CHAPTER I

INTRODUCTION

“You don’t have to be great to start, but you have to start to be great”.

- Zig Ziglar

Adolescents are an important resource of any country and adolescence is regarded as a unique phase of human development. According to the WHO expert committee, adolescence is defined as the period between 10-19 years, the second decade of life. Adolescents comprise 20% of the world’s total population. Kushwah and Mittal, (2007), out of 1.2 billion adolescents world-wide, about 85% live in developing countries (WHO, 2001). In India, today, the adolescent population (aged 10–19 years) represents little more than one-fifth (22%) of the total population.

Adolescence is a period of transition during which an individual develops from a child to an adult. Adolescence begins with the onset of puberty and is divided into three phases. Early adolescence refers to the age between 11-14 years, middle adolescence is between 14-16 years and late adolescence is to 17-19 years.

Agarwal (2008) adolescence is an important period, in which a child undergoes biological transition, which is characterized by puberty related changes in physical appearance and the attainment of reproductive capability, psychological or cognitive transition, which
reflects in an individual’s thinking and social transition, which is related to the rights, privileges and responsibilities of an individual. Anurag Srivastava, et al., (2011) development of knowledge and attitude towards sexual and reproductive health takes place during this period, which can have lifelong effects on the individual, family and society.

**Psychosocial Concept of Adolescence**

According to the psychoanalytical theory of Sigmond Freud, increased drives or impulses due to hormones cause personality reorganization in adolescents. Adolescents’ individualization is more complex, leading them to self-definition. This is how they account for the rebelliousness and the stage of experimentation that are characteristics of adolescents. Some of the characteristics of the adolescents are:

**Independence**: Adolescents become less dependent on parents. They begin to shift from parents to peers or to belief systems in order to achieve independence. This shift is strong and may involve rebellion.

**Identity**: Adolescents struggle to define themselves and what they want to accomplish. This process involves experimenting. Adolescents develop gender role identity, a positive body image, and a sense of esteem and competence.

**Intimacy**: Adolescence is a time of preparation for intimate relationships. Adolescents are learning to express and manage
emotions. They are developing the capacity to love and be loved, and to be intimate in relationships with others.

**Integrity:** Adolescents develop a foundation for sorting out values. Parents provide a base for this. However, there is a tremendous amount of inputs at this time from peers, media, school, etc. Adolescents are able to decide what to believe in and how to behave.

**Intellect:** The adolescent’s intellectual capacity increases and changes from concrete thinking to abstract thinking. This increased ability heightens self esteem. Some adolescents tend to overvalue their intellectual abilities and see things from an idealistic point of view, which result in experimentation.

Erikson and Sullivan emphasized the effect of social factors on developmental processes.

According to Sullivan (1953), psychological growth is driven by a desire to seek increasingly intimate personal relationships. He suggested that adolescents try to coordinate needs of self-security and self-esteem, closeness and intimacy, and general activity and satisfaction of sexual strivings. If these needs become conflicting rather than integrated, emotional problems may result. Erikson (1963) described ego identity or the relationship between a person’s self-perception and how a person appears to others and adolescents, represented an attempt to establish an identity within the social environment. Life styles of adolescents are influenced by various factors. Some of them are:
**Parental influence:** Parents start putting a great deal of restrictions on girls as soon as they start their periods. ‘Do not go out alone’, ‘Do not go out in the dark’, ‘Come back in the evening’. They question girls as to with whom they are talking on the phone and with whom they go out with. Compared to this, boys are not restricted and are allowed more freedom.

**Religious influence:** In some religions, women during menstruation are prohibited from attending religious activities. This may cause negative feelings and attitudes towards normal body changes.

**Dress code:** Girls have to wear non revealing clothes – knees and breasts should be covered. But boys do not have such restrictions.

**Adolescence period:** Boys and girls love to talk to each other, but are often scared of parents and other friends. They then resort to talking secretly.

**Neighbourhood and family culture:** These situations also bring about changes in adolescents. A good, calm, culturally oriented neighbourhood will help adolescents adjust in society, as they are aware of what is expected of them.

Goyal (2005) what happens during adolescence determines how boys and girls will live as men and women, not only in the sphere of reproduction, but also in the social and economic realm as well. This makes it imperative to understand the adolescents’ needs, which,
surprisingly, have so far been given little importance in policy and programmes in several countries.

Hasen et al., (2004) according to the Pan American Health Organization and WHO, sexual health is the experience of the ongoing process of physical, psychological, and socio-cultural well being related to sexuality. Nag (1997) reproductive health is relatively a new concept that includes teenage pregnancy, sexually transmitted diseases (STD’S), HIV and AIDS, freedom from risk of sexual diseases, right to regulate one’s own fertility, and full knowledge of contraceptive choices.

