and friendly environment. A variety of services should be provided to meet the adolescents' needs. Moreover, services should be available after study hours and during holidays.

Slap, G (1998) reported the results of focus group discussions about adolescent health services among young people in a Bangkok slum community. The youths said that they would use a health facility for other, less threatening issues, particularly if the services would enhance beauty, promote fitness and relieve emotional stress. The above

qualitative study concluded by stating that the existing health services did not meet the needs of adolescents.

Nowadays, the health problems of Thai adolescents are increasing. The government sector has developed a variety of health services, including preventive, promotive, curative and rehabilitative programs. However, the above services, particularly health care, if available, are generally fragmented and often not relevant to adolescents' needs. Sexuality for young Thai people is inhibited; however, in reality, it is increasingly recognized by many studies that adolescents engage in sexual activity at an early age. Nevertheless, they still have limited access to contraceptive services and information (Pimpawan et al. 2000). To solve adolescent health problems, one important component is improving accessible to health services for adolescents.

2.5 Accessibility: Definition

Access to health services is the process initiated from the need for health care to contacting and using health services. According to the WHO (1989), accessibility is *the number or proportion of the given population that can be expected to use a specified facility, service,* etc., *given certain barriers to access, which may be physical (distance, travel, time), economic (travel cost, service fee, time cost), or social and cultural (language) barriers.* There are four dimensions of accessibility to health care (Thinh P N, 2001):

a) Geographical accessibility: This includes transportation, travel time.
b) Financial accessibility: the ability of people to pay for health services
c) Cultural accessibility: related to an appropriate approach used with the cultural patterns of the community.
d) Functional accessibility: the process, method of managing of care to those who need it. The way that a service is delivered to clients affects accessibility

In another definition, access to health care was defined as the possibility of obtaining health care when it is needed (Sanhueza XA *et al.*, 2000).

Pencharisky (2001) and Lee, D (2001) modified the indicators of accessibility in "Improving Access to Medicine: Strategies for Enhancing Access to Medicines", as follows:

1. Geographic accessibility means the location of populations and travel resources relative to the location of the health facility. The indicators for measurement are as follows:
    - the percentage of households more than 20 km away from the health facility
    - the average number of operating hours per day of the health facility
2. Availability means the quantity of need/demand relative to the quantity of health services. The indicator for measurement is as follows:
    - the percentage of clients who have access to appropriate care
3. Affordability means the resources to purchase or pay for health care relative to the price/cost of the care. The indicators for measurement are as follows:
    - average percentage difference in lowest prices to customer/patient per visit
    - the percentage of adolescents reporting problems with affordability
4. Acceptability means the characteristics of services vs. user attitude, perception, or expectations of services, including social, cultural concerns, and the attitudes of adolescents and health providers. The indicator for measurement is the following:
    - satisfaction with last visit to the source of health commodities, such as services, medicines.

Marc, JR *et al.* (2001) defined "accessibility" in two aspects. First, it refers simply to whether services are offered in a specific area. This refers to *physical availability.* It can be measured by the distribution of availability input (such as beds, doctors, nurses, etc.), compared with the population. The second more closely reflects the meaning of the term *effective availability.* It concerns the question "is it easy for people to get care?". The differences between *physical availability* and *effective*

availability arise because of various barriers, such as cost, travel time, poor services, etc. These barriers may influence the use of facilities that are *physically available*. In practice, regarding the term "access", Marc, JR *et al.* (2001) stated that it was quite often employed to refer to utilization, but that *utilization* was only a partial reflection of *effective availability*, since patients may choose not to use services even if they are available. For "access" however, effective availability is rather abstract in terms of measurement. Therefore, it has been eliminated as a meaningful concept since it is no longer independently measurable apart from *utilization*.

In this study, the term "accessibility to health services" refers to adolescents' perception on geographic accessibility (or physical accessibility), availability, affordability, acceptability and utilization which the researcher concentrated upon in this study.

2.6 Problems of Accessibility and Utilization of Health Services for Adolescents

The report of a WHO/UNFPA/UNICEF study group on Programming for Adolescent Health (WHO, 1999) indicated the barriers to accessibility and utilization of health services for adolescents depend on many factors. Adolescents may fail to seek help because:

1. They do not recognize their illness or are not aware of the severity of the illness.
2. They do not know that they could get help to prevent the illness, and to have it treated if illness does arise.
3. They do not know where, and under what conditions, health services are provided.
4. They do not want to call attention to their actions (such as their sexual activities).
5. Services are located a long distance from where they live/study/work, or in places that are not easily accessible.
6. Services are provided at times of day when adolescents cannot get away from their study/work.

7. Services are provided in places where they, the service users, could be seen by people who know them.
8. Health personnel cannot provide them with the services they need without the consent of their parents.
9. Health personnel cannot maintain confidentiality.
10. Health personnel may ask them difficult and embarrassing questions and put them through unpleasant experiences.
11. Adolescents cannot afford to pay for the service costs and have no financial resources to spend on themselves. Most of them relied on parents.

One example that supports the abovementioned problems of accessibility to health programmes/services by adolescents is sexuality and reproductive health, where, in many countries the great majority of adolescents are poorly informed. They also have inadequate social skills to say "no" to unwanted sex or to negotiate for safe sex. Moreover, many policymakers, public opinion leaders and parents still seem to believe that withholding information about sexuality and reproduction from young people will dissuade them from becoming sexually active (WHO, 1998b).

Providing health care services to adolescents is difficult. They often do not present for care unless acutely ill or in crisis. Furthermore, many health professionals have limited training in the area of adolescent growth and development, risks to adolescent health, and effective communication with adolescents (Rutherford *et al.*,1999). Several studies have shown that most adolescents become sexually active before the age of 20, but generally lack access to family planning services, including appropriate contraceptives, ante-natal care, obstetric care and STD clinics (WHO, 1998b). Most health services for adolescents have opening times or locations that make them inaccessible, and some are too expensive.

Results of the study "Health Education and Services in Human Reproduction and Contraception for Adolescents" by Sakondhavat *et al.* (1991), regarding health care seeking behaviors for unwanted pregnancy, revealed that 37.7% would go to see a doctor for counseling and 29.6% would consult a friend. The study also found that one-

third of male respondents would ask their girlfriend to get an abortion. This study showed that female adolescents chose self-treatment for their health problems (cited in Pimpawan et al. 2000). In addition, the study by Ford & Kittsuksethit in 1996 about the patterns of healthcare seeking behaviors of young factory workers showed similar results; most of the counselors for their sexual and reproductive health problems were their friends (cited in Pimpawan et al. 2000.)

The Global Sex Survey: Youth Perspective (Durex, 1999) was conducted in 14 countries, including Thailand, and it supported the above findings. The results revealed that a friend was the first source of sex education. The survey discovered that the rate of condom use in Thailand was the lowest, at 23%. Thai youth also stated that a family planning program was not available to them and that they were unable to access that kind of service. In addition, the study found that Thai youth had more multiple sex partners in a given period than the other countries in the study.

A focus group discussion of adolescents, young adults and youth leaders living in a Bangkok slum found that the adolescents in the slum under-utilized the existing governmental health services. The barriers cited included unavailability of the desired services (e.g., contraception for unmarried females), anxiety about the social ramifications of health problems resulting from unacceptable behaviors (e.g., pregnancy) and lack of empathy and counseling from providers (e.g., school and family). The adolescents expressed a preference for youth-only sites that provided separate services (and probably separate waiting areas) for males and females. Females wanted more education about normal puberty than is currently available from parents and teachers. Males wanted help coping with the daily realities of community heroin and amphetamine use, gang-related violence and parental pressure to leave school for work (Slap, G. 1998).

The other study in slum community on the existing health needs and related health services for adolescents, the results indicated that adolescents who had general illnesses (headache, common cold) mostly resorted to self-medication. In addition, the qualitative finding of this study by focus group discussion showed that the Bangkok

Metropolitan health station provided unsatisfactory services (Ratana Somrongthong, and Chitr Sitthi-amorn , 2000).

