CHAPTER I
INTRODUCTION

Adolescence is the very exciting phase of life fraught with many challenges. The notion of adolescence inspires conflicting emotions and ideas. To parents, educationists, social scientists, public health specialists and perhaps to adolescents themselves, this period is an intriguing mix of vulnerability, and of development. Of a body that can respond and behave in ways that are thought of as ‘adult’, and a mind and heart that may still be as sensitive as a ‘child’s’. Adolescence is a period of change and, consequently, one of stress, characterized by uncertainties in regard to identity and position in the peer group, in society at large and in the context of one’s own responsibilities as an adult. The compulsions of parental approval often encounter the emerging aspirations of independence. The average adolescent is confused about sex and sexuality, caught in the circle of parents, elders and teachers who are primarily concerned about their academics and behaviour. They are constantly bombarded with various sexual images through media and peers. Regardless, the topic of sexuality and adolescent hormonal changes continues to be taboo in many households. The absence of adequate sex education also adds to their woes and they have nobody to consult with regarding their sexual curiosity and changes in their physical body. In the absence of adequate information, adolescents exercise decisions without being able to consider all the aspects and impacts of these decisions. Ignorance, misinformation, and misconceptions abound among the vast majority of adolescents in India concerning issues of sexuality and health. However, cultural norms that censure adolescents’ access to information and sexual expression have not stopped them from being sexually active. This results in a situation where adolescents make uninformed choices that could affect their lives and health in a serious and irreversible way (CREA, 2005).
According to different estimates, one fifth of world population is between 10 and 19 years old amounting to over a billion young people 85% of whom lives in developing countries. (Saipre, 1996). Globally, young people aged 15-24 years account for an estimated 45% of new HIV (Human Immunodeficiency Virus) infection worldwide (UNAIDS 2008). In India, 35% of all reported AIDS (Acquired Immuno Deficiency Syndrome) cases are among the age group of 15-24 years, indicating the vulnerability of the younger population to the epidemic (NACO, 2005). Gupta (2003) has reported that there are almost 200 million adolescents in India and it is estimated that this age group will grow to over 214 million by 2020. In the poorest countries, some 60 per cent of the population is under the age of 25. These millions of girls and boys have dreams of living lives that are fulfilling, happy and safe. Yet the vast majority of them receive little reliable information or skills-building related to sex, gender and sexuality. The consequences are well known: without access to comprehensive sexuality education and sexual and reproductive health services, young people are more vulnerable to daunting reproductive and sexual health problems. The need of research on sexual behaviour has been felt more intensely after the discovery of the HIV (Cleland and May, 1994).

Though premarital sex is proscribed, teenagers and young adults have always experimented with it. The last few years have perhaps seen an increasing trend towards greater experimentation by more individuals at a younger age with more partners in India (Jejeebhoy, 1994, Nag, 1996, Ramasubban, 1992; Sehgal et al, 1992; Watsa, 1994;). Despite awareness about HIV/AIDS, the number of premarital sex partners has increased over time among youth (Reddy et al, 1993). Solomon (2007) has stated that adolescents are generally thought to be healthy. Nevertheless, suicide, depression, other mental health conditions, AIDS and other adolescent-focused risks threaten this notion of prevailing good health for adolescence. Indian studies show that 20-30% of adolescent males and up to 10% of adolescent females are sexually active before marriage (Jejeebhoy, 1996); 4.5% of drug users belong to the age group of 12-17 years and 13.9% to the age group of 18-23 years (Planning Commission, 2001), 20% to be depressed
(IAP, 2003); and 40% teenagers have severe anxiety (Planning Commission, 2002). Adolescents who are vulnerable to sexual abuse and who lack knowledge and skills to negotiate safer sex practices or contraceptives have a high risk of unwanted pregnancy, unsafe abortions, and maternal mortality. In developing countries the maternal mortality of adolescent girls is twice that of older women. Worldwide more than 10 percent of births are given by women 15 to 19 years of age. Each year 1 to 4.4 million adolescents undergo abortions; most are performed illegally, under hazardous circumstances. (WHO, 1997). Lakshmi et al (2007) have reported that adolescents are poorly informed about how to protect them sexually and are particularly susceptible to unwanted pregnancies and STD’s (Sexually Transmitted Diseases) including HIV.