El-Gilany et al., (2005) adolescents are the most vulnerable group whose taste and preferences, attitude and practices always involve a certain amount of risk. Without sufficient knowledge, they become sexually active and are at serious health risks. Today millions of adolescents are facing problems like early marriage and childbearing, incomplete education, and the threat of HIV/AIDS. Blum and Mari Kristin Nelson, (2005) many adolescents die prematurely every year; an estimated 1.7 million young men and women between ages of 10 and 19 years lose their lives through accidents, violence, and pregnancy related complications and other illnesses that are either preventable or treatable. UNAID, (2009) in India, of the total AIDS cases, 45% are aged between 15-24 years. Every day, approximately 7500 people are infected with HIV. About 1000 are children under 15 years of age. AIDS Outlook (2009) **The shocking fact is that 6 adolescents are infected every minute with a new**
**HIV infection.** Majority 90% of those infected are themselves not aware of their HIV sero-status, and therefore, many may be transmitting the virus to their partners. This reflects the fact that many adolescents see themselves as invulnerable to diseases in general, including HIV.

According to the National AIDS Control Program survey (2009), most adolescents in India are aware of HIV/AIDS, but awareness does not always mean the same thing as knowing how to keep away from getting the disease. Adolescents’ concern about sexuality, emotional, psychosocial development in adolescence, and their life style are some of the most important issues to be considered.

Diale et al., 2000; Bukovic et al., (2002) globally, adolescent sexual and reproductive health issues have become increasingly prominent and have aroused widespread international concern. Malleshappa et al., (2011) adolescents find themselves sandwiched between a glamorous western influence and a stern conservatism at home, which strictly forbids discussion on sex. Today, the media revolution has thrown them into turmoil of confusion and conflicts. Adolescents enter a world of risky behaviour at an early age.

In India, ignorance about sexual and reproductive health among adolescents make them particularly vulnerable to reproductive and sexual health problems. Early intervention by targeting adolescents with sex education, as well as programmes to improve their self-confidence and social status may be an effective way to safeguard
their future health status. Adolescents are in the need of opportunity to express positive relationships and constructive behaviour and to learn skills and acquire knowledge. They need access to information, counseling and services that will help them to establish healthy relationships and promote healthy behaviour.

Their educational and health status, their readiness to take on adult roles and responsibilities, and the support they receive from their families, communities, and governments will determine their own future and the future of their countries. Against the backdrop of a relatively early maturation of adolescents, due to greater exposure to information, growing complexities of modern life style and tendency to live freely, etc., the dimensions of the problem have grown in scale, and need for an urgent attention for sexual and reproductive health of the adolescents requires immediate attention because of the real and perceived vulnerability to sexual and reproductive health issues.

Akhter (2003) however, addressing the needs of adolescents is a huge challenge in countries like India due to various cultural and social barriers. It is also commonly assumed that family and educational institutions exercise greater control over the sexual behavior of unmarried youth in India than in the West.

Path (1999) focusing on adolescent sexual and reproductive health is both a challenge and an opportunity for health care providers. While adolescence is generally a healthy period of life, many adolescents are less informed, less experienced, and less comfortable
accessing health services for sexual and reproductive health, than adults. Adolescents often lack basic RH information, knowledge, and access to affordable confidential health services for RH. Many do not feel comfortable in discussing RH with parent.

Population Action International, (2007) in 1994, the International Conference on Population and Development held in Cairo recommended that governments should focus more attention on adolescents through an integrated approach to their health, education and social needs. American College of Obstetricians and Gynecologists, (2010), good sexual and reproductive health services enhance public health and improve quality of life. They can reduce the risk of disability, disease or death from sexually transmitted infections (STIs), harmful traditional sex practices and HIV/AIDS. Factors that contribute to such discrepancies in sexual and reproductive risk, all over the world are: weak and uneven distribution of health services, the concentration of poverty among certain population groups and geographic areas, gender inequalities and harmful social practices.

WHO (1997), sex education is a major component of comprehensive health education, the goal of which is to help children and adolescents become healthy adults with responsible health behaviours. Sex education is a lifelong process of building a strong foundation for sexual and reproductive health and should take place in the homes, schools and faith-based institutions.
Young people may know little about reproductive health or have incorrect information about sexual and reproductive health. Thus, meeting the sexual and reproductive health needs of adolescents is vital through imparting knowledge and changing attitudes about sexual and reproductive health among adolescents.

Jejeebhoy (1996) educational programmes that are as clear and accurate as possible, and which respect individuals, families and their sense of values must be proposed. The points that need to be kept in mind are the age of the adolescents, their interests and ability to understand. Innovative ways of providing this information in a non-threatening environment that allows adolescents to raise their own concerns, need to be replicated at the school and community levels.

Sex education is also about developing young people's skills so that they make informed choices about their behaviour, and feel confident and competent about acting on these choices. It is widely known and accepted that young people have a right to sex education, because this is a means by which they are helped to protect themselves against abuse, exploitation, unintended pregnancies, and sexually transmitted diseases including HIV/AIDS. Effective school-based sex education can be an important way to enhance young people's knowledge, attitudes and behaviour.

Mandal (1998) in order to lead a healthy, responsible and fulfilling life, and to protect themselves from reproductive health problems, youngsters need to be knowledgeable about themselves and
need adequate information about the physical and psychological changes that take place during puberty, menstruation, pregnancy, and child birth. Shetty and Kowli, (2001) the need to address these problems through reproductive health education has been recognized at various national and international forums. Among the several options available, creating awareness among adolescents appears to be an important tool.