Adolescents with health problems do not always turn to health care providers or health services for help. It depends on the problems and their perception of them. They might seek help from various individuals and organizations around them (WHO/UNFA/UNICEF, 1999). Their perceptions of the assistance they can get from those individuals and organizations determines their reaction. To solve the problem of accessibility and utilization of health services/programmes, the people involved should clearly understand adolescents' health needs and their perceptions toward health problems. Consequently, promoting adolescents' health and improving accessibility to health programmes/services can prevent further problems and improve the quality of life for young people.

2.7 Depression

The term "depression" can be confusing since it's often used to describe normal emotional reactions. At the same time, the illness may be hard to recognize because its symptoms may be so easily attributed to other causes. Department of Health and Human Services defined Depression as. "A mental state of depressed mood characterized by feelings of sadness, despair and discouragement. Depression ranges from normal feelings of the blues through dysthymia to major depression". The most common often feelings of low self esteem, feelings of worthlessness, sadness, guilt and self reproach, withdrawal from interpersonal contact and physical symptoms. such as eating and sleep disturbances. (Mental Health, 2003)

2.7.1 Adolescent depression

Adolescent depression refers to a disorder occurring during the teenage years marked by persistent sadness, discouragement, loss of self-worth, and loss of interest in usual activities. Depression can be a transient response to many situations and stresses. True depression in teens is often difficult to diagnose because normal adolescent behavior is marked by both up and down moods. These moods may alternate over a period of hours or days. The depressed mood includes: faltering school performance; failing relations with family and friends; substance abuse; and other negative behaviors

that may indicate a serious depressive episode. Moreover, excessive sleeping, changes in eating habits, even criminal behavior (like shoplifting) may be signs of depression. Another common symptom of adolescent depression is an obsession with death, which may take the form either of suicidal thoughts or of fears about death and dying. These symptoms may be easy to recognize, but depression in adolescents often manifests very differently than these classic symptoms (Franklin, DJ. 2003). Brooks SJ and Kutcher S. (2001) reviewed 12 instruments most commonly used in studies of adolescent depression. The findings indicated that too many different instruments were being used by investigators, presumably due to a lack of consensus as to which are the most valid and reliable tools. Instruments designed for use in adults and never validated in adolescent populations are frequently used with no evidence for their developmental sensitivity. For this study, the Center for Epidemiologic Studies' Depression Scale (CES-D) was adopted.

2.7.2 Why is the Center for Epidemiologic Studies' Depression Scale (CES-D) suitable for measuring adolescent depression?

The CES-D is one of the most frequently used standardized measures of depression in adolescents (Edman JL *et al.*, 1999). A self-administered instrument, consisting of 20 items was designed to measure the level of depressive symptomatology in community populations. Although this tool was designed primarily as a measure of depression symptoms (such as feeling blue, feeling depressed) it also includes items that measure self-esteem and social withdrawal (for instance; feeling lonely, life is failure). Several studies have addressed the issue of the cross-cultural validity of the CES-D (Radloff LS, 1991; Roberts RE et al., 1992).

This study adopted the Center for Epidemiologic Studies' Depression Scales (CES-D) to measure the levels of adolescent depression. It is composed of 20 questions asking about adolescents' feelings or behaviors related to depression symptoms. It has been extensively used in large studies and norms are available. It is applicable across age and sociodemographic groups. It has often been used in cross-cultural research (McDowell, I. and Newell, C. (1996). Moreover, this instrument had been translated into the Thai language and used with Thai adolescents. The results show that the

Cronbach alpha coefficient of the CES-D was 0.86, that the validity was significant (X = 25.6, 15.4, SD = 8.8, 6.7) , that the sensitivity was 72%, the specificity was 85% and the accuracy was 82%; the cutting point = 22 scores. The report shown that the sample was diagnosed for depression at the significant p-value < 10^{-6} (Umaporn Trungkasombat, 1998). Recently, the Ministry of Public Health, Thailand, has adopted the CES-D for adolescent depression screening nationwide (MoPH, 2003).

2.7.3 Thai adolescents and depression

Regarding adolescent depression in Thailand, the literature review found only one study. Umaporn Trangkasombat *et al.* (1997) conducted a study on CES-D (Center for Epidemiologic Studies - Depression scale) as a screen for depression in adolescents. The study used the CES-D, Thai version, as a screen for depression in Thai adolescents. The subjects, who consisted of 125 male adolescents aged 15-18 years, filled out the CES-D and were evaluated with structured psychiatric interviews by psychiatrists who were blind to the results of the CES-D. The findings indicated that subjects with interview-validated depression had significantly elevated CES-D scores (mean = 25.6, SD = 8.8) compared with non-depressed subjects (mean = 15.4, SD = 6.7), P < 10-6. Furthermore, the CES-D scores increased as the severity of depression increased. Moreover, the results of this study revealed that the CES-D efficiently differentiated depressed from non-depressed adolescents; the optimal cutoff score in Thai adolescents was higher than the score previously recommended.

2.8 Adolescents' Quality of Life

For the study of the quality of life of Thai adolescents, it is necessary clearly to understand the definition of Quality of Life (QoL). Defining the term Quality of Life seems complex. There is a variety of definitions, depending on the perceptions, contexts and circumstances of each individual.

2.8.1 Definition of the term "Quality of Life"

There are various terms to assess quality of life in the medical and health research, including "general health status measures" or "measures of health related quality of life". Although the trend has been to call these instruments "quality of life

measures", there is no clear distinction between quality of life measures and methods. In the past, interest in the quality of life by medical research was stimulated by success in prolonging life. However, in more recent medical research trends, social aspects have been extensively discussed in studying patients' quality of life. In addition, some distinguish QoL from the concepts of life satisfaction, morale, happiness, and anomie largely in subjective terms (McDowell I & Newell C, 1996).

Some define quality of life as being a personal judgment about satisfaction and happiness (anonymous unpublished paper, 2002).

The Quality of Life Center, Denmark (2001) described quality of life in both subjective and objective terms. The subjective quality of life includes feeling good and being satisfied with things/events in general, while the objective quality of life is related to fulfilling the social and cultural demands for material wealth, social status and physical well-being.

The Quality of Life Research Unit, Toronto University (University of Toronto, 2001) defined quality of life as "the degree to which a person enjoys the important potentials of his/her life, which possibly results from the opportunities and limitations that each person has in his/her life, and reflects the interaction of personal and environmental factors".

Many other definitions of both "health" and "quality of life" have been attempted, often linking them together. For Quality of Life, components of happiness and satisfaction with life are frequently emphasized. Moreover, other definitions of QoL mean different things to different people and take on different meanings according to the area of application (Fayers MP & Machin D, 2000).

2.9 QoL Instruments

Over many years, several sets of instruments have been developed worldwide to assess QoL. There are two types of instrument: generic and disease-specific.

2.9.1 Generic Instruments

This type of instrument is intended for general use. These generic questionnaires may often be applicable to healthy people. Few of the early instruments had scales that examined the subjects' non-physical aspects, such as emotional, social and existential issues. Some instruments emphasize the subjective aspects strongly, and commonly include questions about overall QoL. Examples of this type of instrument are the Nottingham Health Profile (NHP), the Medical Outcome Study 36-Item SF–36 (Ware J. *et al.*, 1993), and the WHO-QoL (1996). A brief description of each follows:

- Nottingham Health Profile. This instrument measures the emotional, social and physical distress of patients. The questionnaire consists of 38 items in six sections, covering sleep, pain, emotional factors, recreation, social isolation, physical mobility and energy level. It is often used in population studies to evaluate general health.

- Medical Outcomes Study 36-Item Short Form (SF-36). The SF-36 was developed by Ware *et al.* (1993) for evaluating general health status. This instrument was modified into a short form for easy use. It is designed to provide assessments involving generic health concepts that are not specific to any age, disease or treatment group. The questionnaires place their emphasis on physical, social and emotional functioning (Fayers MP & Machin D, 2000).