In 1994 representatives at the International Conference on Population and Development (ICPD) proposed a youth agenda to solve the problems of population and development. In what may be considered a paradigm shift, most representatives agreed to focus on individuals’ reproductive health rather than on demographic targets (Pachauri, 1999). This new focus was holistic. India formulated its National Population Policy 2000 in response to the recommendations of the ICPD conference. This policy gives emphasis to reproductive health rather than contraceptive targets and seeks to provide opportunities that enhance people’s well-being, making them productive assets in society (Ramasubhan and Jejeebhoy, 2000). This policy’s section on adolescents reads as follows:

Adolescents represent about a fifth of India’s population. The needs of adolescents, including protection from unwanted pregnancies and STD have not been specifically addressed in the past. Programs should encourage delayed marriage and childbearing and education to adolescents about the risks of unprotected sex. Reproductive health services for adolescent girls and boys are especially critical in rural India, where adolescent marriage and pregnancy are widely prevalent. Their special requirements comprise information, counseling, population education, and making contraceptive services accessible and affordable, providing food supplements and
nutritional services through the ICDS, and enforcing the Child Marriage Restraint Act, 1976 (Mathew, 2004). India has adopted the ICPD definition and is in theory, moving towards a more reproductive health approach; the full implementation of this shift, however, remains to be seen.

In the light of above discussion it becomes essential to raise issues pertaining to sexuality of adolescents so that exigencies regarding their needs of sex education be understood in the right perspective. The views of parents and teachers are highly valuable because they are genuinely responsible and worried about right kind of socialization of these adolescents. The teachers and parents know the gravity of problem arousing from mal-learning of sexuality among adolescents.

Even though extensive research on adolescent sexuality has been done in the developed countries there is a dearth of such studies in Indian context. The main purpose of the researcher was to conduct a programme evaluation study to investigate whether the needs of the students are being met by the existing concept of sexuality education programme. The study therefore aims to inform/educate the society of what is really taking place in schools in the name of sexuality education programme. It is expected that present study would create awareness in both learners and educators and the value of their responses would help in improving the quality of life. It also serves as a catalyst for further research into sexuality education programmes.

After a brief introduction about various facets of problem under consideration let us understand the concept of adolescence in details.

**Who are Adolescents?**

Adolescence (Latin adolescere = (to) grow) is a transitional stage of physical and mental human development that occurs between childhood and adulthood. This transition involves biological, social, and psychological changes. The period is characterized by a combination of physical changes (puberty), behaviour changes and shifts in social grouping. Broadly, these changes are:

**Physical changes** – The onset of puberty is marked by rapid growth and the development of secondary sexual characteristics.
Psychological changes – The development of a sense of identity distinct from parents and self-worth, the exploration of new relationships with their peer groups, with the opposite sex, families and the community. The development of a sense of identity distinct from parents and self-worth, the exploration of new relationships with their peer groups, with the opposite sex, families and the community. It is also a time of exploration (of their own bodies, of one’s capabilities and potential) and experimentation (in sexual relationships, alcohol and tobacco use). At this stage, media and peers exert a powerful influence. Manifested by change, it is also a stage of extreme vulnerability where, for instance, alcohol use could easily slip into alcohol abuse if there is inadequate access to services and a supportive environment. The support and understanding of parents during this phase is critical in enabling them to meet these challenges. Adolescence is further complicated by the number of simultaneous nature of these changes. Different aspects of behaviour or physical appearance occur at various ages.

Hurlock (1967) divides the adolescent period as follows:

1) Pre-adolescence 10-12 years
2) Early-adolescence 12-16 years
3) Late-adolescence 17-21 years

In Indian context Pandey (1963) divides adolescent period into three stages:–.