Gupta et al., (2004) a remarkable improvement was seen with relation to knowledge of participants, who received reproductive health knowledge about puberty, menstrual cycle, pregnancy, contraception and also transmission and prevention of STDs. Various studies have shown the effectiveness of intervention in increasing the knowledge of reproductive health.

Dhital et al., (2004) several overviews of the sexual health education program for adolescents have concluded that sex education can beneficially affect behavior. Many adolescents do not receive sex education in the schools or at home, and learn about it on the streets. This leads to massive amounts of misinformation. Wight et al., (2002) Sex education is a subject on which many schools and most parents remain silent.

Behavior Change Communication or “BCC” is a set of organized communication interventions and processes aimed at influencing social and community norms and promoting individual behavioral change or positive behavior maintenance for a better quality of life.
BCC is critical, to addressing among others, responsible sexual behavior, age at marriage, teenage pregnancy, prevention of sexually transmitted infections and HIV/AIDS, male responsibilities for reproductive health, gender equality, safe motherhood, maternal and child health, family planning, reproductive rights, discrimination against the girl child and persons with disabilities, and reduction of harm and risks among identified vulnerable population groups.

**Need for the Study**

Adolescents live in a new world transcending from childhood to adulthood. The real trouble is, they are in the search of an identity in a predominant adult world. Teenagers undergo rapid physical and psychological growth. During adolescence, the patterns of behavior are formed, which largely determine a person’s adult health and longevity. As young people enter puberty, new health concerns arise, which are related to their sexual and reproductive maturation, and the behaviors that follow. Responsible, mutually respectful, and caring behavior in adolescence promotes and enhances harmonious and healthy relationships, and helps to promote future family formation and parenthood.

Mukuta and Stonium, (2006) adolescence is a period when lots of changes take place in the body and mind. Hormonal changes result in unusual swing of emotions. Sex drive emerges. The rapidly changing body proportions and the new sensations attributed to sexual development confuse and cause anxiety to adolescents. Due to lack of access to correct information, many adolescents have
misconceptions on issues related to sex and sexuality. Sex urges can be so strong that they tend to seek satisfaction or pleasure purely at the physical level. Sexuality in adolescents is often combined with ignorance, misinformation, secrecy, inexperience, myths, traditions, peer pressure, adventurousness, and experimentation. Therefore, any effective intervention strategies would need to address these stumbling blocks.

Adolescence is characterised by the development of a sense of individual identity distinct from that of the parents. It is also a time for experimentation and exploration of one’s own body and capacities, as well as relationships with others. Media and peers exert a very strong influence on the individual and dictate how she or he will respond to different social situations. Some of the changes that take place within the individual are the development of sexual desire, desire to explore and experiment and, develop a sense of shame and guilt, confusion and irritation. It is a time, characterized by mood swings, which can lead from outgoing behavior at one time to secretiveness and irritability at another. Adolescents need to learn to deal with sudden changes in social rules (for example - girls who could freely play with other children are now asked to stay indoors and conform to adult standards), as well as with their own growing sexual desires.

Many adults seem threatened by adolescent sexuality and try to regulate it in illogical ways. There are always excuses for not introducing sex education in schools ("it would put ideas in their
heads”), limiting information about contraceptive methods, censoring what teenagers read or can see in movies (“pure minds, pure thoughts”), inventing school dress codes or simply pretending that adolescent sexuality does not exist. But throughout the world, a majority of individuals both male and female, married and unmarried, become sexually active during adolescence.

As adolescents struggle to establish a sense of personal identity and independence from parents and other authority figures, interactions with their peer group become increasingly important. They look to each other for support and guidance, vowing to correct the mistakes of the older generations. But they quickly discover that their peer group too, has its own set of expectations, social controls, and rules of conduct. There is a high pressure the adolescents to conform to the etiquette of the peer group. Many adolescents are pressurized to smoke, drink alcohol, and get into sexual activity - even into drugs - by this pressure. Thus adolescents’ need for freedom is usually accompanied by a need to be like their friends, even though these two needs sometimes conflict. The best way to help an adolescent cope with such pressures is by imparting proper education on issues, such as sexuality, drugs, smoking, etc., as well as on the skills of coping with such peer pressure, and by providing counseling.

During adolescence, movement away from the family continues. Identity formation and developing autonomy are tasks that must be faced during this period. The degree to which an adolescent is able to do this will later reflect on his or her capacity to develop intimate
adult relationships. The task is complicated because, while adolescents must go through a process of disengagement from their families, they still need guidance from their parents. Not surprisingly, parents and young people often have great deal of difficulty managing this seeming paradox. This issue is raised because parents sometimes feel that their adolescent sons or daughters are beyond the age when they need or will respond to the opinions or wishes of their parents about sexual behavior. However, adolescents want and need this guidance, and parents need to maintain their own equilibrium during this period and to continue to support their adolescent sons or daughters.