2.9.2 Disease-specific Instruments

These instruments focus on the issue of particular concern to patients with diseases such as cancer, epilepsy, and these will not be discussed here

2.9.3 Other Instruments related to QoL

The UNDP has developed a "human development index" (HDI) as an indicator of quality of life, based on social indicators (education and life expectancy) and economic indicators (per capita GNP). In 1994, the UNDP developed a human poverty index (HPI) to measure the effectiveness of developing countries in developing quality

of life, based on the percentage of the population dying before the age of 40, the percentage of illiterate people and the percentage of the population lacking health services. It might be said that this type of instrument is for the macro level measurement of QoL.

2.9.4 Adolescents' Quality of Life

The literature review uncovered several studies related to the quality of life of adolescents with specific diseases, including assessments of young people that used a variety of instruments for measuring adolescents' quality of life. However, most of the studies were conducted in Western countries.

Some examples of adolescent QoL assessment follow:

The study results of Beker, DZ (2002), entitled "Quality of Life Indicators: Adolescents' Perceptions", revealed that individual characteristics do influence adolescents' perceptions of what gives their life quality; especially sex, race, place of residence and parents' marital status. All were found to affect quality of life indicators.

Moreover, in the study by Rivera, PM (2000) of the relationship between exposure to violence and quality of life of urban adolescents, multi-regression statistical analysis was conducted. The results indicated that gender, age and total exposure to violence were significant predictors of quality of life for urban adolescents. In addition, it showed that males were more likely to report higher levels of exposure to violence than females.

Topolski TD *et al.* (2001) conducted a study to assess the association between health risk behaviors (the health risks related to tobacco use, alcohol use, illicit drug use, and high-risk sexual behavior) and self-perceived quality of life among engagers (adolescents who often engage), experimenters (occasionally engage), and abstainers (never engage). The Youth Quality of Life Instrument for the surveillance module (YQOL-S), Washington University, was adopted as the instrument for assessment. The results showed that adolescent abstainers reported higher quality of life than engagers

and experimenters on the YQOL-S items. Experimenters tended to rate their QoL as more similar to abstainers than to engagers.

Raphael, Renwick and Brown (1998) developed a Quality of Life Profile: Adolescent Version. It defined quality of life in simple terms to assess the QoL of young American people. The study found that quality of life score was related to adolescent drinking and smoking, as well as to adolescent perceptions of their current happiness and future opportunities.

Unfortunately, studies on Thai adolescents' quality of life are difficult to find.

2.10 Adolescents' Quality of Life Instruments

In the literature review, several institutes were found to have developed instruments for measuring adolescent QoL; however, most had been implemented only in Western countries.

2.10.1 Adolescents' quality of life instrument: University of Toronto

The Center for Health Promotion, in cooperation with the School of Nursing, Laurentian University of Toronto, Canada (2002) identified quality of life issues through direct dialogue with adolescents. Based on a literature review and focus group with adolescents, a 54-item Quality of Life Profile–Adolescents' Version, was developed and validated in 1995 (Raphael, Renwick & Brown, 1998). This instrument consists of 9 specific areas of life that are important parts of the lives of all people. Each domain item is rated for Importance and Satisfaction. The nine areas of life consist of the following:

- **Being**
  - *Physical Being*
    (my *body and health*; my appearance –how I look, making healthy choices - alcohol, drugs, smoking)
  - *Psychological Being*
    (my *thoughts and feelings*; being independent, knowing where I am going)

- *Spiritual Being*

  (my *beliefs and values*; having hope for the future, feeling that life has meaning)

- **Belonging**
  - *Physical Belonging*

    (where *I live and spend my time*; the earth and its environment, feeling safe at school, in the neighborhood and when I go out)
  - *Social Belonging*

    (the *people around me*; being appreciated by others, the friends I have)
  - *Community Belonging*

    (my *access to community resources*; being able to access medical/social services on my own, having things to do in my community in my spare time)
- **Becoming**
  - *Physical Becoming*

    (*the daily things I do*; looking after myself and my appearance, the work I do at a job while still a student)
  - *Leisure Becoming*

    (the *things I do for fun or enjoyment;* participating in sports and recreational activities, visiting and spending time with others)
  - *Growth Becoming*

    (*the things I do to cope and change;* planning for a job or career, solving my problems)

This QoL instrument had simple terms, meaning "how good is your life for you?" The initial validation of this instrument was done among American adolescents aged 11-18. It showed good psychometric properties and was sensitive to adolescent concerns.

2.10.2 Adolescents' quality of life instrument: University of Washington

The University of Washington (2001), Youth Quality of Life Group developed a global measure to assess the quality of life from the adolescents' own perspective, called the Youth Quality of Life Instrument - Research Version (YQOL-R). http://depts.washington.edu/yqol.about_Us.html This instrument consists of three types of items: 1) Contextual (potentially verifiable; 28 items); 2) Perceptual (known only to the individual, 42 items); 3) Individual specifics. The instrument was designed using grounded theory and assesses the following 4 domains associated with quality of life;

1. **Self**: pertains to the adolescent's feeling about him or herself. It consists of the following facets; being in self, being oneself, mental health, physical health, and spirituality.
2. **Relationship**: pertains to the adolescent's relations with others. It consists of the following facets; adult support, caring for others, family relations, freedom, friendships, participation, and peer relations.
3. **Environment**: pertains to opportunities and obstacles in the adolescent's broader social and cultural milieu. It consists of the following facets: engagement and activities, education, neighborhood, monetary resources, personal safety, and vision of the future.
4. **General Quality of Life:** pertains to the adolescent's sense of how well his or her life is going. Facets include enjoying life, feeling life is worthwhile, and being satisfied with one's life

Unfortunately, the researcher was unable to access the full YQOL-R instrument for review. Therefore, this instrument was not considered for use in this study.

2.10.3 Adolescents' quality of life instrument: Others

Ulrike Ravens-Siebere, (2000) developed a program that emerged from the desire to develop a computer-assisted, child-friendly and economical method for measuring health-related quality of life in children and adolescents. The program is available for two age groups (6-12 and 13-17 years old). The program consists of 24 Likert-scaled items associated with 6 dimensions: physical wellbeing, emotional wellbeing, family, friends, and everyday functioning. The sub-scales of these 6 dimensions can be

combined to produce a total score. However, this instrument requires a computer application and is costly, and therefore might not be suitable for Thailand.

The review of the above adolescents' QoL instruments found that they had all been used only in Western countries. Given the differences in geography, socio-cultural aspects and language, they may not be suitable for use as QoL instruments for Thai adolescents.

2.11 World Health Organization Quality of Life (WHOQOL)

The WHO (1993b) defined quality of life as "an individual's perception of life in the context of the culture and value systems in which they live, and in relation to their goals, expectations, standards and concerns. It is a broad-ranging concept incorporating in a complex way the person's physical health, psychological state, level of independence, social relationships, personal beliefs and their relationship to salient features of the environment". The WHO has developed a quality of life scale (WHOQoL) for use in different cultures, since 1992. A series of meetings in Geneva set the operational parameters for the development of a new quality of life instrument under the auspices of the WHO. There are two versions of the instrument, the WHOQoL–100 and the short form WHOQoL-Bref. These instruments have many uses, including use in medical practice, research and policymaking. They can be used in a variety of cultural settings whilst allowing the results from different populations and countries to be compared (WHO, 1996b).

WHO QoL domains and facets (WHOQoL-100)

WHO QoL measurement consists of 6 domains with 28 facets of QoL, as follows:

Domain 1 Physical domain

1. Pain and discomfort

This facet explores the unpleasant physical sensations experienced by a person, and the extent to which these sensations are distressing and interfere with life.

2. *Energy and fatigue*

This facet explores the energy, enthusiasm and endurance a person has to perform the necessary tasks of daily living, including recreation.

3. *Sleep and rest*

This facet is concerned with how much sleep and rest and problems in this area affect the person's quality of life.

Domain II Psychological Domain

4. *Positive feelings*

This facet examines how much a person experiences positive feelings of contentment, peace, happiness, hopefulness, joy and enjoyment of the good things in life.

5. *Thinking, learning, memory and concentration*

This facet explores a person's view of his/her thinking, learning, memory, concentration and ability to make decisions.

6. *Self-esteem*

This facet examines how people feel about themselves, both positively and negatively. The aspect of self-esteem is concerned with a person's feeling of self-efficacy, satisfaction with oneself; control is also included in the focus of this facet.