1) Early adolescence : 11 to 12.5 or 13 year
2) Middle adolescence : 13 to 18 years
3) Last adolescence : 18 to 21 years.

Generally in our country adolescence begin from 12th/13th year in boys and a bit earlier in girls. Adolescents as an age group usually tend to be subsumed under the categories of either youth or children. The formulation of definitions clearly demarcating the age and characteristics of adolescents is only a recent phenomenon, and yet to be widely recognized across the world. Douvan & Adelson (1966) have stated that adolescence is a time marked by increasing reliance on peers for the support which had previously been provided by family. Adolescence is often described as a phase of life that begins in biology and ends in society (Sharma, 1996). The actual
interpretation of adolescence as a phase of life remains a social construct that differs between cultures. In India there is a resistance to the concept of 'adolescence', if it is understood, as in the West, as an extended period of education and training for adult roles. The experience of such a phase is limited in the Indian context. This may be explained by factors such as a delay in the onset of puberty (due to poor nutritional status) and prevalence of early marriage (signifying adulthood). With the changing economic and social profile, generational differences in India are becoming increasingly important. The association of adolescence with sexuality is another factor which increases resistance to the concept, particularly in regard to female adolescence (Greene, 1997). However, if adolescence is viewed in terms of shifts in "dependency to autonomy, social responses to physical maturity, the management of sexuality, the acquisition of skills, and changes in peer groupings" (Greene, 1997), then the notion that adolescence is a social stage that occurs only in developed nations must be discarded. Aside from these objections to the relevance of the concept of adolescence to the Indian scenario, it is also arguable whether the term itself is valid. Adolescents are generally perceived as a homogenous group, yet they can be stratified on the basis of gender, caste, class, geographical location (urban/rural) and religion. Adolescents also include a whole gamut of categories: school and non-school going, drop-outs, sexually exploited adolescents, working adolescents – both paid and unpaid, unmarried adolescents as well as married adolescents with experience of motherhood and fatherhood.

It may be pertinent to ask - are there any common characteristics defining adolescents? The only universal definition of adolescence is to mark it as a period in which a person is no longer a child, and not yet an adult. This is a period of rapid growth and is apparent from the prevalence of new factors – of new capacities, of being faced with new situations, new types of behaviour – which signify opportunities for growth and development, but also risks to health and well-being.

For the present study the term adolescent has been defined as the period between childhood to adulthood i.e. age group of 11-19 years.
Sexuality in adolescents

Sexuality has a broader meaning. It means a dimension of personality and refers to all aspects of being and feeling sexual (Master et al., 1995). It is an intrinsic part of human behaviour and is one of the most complex and sensitive issue associated with adolescence (UNFPA, 2001). Sexuality has various dimensions. The biological side of sexuality affects our sexual desire, sexual functioning, and sexual satisfaction (Master et al., 1995). In drive reduction model, the biology determiners of sexuality prevail over other theories. It presents sexuality as "an intense, instinctual drive that is overpowering if left unchecked by civilizing social mediators such as laws and morality" (Bay-Cheng, 2003).

Psychoanalytic and other drive reduction theories in this model view that this innate and powerful sexual drive threatens to overwhelm all common and moral sense. If this model is linked to the traditional view of adolescence as a period of "Stress and Storm" in which many teens struggle with pubertal changes and identity concerns (Coleman, 1992), it leads to a depiction of adolescents as hypersexual and their lives as driven by sexual desires and impulses (Lesko, 1996).

Sociological perspective views sexuality as a social construct (Adkins & Merchant, 1996; Giddens, 1992). Rather than "natural", "instinct", or "commonsense", many social scientists believe that sexual practices, desires, and pattern of behaviours are socially made and shaped by social learning (Adkins & Merchant, 1996; Weeks & Holland, 1996). How we make sense of sexual behaviour depends on the culture in which we live: the stories scripts and attitudes circulating in our society (Measor et al., 2000).