Psychological and emotional changes like assertion of self-identity and independence, sex drive, and attraction towards the opposite sex take place simultaneously. Adolescents begin extending their relationships beyond the family. They feel an inclination for distancing themselves from parents and expanding their social circle to carve an important place amongst peers. If young people are not well informed or guided, they are likely to make decisions that could harm them. Adolescents are particularly inclined to try out new ideas. While this is a positive trait, lack of abilities, particularly life skills to assimilate multiple stimuli from media and peers, could encourage them to experiment with risky behavior. They could engage in smoking, substance abuse, consumption of alcohol, unprotected sex, and while such behavior may start on an exploratory note, many young people get trapped for a lifetime, and are not able to realise
their potential. Often, young people are not informed and/or not prepared for the rapid pace of physical, emotional and psychological changes that they undergo during adolescence. Misconceptions about issues related to sex and sexuality, especially those related to masturbation, nocturnal emissions, and menstruation make them anxious. Their anxiety and confusion is further compounded by adults who expect them to conduct themselves in a more mature manner without preparing them for their new role.

Sexuality is an important aspect of development during adolescence. In Indian society, adolescence is shrouded with myths and misconceptions about sexual health and sexuality. In Indian culture, talking about sex is taboo. Consequently, little information is provided to adolescents about sexual health. Instead, young people learn more about sexual and reproductive health from uninformed sources, which results in the perpetuation of myths and misconceptions about puberty, menstruation, secondary sexual characteristics, physiological body changes, masturbation, night emissions, sexual intercourse, and Sexually Transmitted Infections (STIs).

Wright (2005) increasing penetration of international mass media is changing the social values and shifting the standard of societal behavior from conservatism to liberal interactions between both sexes. Adolescents find themselves sandwiched between a glamorous western influence, which arouses their curiosities and instincts, and a stern conservatism at home, which strictly forbids
discussion on sex. This dichotomy aggravates the confusion among adolescents.

Joshi et al., (2009) in the current scenario, the available evidence suggests that in India, 20% to 30% of all male adolescents and up to 10% of all female adolescents are sexually active before their marriage. Alexander (2007) small-scale community based studies of 15–24 years olds in urban slums and rural settings in Maharashtra reveal that overall 16%–18% of young men and 1%–2% of young women reported to have had premarital sex.

Aboyeji et al., (2001) of the 1.5 million girls married under the age of 15 years, nearly 20% are already mothers. Mortality in female adolescents aged between 15-19 years is higher than adolescents belonging to the age group of 10-14 years and contributes to 20% of the overall maternal deaths.

Oye-Adeniran et al., (2005) and Population Reference Bureau, (2000) Adolescents are said to initiate sexual activity at an early age with many of them not knowing about contraception, and those who know, do not use them consistently and correctly. This non-use of contraception is a major contributory factor to teenage pregnancy and unsafe abortion, which are rampant among adolescents.

NACO (2001) young people aged 15 to 24 years have the highest rates of STIs, including HIV/AIDS. Jejeebhoy and Sebastian, (2003) the National AIDS Control Organization has also reported that sexual activity is risky with sex workers are often frequently reported by
young males. The incidence of sexually transmitted infections, including HIV infections, has increased rapidly during the last decade. Nearly half of all HIV infections occur among persons aged between 15-25 years of age. Researches in many parts of the world suggest that men tend to have more sexual partners during their lifetime than women.

Mamdani (1999) adolescents often do not take informed decisions about whether or not to have sex, and if they do, they are unsure as to whether or not to use condoms and/or other contraceptives often resulting in unprotected premarital sexual activity. Their young age and/or poor knowledge on matters related to sexuality, reproductive health coupled with their inability or unwillingness to use family planning and health services, increase their vulnerability and exposes them to a significant risk of experiencing negative consequences.

Kaila (2001) as per National Family Health Survey 3 (NFHS-3), sexual intercourse by unmarried youth was reported among 5% males and 0.4% females in the age group of 15-9 years and 8.9% males and 0.8% females in the age group of 20-24 years. Among them, use of condom was reported only by 31% males and 18% females in the 15-19 years age group and 41% males and 16.8% females in the age group of 20-24 years. High risk sexual activity, however, was reported by 63% males and 0.7% females among the 15-19 year olds and 18% males and 0.2% females among the 20-24 year olds and condom use was reported by 31%-41% males and 20%-25% females in the
respective age groups. Among those who were sexually active, about 11% females and 28% males in the 15-24 years age group complained of one or the other STIs.

Hardee et al., (2004) a study conducted in the early days of the new millennium revealed that 14% of boys and 8% of girls had trouble with sexual thoughts, and nearly 9% of the boys and girls perceived premarital stress (Gupta et al., 1998). This is particularly true for girls given that the majority of them have no knowledge of menstruation. In most cases, their mothers are the only source of information. Most of the girls perceive menstruation as disgusting and as a curse.

Tangmunkongvorakul et al., (2005) and Gupta (1988) during the transition to adulthood, lack of knowledge and awareness about reproductive organs, physiological changes, or sexuality can enhance psychosocial stress. Gender discrimination coupled with the stigma about discussing sex and sexuality issues with young people particularly for girls, further contribute to risk-taking behaviors among youth, thus, influencing their sexual and reproductive health.