7. *Body image and appearance*

This facet examines the person's view of his/her body, and whether the appearance of the body is viewed in a positive or negative way.

8. *Negative feelings*

This facet is concerned with how much a person experiences negative feelings, including despondency, guilt, sadness, tearfulness, despair, nervousness, anxiety and a lack of pleasure in life.

Domain III- Level of Independence

9. Mobility

This facet examines the person's view of his/her ability to get from one place to another, move around the home, or to and from transportation services.

10. Activities of daily living

This facet explores a person's ability to perform usual daily living activities, including self-care and appropriate care for property.

11. Dependence on medication or treatment

This facet examines a person's dependence on medication or alternative medicines to support his/her physical and psychological wellbeing.

12. Work capacity

This facet examines a person's use of his/her energy for work. "Work" is defined as any major activity in which the person is engaged.

Domain IV- Social relationships

13. Personal relationships

This facet examines the extent to which people feel the companionship, love and support they desire from the intimate relationships in their life.

14. Practical social support

This facet examines how much a person feels the commitment, approval and availability of social assistance from family and friends.

15. Sexual activity

This facet is concerned with a person's urge and desire for sex, and the extent to which the person expresses and enjoys his/her sexual desire appropriately.

Domain V – Environment

16. Physical safety and security

This facet examines the person's sense of safety and security from physical harm. A threat to safety or security might arise from any source, such as other people or political oppression.

17. Home environment

This facet examines the principal place where a person lives, and the way that this impacts on the person's life.

18. Financial resources

This facet explores the person's view of his/her financial resources and the extent to which these resources meet the needs for a healthy and stable life style. The focus is on what the person can or cannot afford.

19. Health and social care: availability and quality

This facet examines the person's view of the health and social care in the near vicinity.

20. Opportunities for acquiring information and skills

This facet examines a person's opportunity and desire to learn new skills, acquire new knowledge, and feel in touch with what is going on.

21. Participation in, and opportunities for, recreation and leisure

This facet explores a person's ability, opportunities and inclination to participate in leisure time and relaxation

22. Physical environment

This facet examines the person's view of his/her environment. This includes the noise, pollution, climate and general esthetics of the environment and whether this serves to improve or severely affect quality of life.

23. Transport

This facet examines the person's view of how available or easy it is to find and use transport services to get around.

Domain VI- Spirituality/ Religion/ Personal Beliefs

24. Spirituality/ Religion/ Personal beliefs

This facet examines the person's personal beliefs and how these affect quality of life. This may be by helping the person cope with difficulties in his/her life, giving structure to experience, describing meaning to spiritual and personal questions, and more generally, providing the person with a sense of wellbeing.

Overall Quality of Life and Health

25–28.

These questions examine the ways in which a person assesses his/her overall quality of life, health and wellbeing (WHO, 1993b).

However, the WHOQoL-100 was found to be too long for use in community surveys. So, WHO developed a short version with 26 items, it called " WHOQoL-Bref" for field surveys, by selecting 26 items from the WHO-QoL100. This instrument has been tested in different countries, including Thailand (Suwat M et.al. 1997)

2.12 Why the WHOQoL-BREF is Suitable for Measuring Adolescents' QoL

The Department of Mental Health, Ministry of Public Health, Thailand (Suwat M et.al., 1997) developed the short form questionnaire (WHOQoL-Bref), which contained 26 questions, comprising one item from each of the 24 facets plus one item to measure "overall quality of life" and another to measure "general health" (WHOQoL Group, 1998b). In addition, the six domains of the WHOQoL-100 have been reduced to four, which consist of 1) physical health (incorporating level of independence), 2) psychological (incorporating spirituality), 3) social relationships, and 4) environment.

Table 2.3: WHOQoL-Bref domains

Domain	Facet incorporated within domains
1. Physical health	- Activities of daily living - Dependence on medicinal substances and medical aids - Energy and fatigue - Mobility - Pain and discomfort - Sleep and rest - Work capacity
2. Psychological	- Bodily image and appearance - Negative feelings - Positive feelings - Self-esteem - Spirituality/religion/personal beliefs - Thinking, learning, memory and concentration
3. Social relationships	- Personal relationships - Social support - Sexual activity
4. Environment	- Financial resources - Freedom, physical safety and security - Health and social care: accessibility and quality - Home environment - Opportunities for acquiring new information and skills - Participation in and opportunities for recreation/ leisure activities - Physical environment (pollution/noise/traffic/climate) - Transportation
5 Overall QoL & General Health Facet	

Source: WHOQoL-Bref - Instructions, Field Trial Version, December 1996

The WHO/QoL-100 and the WHOQoL-Bref (26 items) were compared in Thailand by an expert panel, which reviewed the content and suitability of the language used. In addition, three rounds of comprehensibility testing with people from different backgrounds were carried out. The final version of the WHOQoL-Bref was tested against the WHOQoL-100. It was found that the Cronbach alpha coefficients of the WHOQoL-100 and WHOQoL-Bref were 0.89 and 0.84, respectively. The correlation between the two instruments was 0.65 ($p > 0.01$). Consequently, the WHOQoL-Bref was recommended as a shorter, simpler, and more convenient version for use in community surveys. This instrument has been tested in Thailand for the population aged 16 years and over since 1997.

For this study, the modified WHOQoL-Bref is the instrument used for measuring adolescents' quality of life. Some words require modification for correct use in this period of time and for the understanding of adolescents. The findings of this

study will provide useful information for people involved in adolescent health development.

2.13 Slum Communities

Currently, Thailand has a population of 62.5 million. Bangkok has been undergoing rapid urbanization and industrialization since 1960 and currently has a population of 7 million (Bangkok Metropolitan Administration, 2002). The increasing population is due in large part to the development of infrastructure, such as road networks, real estate developments and escalating land values, as well as economic developments that have resulted in expansion of the population (Bangkok Slum, 2001). The rapid rise in population has caused community numbers to increase. The Bangkok Metropolitan Administration (BMA) has defined communities into 5 categories: 1) slum, 2) suburban, 3) real estate, 4) urban, and 5) housing communities. In the year 2000, there were 1,596 communities in Bangkok and the trend is increasing every year (BMA, Statistics Report, 2000). Around 10% of the total population live in Bangkok and nearly 20% of those live in slums Duang Prateep Foundation, (2001). The National Housing Authority (NHA) defines "slum" as a densely packed housing unit in a state of disrepair, with overcrowding of the units and with a dangerous environment. (Family Planning Needs of and Services for the Underprivileged Urban: The Case of Bangkok, 1984).

2.13.1 Problems in slum communities

As Bangkok is the national focal point for business and education, it attracts large numbers of migrants to the city. They come, impoverished, to the city in search of work and they need places to live. The Bangkok Metropolitan report (BMA, 2001) showed the trend of population dynamics in Bangkok city during the years 1987–2000; in the inner and middle areas, the population was decreasing. Bangkok seems to be losing some of its population. However, the actual population of the city may not be known, as there are people who commute to work in Bangkok or live in the city without registration. It is estimated that there are around 3.21 million persons without registration, and therefore the actual population of Bangkok was likely to be around 9.5

million (BMA, 2003). The NHA suggested the characteristics of a slum and its problems are as follows:

- there are dense housing facilities
- the housing units have the following characteristics
- in a state of decay
- inadequate water facilities leading to inadequate disposal of waste water
- inadequate ventilation
- the area around the unit is filthy and strewn with garbage

The area has numerous health threats. The residents have severe economic problems, facing a cycle of poverty that includes crime, illicit drugs, broken homes, violence, etc.

Until now, Bangkok has developed without planning and without public housing. Clusters of shacks, built by the poor migrants, have aggregated on wasteland near sources of work. As Bangkok attracted more workers, the slums became more crowded and more widespread Duang Prateep Foundation (2001). It has been estimated that Bangkok had a total of 1500 slum and squatter settlements (BMA, 2003).