In the present study 'Adolescent sexuality' refers to sexual feelings, behavior and development in adolescents and as a stage of human sexuality. Sexuality is a vital aspect of adolescents' lives. During adolescence it is essential that individuals form a sexual identity and a sense of sexual well-being. These processes determine adolescents comfort with their own emerging sexuality as well as that of others. It is important for adolescents to become comfortable with their own changing bodies, learn to make good
decisions about what, if any, sexual activities they wish to engage in, and how to be safe in the process

Discussion of sex openly, is a taboo in the Indian society and the parents in India constitute a very small percentage as source of sexual information to their children. The school has not yet taken up the responsibility to teach reproductive health education, to primary school or secondary school students. On the other hand, the socio-psychological problems faced by adolescents and the reproductive behaviour they exhibit have changed in the recent past. The teachers who teach the adolescents, the students who are adolescents themselves, the parents and the guidance counselors in schools acknowledge the rise in premarital sexual activities of the adolescents.

With the widespread availability of information, the influence of the media and the breakdown of traditional family structures, sexual behaviour among adolescents may be described as being in a state of flux. While information on sexual activity and behaviour is limited, disturbing trend is the lack of use of contraceptives and knowledge of STDs. The solutions to the problem of adolescents lie in imparting sex education. It becomes essential to understand the concept of Sex Education.

OVERVIEW OF SEX EDUCATION

Sex education is a broader concept and it ranges from education about biological aspects of reproduction to life skills.

In Pre-AIDS era, according to Dictionary of Education (1945), sex education pertains to:

1) Education dealing with the process and problem of reproduction.
2) Education designated to provide the individuals with understanding and control of his sex impulses and behaviour.
3) Education dealing with the principles and individual and group problems stemming from the biological fact that there are two basic types of human beings, male and female.

In Post-AIDS era the basic rational behind sex education has shifted from physiological aspect to Sexually Transmitted Infections (STI’s) prevention and relationship management. Sex education is referred as, the process of
acquiring information and forming attitudes and beliefs about sex, sexual identity, relationships and intimacy. It is also about developing young people's skills so that they make informed choices about their behaviour, and feel confident and competent about acting on these choices. It is widely accepted that young people have a right to sex education, partly because it is a means by which they are helped to protect themselves against abuse, exploitation, unintended pregnancies, STD and HIV.

We can sum up 'Sex education' as a broad term used to describe education about human sexual anatomy, reproduction, intercourse, and other aspects of sexual behavior. It often includes topics such as STIs and how to avoid them, as well as birth control methods. It also helps to get awareness about the fatal diseases caused by negative sex behaviour. Common avenues for sex education are parents or caregivers, school programs, and public health campaigns. Although some form of sex education is part of the curriculum at many schools, it remains a controversial issue in several countries, particularly with regard to the age at which children should start receiving sex education, the amount of detail that is revealed, and topics dealing with human sexuality and behavior for e.g. safe sex practices, masturbation, sexual ethics etc.

Two main forms of sex education are taught in schools worldwide is abstinence-only and comprehensive sex education. Abstinence-only sex education tells adolescents that they should be sexually abstain until marriage but does not provide information about contraception. It teaches abstinence from sex until marriage as the only option for adolescents. Comprehensive sex education covers abstinence as a positive choice, but also teaches about contraception and avoidance of STIs when sexually active. It includes information about both abstinence and contraception. Sometimes a comprehensive curriculum may be referred to as "abstinence plus" because it teaches abstinence as the preferred choice. Advocates of comprehensive sex education argue that while young people should be taught to remain abstinent until they are emotionally and physically ready for sex, and information about birth control and disease prevention is essential for those who are sexually active.
The sex education talks began earlier than many people assume. At the end of the 19th century there was increasing concern about the spread of venereal disease. People were drawn into a widespread public conversation about the transmission of sexual knowledge. By the end of the first decade of the twentieth century, sex education has become a focal point of debate. People started realizing that access to sexual information would provide them a solution to the significant problem of proliferating venereal disease. On the other hand, many people feared that information and beliefs derived from vulgar or commercial sources might be inaccurate or encourage promiscuity. There was the apprehension that education had the power to either confuse and corrupt students, or enlighten them. For this reason, even the most enthusiastic sex educators expressed reluctance about teaching sex. Moran (2002) has reported that Sex educators feared that their teachings might arouse precocious sexual behaviour. Thus, the sex education movement began in the beginning of the 20th century with definite reservations, focusing on disease prevention and hygiene.