Goyal (2009) there is a lack of knowledge and awareness among adolescents about health issues and problems. The Indian Council of Medical Research (ICMR) study showed that knowledge and awareness about puberty, menstruation, and physical changes in the body, reproduction, contraception, pregnancy, childbearing, reproductive tract infections, STIs, and HIV was low among boys and girls, especially in younger adolescents (ages 10–14 years). Among the
younger adolescents, 40% had little knowledge about the sex organs and most girls had not been informed about menarche prior to its onset. About one-half of the adolescents were not aware of condoms and were confused about the various modes of HIV/AIDS transmission. Only one-half of the adolescents were aware of various family planning methods, and their knowledge about spacing methods, such as Intrauterine Devices (IUDs) or oral contraceptive pills, was very low.

Current evidences show that the adolescents are inadequately informed regarding their own sexuality, physical well being and their health, the major source of information being the media and peers. Whatever knowledge they have is incomplete and confused. Low rate of literacy, limited sex education, and inhibited attitudes towards sex, attenuate this ignorance leading to unwanted pregnancy, illegal abortion, mortality and morbidity among the adolescents.

Studies showed that when adolescents lack sexual health education, which can provide them with an understanding of their own bodies, pregnancies, STIs, and increased risk of contracting HIV, are the result. Many adolescents get their sexual information from unreliable sources. Studies from countries as diverse as Cameroon, Philippines and Zimbabwe reveal that while parents often provide young girls with some sexual health education usually relating to menstruation and pregnancy, boys rarely receive any information.
Most adolescents go through adolescence with little or no knowledge of the body’s impending physical and physiological changes. In a country like India, where discussion about sexuality with young children is almost absent, adolescents are not prepared mentally or psychologically to cope with these changes. In our societies, ‘good’ girls and good boys are not supposed to know about sex, thus forbidding adolescents from seeking information.

Ravishankar (2011) several factors contribute to adolescent vulnerability. These range from social, economic, cultural, geographical and political conditions of the wider society, to those characterizing living conditions of adolescents, including parent-child communication, opportunities to learn/acquire life skills, family education and income, etc. For example, one of the resulting factors is lack of appreciation for the information needs of adolescents on reproductive and sexual health matters. Parents either do not recognize and appreciate these needs or find themselves ill equipped to provide the guidance. A large number of parents do not even approve of such counseling due to a fear that it may lead to free sex behavior among adolescents. In the wider society, very limited opportunities and space is available to adolescents to acquire learning on these issues. The School-based interventions are just a beginning, too limited and too far placed.

Kirby (1995) inadequate knowledge on sexual and reproductive health may lead to serious consequences in sexual and reproductive health. Even though adolescents become sexually active at younger
ages in developed countries than in developing ones, due attention should be given to reproductive health education for healthy sexuality and prevention of many sex-related problems all over the world. Most adolescents face these risks with too little factual information, too little guidance about sexual responsibility, and too little access to health care. Therefore, the reproductive and sexual health needs of these groups should be considered and proper training and guidance are required to change their knowledge, attitude, and practices, and thus, reduce risky behavior. Though hospital services cannot cater to the needs of adolescents, it becomes necessary to reorganize clinical services for adolescents through institutions or certain outreach activities. Because a vast majority of the Indian population live in rural areas, outreach efforts could also be more useful in this regard.

In India, despite the fact that adolescents form one-fifth of the Indian population, their sexual and reproductive health needs are poorly understood and ill served. While the needs of children or pregnant women are acknowledged in national strategies and programmes, neither services nor researches have focused on adolescents and their unique health and information needs.

**Realities of Adolescents in India Today**

- In India, 30% of population (327 million individuals) is in the age group of 10-24 years (Source: WHO, 2007)
- Youth are vulnerable to sexually transmitted infections, including the Human Immunodeficiency Virus, and account for 31% of AIDS burden in the country (Source: NACO, 2007).
• Though age at marriage is increasing, data from the NFHS-3 shows that 27% of young women and 3% of young men in the age group of 15-19 years were married at the time of the survey (2005-2006).

• In the age group of 15-19 years 30% of women have had a live birth by the age of 19 years (Source: NFHS 3).

• Regarding current use of modern contraceptive methods 7% married and 9% unmarried girls reported (Source: NFHS-3).

• Anemia is a contributing cause of increased age-specific mortality among female adolescents. 60% of girls in the age group 15-19 years were found to be anemic (Source: NFHS-3).

• The sex ratio in the age group 10-19 years is 882 females per 1000 males, and is lower than the sex ratio of 927 females per 1000 males in the age group of 0-6 years.

• Among the 15-19 years old, 25% of adolescents in rural areas and 10% in urban areas are illiterate. Gender disparities persist in the education sector despite improved school enrolment rates. Girls account for less than 50% of enrolment at all stages of schooling.

• Rural girls are the most disadvantaged. The male–female gender disparities grow with each level of education.

• Among 12,447 children surveyed across 13 states in India, 50% reported some form of sexual abuse. 53% victims were boys (Source: Study on Child Abuse, Ministry of Women and Child Development, 2007). A majority of nonconsensual sexual experiences (eve teasing, abduction) go unreported.