2.13.2 Klong Toey Slum: History and its situation

Klong Toey slum is the largest slum community in Bangkok. The area is about 3 square km., encompassing 25 different slum communities, with a population of more than 140,000 (BMA, 2000). The community was first established in 1952 as a dwelling place for port workers and other laborers. Although many residents have lived there all their lives, the majority have no rights to the land they occupy, which creates a feeling of instability among the populace. The problems that slum people face include:

1) Dwellings are makeshift and unstable. Slum dwellers face a constant threat of eviction from land reclaimed for development
2) Cycles of poverty, broken homes, criminal activity, HIV/AIDS, drug and alcohol dependence, which can be difficult to break

3) Social and financial problems that may prevent children from receiving education - an essential bridge to a better standard of living
4) Poverty and desperation may lead slum residents into accepting jobs with poor working conditions or unfair pay. Due to financial problems, many slum residents may delay seeking professional medical treatment

Generally, people living in slums have no house registration and lack legal rights. Fortunately, Klong Toey Slum presently has now been approved for housing registration. Houses are closely packed together with narrow walkways. In the past, many houses were poorly constructed and highly prone to causing injury and fire. At present, the housing units are much better than in the past; however, in some areas, public utilities such as water supply and electricity are not accessible. Most of the people who live in Klong Toey are laborers or unskilled workers. For this study, the primary target is adolescents, and there are about 21,000 inhabitants aged between 12-22 years (BMA, 2001).

2.13.3 What are the major health problems of adolescents in slum communities?

The negative influence of the slum environment takes a severe toll on the appropriate development of young people. Broken homes, lack of warmth and support from the family and the undesirable atmosphere in the community lead young people astray, and into drugs and crime. In slum communities, adolescents' health problems are more pronounced as a result of their characteristic socio-cultural and economic disadvantages (Guzman, D A. 1999). Youths who live in slum communities are readily exposed to such unhealthy surroundings. The qualitative study in Klong Toey slum community by Ratana Somrongthong and Chitr Sitthi-amorn (2000) indicated that the most important health problems are drug dependency, sexuality and reproductive health. Moreover, it was also found that for males, injuries, accidents and drug abuse were the main health problems in this community. In addition, the study of Guzman, DA. (1999) revealed that adolescent health problems were stress, concern about body image, substance abuse and unwanted pregnancy. However, only 3% of them had ever

visited a health center. In conclusion, the major health problems of this slum community are:

a) **Sexual and reproductive health:** According to the study by Ratana Somrongthong, Chitr Sitthi-amorn (2000), most adolescents do not have adequate and appropriate knowledge about sexual and reproductive health. Moreover, the study found that young people in slum communities had their first sexual experience at the age of 15 years. Regarding safe sex, only 40% of sexually active respondents reported using condoms. Moreover, the recognition of STDs was only 52% (Guzman, DA. 1999). Currently, there is particular concern with sexual behavior among young unmarried people, who often engage in sexual activities without adequate information. This indicates that there is a gap between actual health needs and healthcare provision.

b) **Substance abuse:** Klong Toey Slum Community is well known as one of the largest areas for illicit drugs in Bangkok (Hi-class, 2000), and therefore the young people living there are highly likely to be closely exposed to substance abuse.

c) **Injury:** adolescence is a period of challenge, when adolescents are less aware of having a safe life. In slum communities, young people may face various problems, including crime and violence, which affect the young people's behavior. It is thus not surprising that fighting among youngsters occurs frequently in slum communities. Regarding traffic accidents, young males have less awareness about safety. By community observation, it was found that many young motorcyclists in slum communities ignore wearing a safety helmet, and try to show off by riding their motorcycles at high speed.

d) **Mental health**: urbanization and consequent rapid population growth increase the number of congested areas that often have unhealthy

> surroundings. Klong Toey slum is one of the consequences of this rapid growth. In slum communities, young people's problems are more pronounced as a result of the socio-cultural and economic disadvantages characteristic of many underprivileged communities. These areas are prone to disorder and urban stress, which manifests itself in depression, anxiety, suicide, alcohol and drug abuse, crime and family violence. Adolescents are open to exposure to these negative influences. Increases in such problems as juvenile delinquency, teenage pregnancy, and violence have been reported in urban poor settings.

Chai Phodhisita and U Pattaravanich (1995) showed that teen health problems were substance abuse, teenage pregnancy, sexual health issues (STDs and HIV/AIDS) and mental health problems, which include suicide and violence. Furthermore, the report of the Community Development Unit, Klong Toey District, Bangkok (BMA, 1999) indicated that the major problems of young people in slum communities were drug use, having a single parent or no parent, poverty, unemployment, discontinued education, and stigmatization, particularly in the context of employment. In addition, the pollution and poor sanitation in slum communities lead to health problems, including respiratory tract infections, gastrointestinal tract infections, and skin diseases. The review of the OPD record book of Health Center 41, Bangkok Metropolitan Administration (Oct 1999–Mar 2000) showed that about 3% of total clients were young people aged 12-22. The study by Guzman, DA. (1999) also indicated that only 3% of young people visited a health center for HIV/AIDS consultation. The major health problems were respiratory tract infections, gastro-intestinal infections and skin diseases. It is noteworthy that few cases visited a health facility. Several studies indicated that sexual and reproductive health among young people was a major problem (Guzman, D.A. 1999, Ratana Somrongthong and Chitr Sitthi-amorn. 2000, Sharma, 2003).

It can be said that adolescents in the slum community have under-utilized the health facilities, particularly for sexual and reproductive health problems. For this study, the research focuses on sexual and reproductive health problems, since these problems need to be resolved urgently.

2.13.4 What is the Quality of Life (QoL) of Slum Adolescents?

Before approaching the question of the QoL of slum adolescents, it is useful to review what is known about the definition of QoL and the underlying factors that influence QoL. Some authors have defined QoL as a multidimensional evaluation of an individual's current life circumstances in the context of the culture in which they live and the values they hold. QoL is primarily a subjective sense of wellbeing encompassing physical, psychological, social, and spiritual dimensions (Carr, JA and Higginson, JI., 2001). During the literature review, it was difficult to find any paper related to adolescents' QoL in Thailand. Most of them focused on disease-specific QoL, and certain groups, such as the elderly, patients with diabetes or epilepsy, and the disabled. The study by Khammapirad, B., *et al.* (1984) on the quality of life of slum residents in Bangkok also focused on socioeconomic and demographic characteristics. There has been no study of the quality of life of slum adolescents. However, as may be gathered from the WHO-QOL-BREF instrument, one facet incorporated within the domains indicated that the environment is one important component in measuring people's QoL. For this study, the target group is slum adolescents living in a negative and dangerous environment. Therefore, the quality of life for these young people is questionable.

2.13.5 Existing adolescent health and development programs/services in Klong Toey Slum Community

Klong Toey slum is a long–standing slum in Bangkok. For many years, people have faced multiple problems, as mentioned above. Consequently, there are various organizations, both governmental and non-governmental. Community organizations were also established in this slum community, aiming to improve the standard of living and health of the people in the community (Doung Prateep Foundation, 2001). At present, the above organizations work independently. For this study, the focus will be only upon the principal organizations that work actively and are involved in adolescent health programs in Klong Toey slum community. These include 1) the Bangkok Metropolitan Administration, 2) NGOs (Doung Prateep Foundation, was selected because this NGO is the largest and is active in working with people in the community, particularly with children and adolescents, with whom they had conducted various

projects), and 3) community organizations (e.g. housewife group, Community Health Volunteer, Youth Volunteer).

1. ***The Bangkok Metropolitan Administration (BMA):*** the BMA is the local administration. For this study, BMA refer to "health center and school", the two organizations that provide health and health-related services for young people in Klong Toey slum community.

BMA Health Center. The Health Department has set up the Community Health Center as the workplace for health volunteers, providing health services and information and various other activities. In the health centers, there are physicians, nurses and social workers, and other workers. For the communities and other interested groups, such as the housewives, the youth and the elderly, there are two BMA health centers (Health Center # 40 and # 41) located in Klong Toey District. However, only Health Center # 41, a ten-bed health facility, is located in the slum community to provide promotional, preventive, curative and rehabilitative services. In contrast, Health Center # 40, which was located outside the community, had no inpatient ward. There are two full-time physicians and five part-time physicians (3 of them are specialists in podiatry, gynecology, and surgery). Generally, the available health services are intended for adults and children. There are no special services for adolescents. However, this health center manages an extended clinic (evening service time) for people who are unable to visit during normal office hours. In addition, hotline services have been initiated for telephone counseling, but they do not seem very popular with clients. Data from the OPD record book (October 1999-March 2000) showed that only 2% of the total clients were aged 12-22 years.

Schools: the BMA also provides educational services free of charge for the people in the slum community. Most of the children in this community study in the BMA school. The parents are required to pay for school supplies, such as books and uniforms. The study by Guzman De Anna (1999) found that 73% of the total subjects were in school. Four schools that belong to the BMA, and four private schools are located close to the slum community.

2. ***Non-Governmental Organizations***. About 10 NGOs work for health and community development for slum people, including the Doung Prateep Foundation, the Center of Human Resource Development, the Rumnamjai Foundation, the Center of Japanese Volunteers, the Suntisuk Foundation, the Catholic Council, and the Newborn Foundation. However, the largest, most famous, and most active organization is the Doung Prateep Foundation.

Doung Prateep Foundation: Existing Services

The Doung Prateep Foundation is the biggest and active NGO that works closely with the people in this community. The Foundation's founder, Prateep Ungsongtham Hata, was born in the slum and began working to help her family from an early age. Having been given only a small taste of the power of education as a child, Prateep worked hard to assist her family and save money to train as a teacher at night school. She subsequently established a "one Baht a day" school under her family home in Klong Toey. As are result of her work with the students, Prateep became involved with the broader issues facing slum families. In recognition of her work addressing both the educational and social problems suffered by the slum residents, Prateep was awarded the prestigious Magsaysay Award in 1978, and the Doung Prateep Foundation (DPF), meaning "a beacon of hope" was established as a community organization working for the people in the community. The Foundation's office is located in Klong Toey slum, and may be accessed by many people. The kindergarten school is also attached to this building. At present, the Foundation is involved in various community health and community development programs endeavoring to improve the quality of life of slum people, including the adolescents in this community. The Doung Prateep Foundation provides various services for children and young people in the community, as follows:

1. Children's Art Programme

Developing the child's imagination and creativity is an essential part of the education of children and young people. It is doubly important for young people who may be deprived emotionally and materially. It provides a wonderful opportunity for

young people who rarely leave Bangkok, to respond to the clarity and space of rural surroundings.

2. AIDS Control Project

The staff work closely with housewife volunteers for the home care of HIV/AIDS patients. In addition, face-to-face education on HIV/AIDS prevention and control is also conducted among motorcycle taxi-drivers, most of whom are young people. Moreover, the Foundation, with the collaboration of the locals, has conducted sex education as a regular session for schoolchildren.

3. New Life Project for Boys and Girls.

This project aims to help boys and girls who are at risk from drugs, exploitation, abuse and crime. The children at risk from the above-mentioned are taken far from the slum environment for a few years, after consultation with the children, their families or guardians, and sometimes with the police. They undertake a program that contains vocational training, agricultural work and some conventional schooling. Most of the young people in this program return from the New Life Project to the same challenges as before, but are ready to face them with new courage and hope.

4. Educational sponsorship.

The Foundation is currently helping young people from poor families to take their place in the public education system. Some funding was provided for the education program with close follow-up.

3. ***Local Community organizations.*** These groups have been established on a voluntary basis. Some of them, such as the Community Health Volunteer Group, receive partial support (both in terms of budget and technical advise) from the government sector. The most active community organizations comprise 1) the community leaders, 2) housewife group, 3) community health volunteer group, and 4) youth group.

Community leaders

The community leaders are elected from community members. They work closely with both government and non-government sectors for community development.

Housewives' group

The housewives' group was initiated on a voluntary basis, and about 70 housewives participate in it. The Doung Prateep Foundation provides technical and financial support.

Community health volunteer group

The community health volunteers work for community health, and have been trained in basic community health services by health professionals. They usually work closely with health officers on basic health issues, such as health education, health information, and first aid.

Youth group

This group was initiated on a voluntary basis. It usually works closely with the community leaders and the Doung Prateep Foundation, occasionally to reflect youth problems in the community. However, as they are volunteers with no financial benefit, some have to leave the program to earn income.

2.14 What Problems are there Related to the Existing Adolescent Health Services/Programs in Klong Toey Slum Community?

In recent years, the urban slum population has been growing at a very high rate, according to various changing socio-economic factors, resulting in migration of the rural poor to urban areas in search of employment, education, and livelihood. The increase in urban slums is quite evident, gradually creating serious social and health problems. Existing urban health services are under pressure. Services in the slum areas are the most vulnerable and inadequate. At present, multiple organizations provide social and health services in urban slum communities. However, there are gaps,

fragmentation, redundancy, and poor coordination among them, resulting in service duplication and inefficiency. (Service Gaps, 2002)

Gap

A significant gap exists between the perceived and expressed needs of adolescents in the Klong Toey Slum community and the health services currently provided for adolescents. These include appropriate information and adolescent health education, user-friendly clinics, privacy and confidentiality, equal access for male and female clients, and service provision by trained adolescent health experts. The existing adolescent health services/programs provided by the BMA, NGOs and community organizations do still not really meet their health needs or health problems. The rights of adolescents are not recognized. They lack appropriate information, education and communication. The service providers do not have appropriate skills to deal with adolescents. For example, there are no specialists in adolescent health. In addition, the existing health services are unfriendly in terms of time, place and services.

Fragmentation

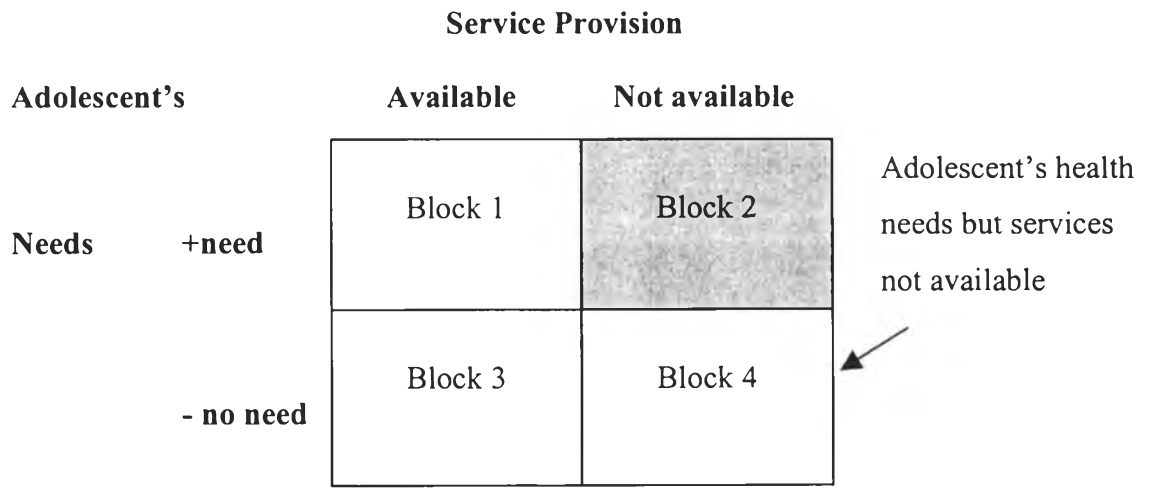
The elements of the existing service sector for adolescent health are fragmented and uncoordinated, working largely independently, despite targeting the same activities, e.g. sex education and reproductive health. This creates difficulties of accessibility for adolescents to the appropriate services, such as health education being provided about safe sex, but the supply of contraception (condoms, contraceptive pills) being unavailable at the same service point and at the same time.

The existing health services have been characterized as "seriously inadequate in dealing with the health of adolescents" (Brindis, C. & Vanlandeghem, K.1999). The complexity of this system, as well as the rapid changes underway, make it difficult for adolescents to navigate. Most teens are far less experienced with recognizing and anticipating their own needs, accessing health services, navigating their way through complex sets of categorical programs and eligibility requirements for their needs. For adolescents just beginning to access health services independently, the system may be

an overwhelming experience that stops or delays appropriate care (Brindis, C. & Vanlandeghem, K. 1999).