All other things, especially anxiety around pubertal changes, take a back seat. These issues are often left un-addressed and can
result in poor sexual and reproductive health even as adults and affect the personality and relationships of the individual long into adulthood. As a result 38% of women in the age group 15-19 years are married; 51% of women aged 20-24 years began their first marriage before the age of 18 years. The NFHS (92-93) indicates that 36% of married adolescents (13-16 years) and 64% of those aged 17-19 years, or 17% of all adolescent females are already pregnant or mothers. Approximately 7% of married women aged 15-19 years use a contraceptive compared to 21% in women aged 20-24 years. Micro-level studies indicate that the proportion of young females attending STD clinics is increasing. The experiences of a large service oriented family planning organization indicate that STIs in the age group 15-19 years have doubled since 1980s.

UNFPA (2003) since the 1994 International Conference on Population and Development (ICPD) in Cairo, Egypt, the Youth Friendly Reproductive Health Services (YFRHS) has been recognized as an appropriate and effective strategy to address the Sexual and Reproductive Health (SRH) needs of adolescents. Hughes and McCauley 1998; UNFPA 2003; UNICEF 2007; Sandoy et al., (2007) concern about adolescent SRH has grown following reports that sexual activity, early pregnancies and STIs including HIV infection rates are increasing at unprecedented rates among adolescents. United Nations 1995a; 1995b; Senderowitz (1999) mostly barriers to adolescents’ utilisation of sexual and reproductive health services have been attributed to the quality of sexual and reproductive health
services. Ham 2004; Blum (2007) a critical analysis of the barriers to adolescent reproductive health (ARH) promotion reveals that cultural norms that influence people’s behaviours and actions related to sexual and reproductive matters, are also extremely important. Furthermore, the current rapid social, political, and economic transformations also appear to have a profound impact on the social norms affecting the adolescents.

Klein 1988; UNICEF (2003) moreover, in most societies, the sexual and reproductive health needs and rights of unmarried adolescents are not acknowledged. Thus, because of culture, government policies and plans do not include strategies and resource allocations to promote the implementation of sexual and reproductive health services targeting unmarried adolescents. Considering the facts that these norms influence adolescent sexual practices and the capacity of facility based Youth Friendly Reproductive Health Services to address such norms is essential for designing effective ASRH promotion interventions in countries throughout the world.

Golbasi (2002) and Ozcebe (2000) knowledge about reproductive health is important for the healthy sexual behavior of adolescents as it will be translated into behavior. There have been many studies showing a positive correlation between increases in adolescents’ knowledge about reproductive health and in adolescents’ positive health behavior. Rao (1990) it has been proven scientifically that higher levels of sexual knowledge are associated with a later onset of sexual activity. This underlines the importance of reproductive health
education for improvement in the knowledge and attitude of adolescents.

Etuk et al., (2004) and Ozvaris et al., (2004) have emphasized the need of sexuality education and that the important role education centres can play in meeting the sexual and reproductive health needs of the adolescents. Walker et al., (2004) it is important to realize the problems and take adequate measures to improve the knowledge and attitude of adolescents on reproductive health and responsible sexual behaviour on purpose to prevent serious health problems. A strategy on education for responsible and healthy sexuality safe and appropriate contraception and services for sexually transmitted diseases is important.

Parwej et al., (2005) several studies have reported that reproductive and sexual health education by health professionals has become acceptable for adolescents. It is clear that reproductive health education provided by public health nurses play an important role in the protection and promotion of public health and acquisition of positive health behaviors. Fatma Ersin and Zuhal Bahar (2009) reproductive and sexual health education should be continuously provided by health professionals in order to preserve knowledge and behavior acquired through health education programs. After establishing cooperation between organizations, nurses and midwives should conduct sex education programs at regular intervals. This might play a crucial role in behavioral changes regarding reproductive health.
Anyone wishing to work with adolescents should understand that a sexual and reproductive health package, which works with one group, would not necessarily work with the other. There are different ways of approaching each of these groups. Different organisations work with different groups and sub-groups, specialising in working with their specific target group.

Investing in the second decade of life should be a regular activity at each level of the development community - from grassroot NGOs to government policies. Neglecting young people's health will reduce or negate the benefits of past government investment in child survival, prevention of childhood communicable diseases, and education. It would curtail future economic and social development as well. Despite their fundamental importance, programs and policies for young people are found wanting. The sexual and reproductive health needs of young people are only now being recognized, often when it is too late, when they become pregnant, need abortions, or are infected with HIV or other STDs. It is time to end cultural and policy silence surrounding young people's health and prevent problems among young women and men. It is time to devise programs specifically geared towards the needs of the younger age groups.

Behavioral Change Communication is an integral component of a comprehensive HIV/AIDS prevention, care and support program. It has a number of different but interrelated roles. An effective BCC can increase knowledge and encourage community and national discussions on the basic facts of reproductive and sexual health and
the underlying factors that contribute to the epidemic, such as risk behaviors and risk settings, environments and cultural practices related to sex and sexuality, and marginalized practices (such as drug use) that create these conditions. It can also stimulate discussion of healthcare-seeking behaviors for prevention, care, and support.

BCC can lead to appropriate attitudinal changes about, for example, perceived personal risk of sexual and reproductive health problems, belief in the right to and responsibility for safe practices and supporting health services, compassionate and non-judgmental provision of services and greater open-mindedness concerning gender roles. Communication about SRH mitigation may reduce stigma and discrimination and attempt to influence social responses to them. BCC can also spur individuals and communities to demand information on SRH and appropriate services. BCC programs can focus on teaching or reinforcing new skills and behaviors, such as condom use, negotiating safer sex, and safe injecting practices. It can contribute to the development of a sense of confidence in making and acting on decisions.

Experience has shown that providing people with information and telling them how they should behave (“teaching” them) is not enough to bring about behavior change. While providing information to help people to make a personal decision is a necessary part of behavior change, BCC has its origins from and draws on over 70 behavior change theories and models including the *Health Belief Model, Theory of Reasoned Action, Transtheoretical Model, Stages of*
Change Theory, Steps in Behaviour Change, and, Diffusion of Innovations, to name a few. These theories and models help in understanding what influences behaviour adoption or maintenance and contribute to the planning, implementation, and evaluation of evidence-based BCC interventions. All of these models have in common the fact that adoption of new behaviours or modification of old ones is a process, and as such, it takes time and dedication to see the change.

The Health Belief Model stipulates that a person’s health-related behaviour depends on the person’s perception of four critical areas: the severity of a potential illness, the person’s susceptibility to that illness, benefits of taking preventive action, and the barriers to taking that action. The model incorporates actions as important elements in eliciting or maintaining patterns of behaviour. For example, writing a note to remind oneself to exercise.

Theory of Reasoned Action states that an individual’s behaviour is primarily determined by the person’s intention to perform that behaviour. This intention is determined by two important factors: the person’s attitude towards the behaviour (i.e., beliefs about the outcomes of the behaviour and the value of these outcomes) and the influence of the person’s social environment or subjective norm (i.e., beliefs about what other people think the person should do, as well as the person’s motivation to comply with the opinions of others).
Stages of Change theory has been conceptualized as a five-stage process or continuum related to a person’s readiness to change: (i) pre-contemplation, (ii) contemplation, (iii) preparation, (iv) action, and (v) maintenance. People progress through these stages at varying rates, often moving back and forth along the continuum a number of times before attaining the goal of maintenance. The stages of change are better described as spiralling rather than linear. In this model, people use different processes of change as they move from one stage of change to another. Efficient self-change depends on doing the right thing (processes) at the right time (stages). According to this theory, tailoring interventions to match a person’s readiness or stage of change is essential. For example, for people who are not yet contemplating becoming more active, encouraging a step-by-step movement along the continuum of change may be more effective than encouraging them to move directly into action.

A successful BCC intervention uses various communication methods and tools, including face-to-face communication, training, community media, mass media, Information, and Communication Technology (ICT), life-skills education and counseling to develop the skills, and capabilities of targeted audiences to manage their own health and development.

Considering the needs of the adolescents, the researcher has planned to conduct an interventional program for adolescents through behavior change communication to influence their knowledge, attitude and practice towards sexual and reproductive health.
Intervention in the form of behavior change communication to increase the knowledge, attitude and practices of sexual and reproductive health, increase the awareness level among adolescents especially, thus empowering them to take care of their own health as well as protect themselves from possible health problems like unwanted pregnancies and the risk of STIs in their future life. Little is known about the impact of behavior change communication on quality and accuracy of knowledge, attitudes and practices of sexual and reproductive health among adolescents. In view of this, the current study is designed to determine the knowledge, attitude, and practices of reproductive and sexual health and efficacy of behavior change communication among the adolescents in selected educational institution at Puducherry.

**Statement of the Problem**

“A study to assess the efficacy of Behavioural Change Communication on the knowledge, attitude and practice regarding sexual and reproductive health among the late adolescents in a selected educational institution at Puducherry”.

**Objectives**

**Phase I**

1. To assess the felt needs of late adolescents regarding sexual and reproductive health.

**Phase II**

2. To assess the level of knowledge, attitude, and practice regarding sexual and reproductive health
3. To evaluate the effectiveness of Behavioral Change Communication on the knowledge, attitude, and practice regarding sexual and reproductive health.

4. To determine the relationship between the level of knowledge, attitude and practice regarding sexual and reproductive health.

**Hypotheses**

**H1**: The subjects will have statistically significant difference on the level of knowledge related to sexual and reproductive health after the exposure to Behavioural Change Communication.

**H2**: The subjects will have statistically significant difference in the attitude of sexual and reproductive health after the exposure to Behavioral Change Communication.

**H3**: The subjects will have statistically significant difference in the practice related to sexual and reproductive health after the exposure to Behavioral Change Communication.

**H4**: There will be a statistically significant relationship between the level of knowledge and attitude regarding sexual and reproductive health.

**H5**: There will be a statistically significant relationship between the level of knowledge and practices related to sexual and reproductive health.

**H6**: There will be a statistically significant relationship between attitude and practice regarding sexual and reproductive health.
Operational Definitions:

Efficacy

It refers to the changes in the knowledge, attitude and practice scores through behaviour change communication programme obtained in the post-test than in the pre-test evaluated by the questionnaires.