Redundancy

Redundancy means the unnecessary duplication of health services. For example, the BMA provides health education at health centers to the community level. NGOs focus on community-based programs, and meanwhile, community organizations also provide health education at the household level. However, most of the time these activities overlap and are uncoordinated.



Source: Some examples regarding adolescent's health needs and service provision in Thailand

Figure 2.2: Health services and the needs of adolescents in Thailand

Block 1: Adolescents' health needs - services available

Example: Medical care and health services for health problems, illness, hotline counseling, friendly adolescent services (available in Thailand but still limited in resources of services, some in the trial process for the above services. Some are already implemented and some are in the process of evaluation)

Block 2: Adolescents' health needs *but services are not available*

Example: ANC, PNC, family planning, contraceptive services, abortion, premarital sex, specialists in adolescent health medicines, fitness, adolescent outreach program

Block 3: Adolescents do not need it and services are not available

Example: Sterilization (male and female sterilization)

Block 4: Adolescents do not need it, but services are available

Example: Contraceptive injection, vaccination programme

2.15 How to Solve these Problems?

Kriby (1997) indicated that the factors underlying adolescent sexual and reproductive health in the USA were numerous and complex, and that each had a small effect. He concluded that effective intervention programs must focus on multiple factors, including beliefs, perceived norms, and environmental factors. It is similar for Thailand: for improving the adolescent sexual and reproductive health situation in slum communities, it can be asserted that no single organization can work alone to solve this problem. In addition, to have greater effect, programs must address the antecedents related to poverty and social disorganization, since the catchment area is a slum community. Kriby (1997) also mentioned that the program serving youth should recognize that meaningful strategies require community-wide, coherent and comprehensive intervention strategies in order to be effective, and therefore community partnerships are most appropriate.

Moreover, the WHO recommended that "Partnerships are the key to successfully promoting health and thus improving people's lives" WHO (1998c). The WHO also stated that schools are an excellent entry point for improving the health and other elements of the social environment, not only for students, but for teachers, other officials and, by extension, all of these people's families.

2.16 Community Partnerships: an Approach for Improving Adolescent Health, the Accessibility of Health Services, and QoL

The term "community partnership" has been used interchangeably with coalition and collaboration. According to Chavis, DM.(1995), the term partnership reflects its multi-sectoral (e.g., religious, business, government, grassroots citizens, schools) make-up and implies the shared and long-term commitment of effective community coalitions, where everybody brings something of value to the table. http://www.aspe.hhs.gov/hsp/ teenp/teenpreg/teenpreg.htm

In respect of adolescents' health problems, those working on other complex social problems with multiple, interrelated causes - alcohol and drug use, youth development, have also come to the conclusion that individual, single-shot solutions are inadequate [References based upon what kind of populations because of your comments in the next paragraph ?] As a result, efforts to address all of these problems have increasingly focused on the need to involve a variety of community institutions and mobilize resources community-wide through creative partnerships.

In the Klong Toey slum community, by the observation, there was less cooperation between the organizations involved in working on adolescent health and development programmes. Those three health service organizations, including the BMA, NGOs and Community Organizations are working independently. The community partnerships should be implemented to solve this problem. Partnerships creates the atmosphere of cooperation, consequently its increase the effectiveness of work in the community.

2.16.1 Introduction

Because adolescents' health problems are so complex, and no one intervention or sector can solve them alone, partnerships among multiple sectors are seen by many as being essential (Edward, LS. and Stern, FR., 1998). As a result, efforts to address adolescents' health problems have increasingly focused on the need to involve a variety of community institutions and mobilize resources community- wide through creative partnerships. In addition, the rationale for the preference for partnerships comes from

the perspective of service integration and coordination. The proliferation of categorical services, often motivated by funding directives, creates complex and fragmented systems that are frequently difficult to access, as well as being inflexible and redundant. By coordinating service providers, partnerships can develop comprehensive plans, eliminate duplication, allow members to specialize in their functions, link and integrate partners' activities, and ensure consistency. These benefits improve efficiency, making better use of more limited resources, increase flexibility, and enhance the ability to leverage resources.

Community partnership is referred to in journals of education, public health and social work, in the fields of housing, substance abuse and violence prevention, and it is becoming part of a new type of public-private sector approach. It is mentioned in conjunction with collaboration, empowerment and initiative (Edward, LS. and Stern, FR., 1998). However, despite its prevalence in the literature and in practice, there is no single, clear definition, framework or application. In some contexts, the terms community partnership, coalition, and collaboration have been used interchangeably by some authors and have been differentiated by others. (Edward, LS. and Stern, FR., 1998).

Bailey and McNally, K. (2003) use the term community-based consortium. They define it as "a partnership of organizations and individuals representing consumers, service providers, and local agencies or groups who (1) identify themselves with a particular community, neighborhood or locale, and (2) unite in an effort to apply collectively their resources toward the implementation of a common strategy for the achievement of a common goal."

These definitions suggest the elements of a working definition of community partnership. Such an alliance

- is composed of two or more legally separate units, which may include individuals as well as organizations, agencies, or other entities;
- shares a commonly defined mission and goals;

- develops a non-hierarchical structure that makes decisions and policy and has well-defined channels of communication;
- shares responsibility and resources and rewards and risks; and
- includes citizens of the local community and representatives of local community groups and organizations.

Chitr Sitthi-amorn (2000) suggested that a good partnership is the cornerstone of success for pooling resources from different sectors for public health. The partners in a partnership might belong to institutions with very different mandates. Nevertheless, they can agree on the objectives of a specific mission, which they want to accomplish together.

2.16.2 Community partnerships: its definition

In the literature review, several articles used the term "community partnerships". Wilcox (2000) defined a " partnership as an agreement between two or more partners to work together to achieve common aims".

UNICEF (2001) recommended "an effective community programme required community participation" (www.unicef.org). A partnership is one component of "community participation". Community members can make valuable contributions. Community members' knowledge and talents can be fostered and used to create and improve the communication aspects of a community health programme.

Partnerships have been a strategy for promoting health and for delivering social services since the early decades of this century in the USA. Shrinking resources, increasing competition, and administrative and technical innovations also contributed to interest in collaboration.

Nowarat Suwannapong and Chaveewan Suboonya. (2001) stated that a community partnership is one approach to community participation, to work with the community for program development. The process of community participation / partnership respects the rights and responsibilities of community members.

In partnerships, the expertise of different individuals, professions and groups can be pooled, allowing a more complete understanding of issues, needs and resources, improving the capacity to plan and evaluate, and allowing for the development of more comprehensive strategies.

Further, the division of responsibility allows each partner to specialize, doing what it does best. Because partners share the responsibility and the risk, they are usually more willing and likely to be creative, becoming involved in new and broader issues.

Partnerships, through efficiencies of scale and elimination of duplication, allow the maximum use of resources. They also provide access to, and permit development of, more talents, resources and approaches than any single organization could. Partnerships bring together larger and more diverse constituencies than single organizations.

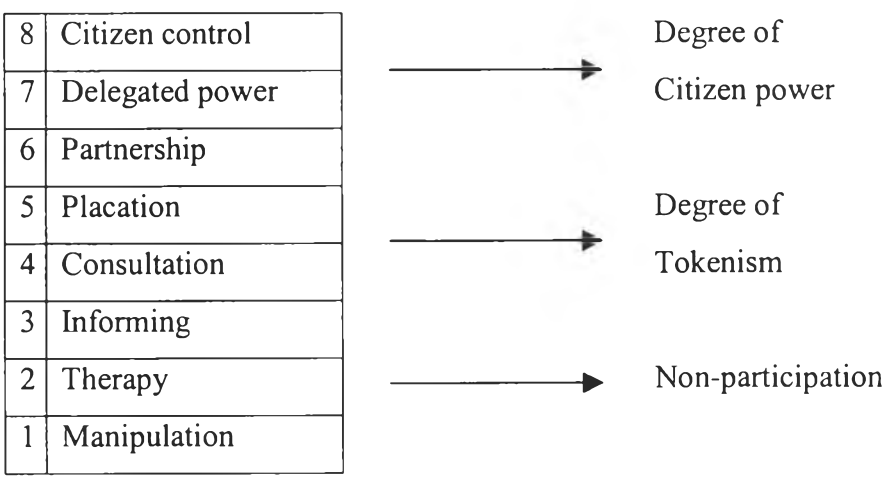
The National Center for Injury Prevention and Control of the Centers for Disease Control and Prevention (The Wonder CDC, 2001) has stated that "no single action in isolation is likely to solve the problem of youth violence."