Behaviour Change Communication

A structured teaching programme to a group of individuals in a class room setting, a list of planned events that gives an individual knowledge, attitude, skills and training regarding the anatomy and physiology of female reproductive system, growth and development, menstruation and menstrual hygiene, family planning, safe sex, responsible sexual behaviour and STI’s including HIV/AIDS in a constructed and organized manner for 4 days.

Knowledge

It refers to awareness and accurate information regarding the anatomy and physiology of female reproductive system, growth and development, menstruation and menstrual hygiene, family planning, safe sex, responsible sexual behaviour and STI’s including HIV/AIDS for girls and for the boys refers to awareness and accurate information regarding the anatomy and physiology of male reproductive system, growth and development, genital hygiene, family planning, safe sex, responsible sexual behaviour and STI’s including HIV/AIDS for males as scores obtained on the questionnaire.
Attitude

It refers to means and ways in which adolescent looks at the aspects of sexual and reproductive health as scores obtained on the questionnaire.

Practice

It refers to activities related to sexual and reproductive health performed by subjects measured as scores obtained on the questionnaire.

Sexual and reproductive health

It is a state of complete physical, mental and social well-being, and not merely the absence of reproductive disease or infirmity and deals with the reproductive processes, functions sexual health/hygiene and system at all stages of life

Late Adolescents

It refers to the students studying in the colleges belonging to the age group of 17-19 years.

Assumptions

1. The knowledge, attitude and practice of sexual and reproductive health of late adolescents can be assessed by a self report and a semi-structured interview schedule from adolescents themselves.

2. Adolescents will give a honest response to the items of the questionnaires and semi structured interview schedule.
3. There will not be adequate knowledge about reproductive and sexual health among late adolescents.

4. There will not be a positive attitude towards sexual and reproductive health among late adolescents.

5. There will be unhealthy practices followed by late adolescents related to sexual and reproductive health.

6. The Behavior Change Communication program promotes early health seeking behavior.

7. There will be improvement in the knowledge, attitude, and practice about sexual and reproductive health due to Behavioral Change Communication.

**Delimitations**

The study is delimited only to adolescents

- Studying in selected educational institutions in Puducherry between the age group of 17-19 years.

- Available during the period of data collection

**Conceptual Framework**

**Theory**

Chinn and Karmer (1999) defined theory as a creative and rigorous structuring of ideas that project a tentative, purposeful and systematic view of phenomena.

**Theoretical Frame Work**

Theoretical framework deals in the human, environmental, professional and organization facilities that make up the context in
which nursing is practiced and that constitute its currently existing limits (Polit and Hungler, 2006).

The present study aims to evaluate the efficacy of BCC on sexual and reproductive health among late adolescents.

The framework of the present study was developed based on the interactive process goal attainment theory by Imogene K. King (1980) which consists of seven components like, perception, judgment, action, reaction, interaction, transaction, and feedback. Imogene King described the goal attainment theory in the year 1990. The goal of nursing care is to help individuals to maintain health or regain health.

Theoretical Framework for the Present Study: King’s Goal Attainment Theory (1990)

The goal of the theory is to establish communication and to help individuals to adapt positively to the environment and it is also a dynamic process for establishing a personal relationship between nurse and client.

Components

Perception

It is a process of human interaction with the environment. It involves organizing interpreting, and transforming information from sensory data and memory.

In the present study, perception refers to health care needs based on the socio demographic data of the sample, the development
of a validated tool and a structured teaching program on knowledge, attitude, and practice of sexual and reproductive health, data collected from the study subjects using a structured questionnaire on knowledge, attitude and practice of sexual and reproductive health based on felt learning needs of the adolescents.

The investigator and study subjects judge that behaviour change communication programme will increase the knowledge, attitude and practice of sexual and reproductive health among late adolescents and give consent to participate in the study.

**Interaction**

A process of perception and communication between a person and the environment and between persons represented by verbal and non-verbal behaviors that are goal directed. The individuals come together for a purpose and perceive each other by making judgment and mental action. Then each reacts to the other and the situation (Perception, Judgment, Action and Reaction).

King indicates that only interaction and transaction are directly observable. Her law of nurse-patient interaction is nurse and patient in mutual presence, interacting purposefully, make transactions in nurses’ situations based on individual perceptions, purposeful communication & valued goals. In this study, it is assessing the pretest level of knowledge, attitude and practice regarding sexual and reproductive health and providing Behavior Change Communication
on Sexual and Reproductive Health to the subjects for the prescribed duration.

**Transaction**

A process of interactions in which human beings communicate with the environment and persons to achieve goals those are valued. Transactions are goal-directed human behavior. In the present study, it includes the administration of tools for evaluating the efficacy of the Behavior Change Communication program on Sexual and Reproductive Health, and an analysis of the data to find out whether the subjects improved in their knowledge, attitude & practice of SRH. If the findings of the post test showed the evidence of improvement, it could be assessed as “transaction”.

**Feedback**

It is the process whereby the decision or output of the system is redirected to the input or first step of same system. If the decision of the output is not satisfactory, the whole process of the system or frame work has to be re-evaluated. In the present study, the subjects felt that behaviour change communication program is appropriate, well organized and helps for them to improve their sexual and reproductive health.