2.16.3 Create Partnership

Wilcox (2000) suggested that "it may be easier to develop an appropriate approach to partnerships if we have a simple theoretical framework described as a ladder of participation ". This framework, Arnstein writing in 1969 about citizen involvement in planning processes in the USA, described a "ladder of participation" as follows:

1. **Manipulation**. this stage is non-participative. The aim is to educate or cure the participants.
2. **Therapy:** this stage is also non-participative. The aim is to cure or educate the participants.
3. **Informing**: a most important first step to legitimate participation. However, it is one-way flow of information with no channel of feedback.

4. **Consultation**: it is also a legitimate step- attitude surveys, neighborhood meetings and public enquiries.
5. **Placation:** for example, the co-option of hand-picked "worthies" onto committees. It allows citizens to advise or plan *ad infinitum* but retains, for power holders, the right to judge the legitimacy or feasibility of the advice.
6. **Partnership**: power is in fact redistributed through negotiation between citizens and power holders. Planning and decision-making responsibilities are shared e.g. through joint committees.
7. **Delegated power:** citizens hold a clear majority of seats on committees with delegated powers to make decisions. The public now has the power to assure accountability of the programme to them.
8. **Citizen control:** the have-nots handle the entire job of planning, policy-making and managing a programme e.g. a neighborhood corporation with no intermediaries between it and the source of funds.

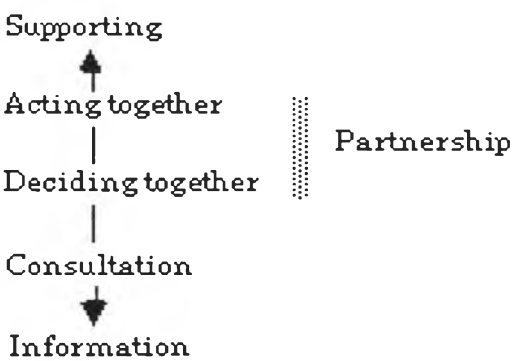


Source: Sherry Arnstein (1969, http://www.partnerships.org.uk/guide/theory.htm)

Figure 2.3: Ladder of participation

Wilcox (2000) suggested thinking of five levels in managing a process of partnership building. These are:

1. **Information:** Informing stakeholders about the current situation of adolescent health, using research/project findings or evidences to tell those concerned people.
2. **Consultation**: Informal/formal meeting should organize to create the cooperation. Stakeholder need to work together for problems identification, these including identify gaps fragmentation and redundancy of services, offer a number of options, and listen to the feedback from stakeholders. Finally, common objectives/ agenda/ should be initiated.



3. **Deciding together:** Encouraging concerned people to provide some additional ideas and options, and join in deciding the best way forward.
4. **Acting together:** Not only do different interests decide together what is best, but they form a partnership to carry it out.
5. **Supporting independent community initiatives:** Helping others do what they want perhaps within a framework, advice and support provided by the resource holder.

2.16.4 Community partnerships for healthy adolescent

Bailey, D and McNally K. (2003) stated that community partnerships referred to organizations and individuals representing consumers, service providers, local agencies unite in an effort to apply collectively their resource to the implementation of a common strategy for achievement of common objectives/goal/agenda. Partnerships operates at the levels of deciding together and act together. For improving adolescents' health a cooperation among concerned people/ organizations is needed, in addition, the stakeholders should initiate a common objectives/goal Bailey, D and McNally

K.(2003). Once common objectives/goal have been defined the partnership by sharing responsibility, pool resources, allowing a more complete understanding of issues, needs and resources, development of more comprehensive and effectiveness intervention, resulting in increased efficiency and decreased gaps, fragmentation and redundancy of the services.

Through community partnerships, adolescents' health needs can be met, by increased accessibility to services, alleviation of depression thus resulting in a better quality of life. The quality of life can be assessed by how well adolescents can meet their health needs. Community partnerships provide the vehicle that adolescents need to access health services, resulting in better physical, psychological, social and environmental outcomes. The figure 2.4 shows the conceptual framework and Figure 2.4 shows the approach of this study.

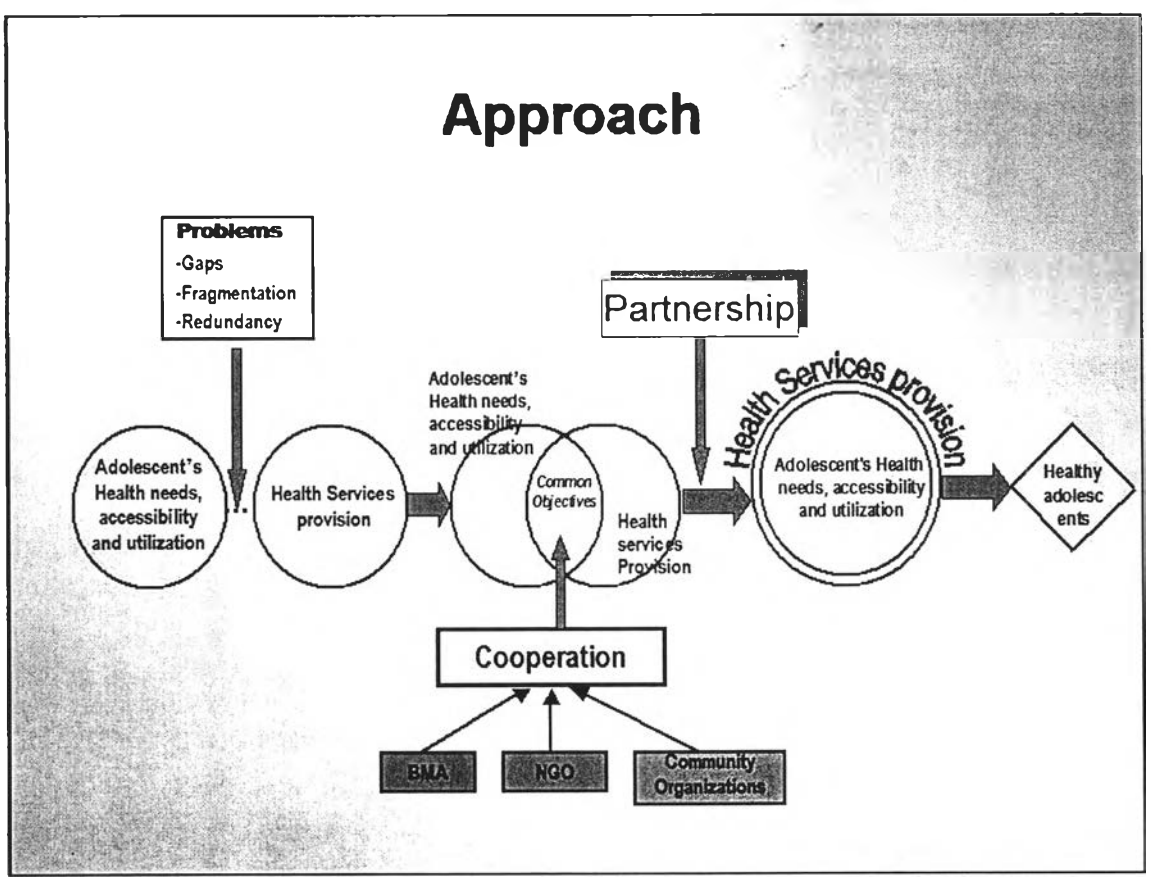


Figure 2.4: Approach