SEX EDUCATION IN DIFFERENT COUNTRIES

An attempt has been made to present the status of sex education in different continents around the world to get an idea about the implementation of this programme. Primarily the help of Wikipedia has been taken to describe sex education across the world.

EUROPE:

In England and Wales, sex education is not compulsory in schools as parents can refuse to let their children take part in the lessons. The sex education curriculum focuses on the reproductive system, fetal development, and the physical and emotional changes of adolescence, while information about contraception and safe sex is discretionary. Britain has one of the highest teenage pregnancy rates in Europe and sex education is a heated issue in government and media reports. In the United Kingdom, there has been a move to improve the provision of sex education with a number of sound publications intended to provide support for teachers at all stages. This support includes curriculum advice as well as guidelines on policy
development. The Sex Education Forum set out a number of general principles in 1991 which provided educators with a solid foundation for developing work in schools. The framework stated that sex education should:

- be an integral part of the learning process, beginning in childhood and continuing into adult life.
- be for all children, young people and adults, including those with physical, learning or emotional difficulties;
- encourage exploration of values and moral issues, consideration of sexuality and personal relationships and the development of communication and decision making skills;
- foster self-esteem, self-awareness, a sense of moral responsibility and the skills to avoid and resist unwanted sexual experience.

In **Scotland**, the main sex education program is ‘Healthy Respect’. It focuses on both biological aspects of reproduction and also on relationships and emotions. Education about contraception and STD are included in the program as a way of encouraging good sexual health. In response to a refusal by Catholic schools to commit to the program, however, a separate sex education program has been developed for use in those schools. Funded by the Scottish Executive, the program ‘Call to Love’ focuses on encouraging children to delay sex until marriage, and does not cover contraception, and as such is a form of abstinence-only sex education.

In **France**, sex education has been part of school curricula since 1973. Sexuality education is nationally mandated, and parents cannot withdraw their children from lessons. Lessons are provided in both primary and secondary schools, beginning at around the age of six, and parents are sometimes involved. Schools are expected to provide 30 to 40 hours of sex education, and pass out condoms, to students in grades eight and nine. In January 2000, the French Government launched an information campaign on contraception with TV and radio spots and the distribution of five million leaflets on contraception to high school students. In France the comprehensive type of sex education is in vogue.
In **Germany**, sex education has been part of school curricula since 1970. It normally covers all subjects concerning the growing-up process, the changing of the body, emotions, the biological process of reproduction, sexual activity, partnership, homosexuality, unwanted pregnancies and the complications of abortion. The dangers of sexual violence, child abuse, and STD are also included in sex education. Most schools offer courses on the correct usage of contraception. There are also other media of sex education, in first place the youth magazine "Bravo", which always contains a topic where teenagers pose questions about partnership and sexuality.

In **Netherlands** the “Lang leve de liefde” (“Long Live Love”), package, was developed by education department in the late 1980s, that aims to give teenagers the skills to take their own decisions regarding health and sexuality. Nearly all secondary schools provide sex education as part of biology classes and over half of primary schools discuss sexuality and contraception. The curriculum focuses on biological aspects of reproduction as well as on values, attitudes, and communication and negotiation skills. The media has encouraged open dialogue and the health-care system guarantees confidentiality and a non-judgmental approach. The Netherlands has one of the lowest teenage pregnancy rates in the world, and the Dutch approach is often seen as a model for other countries. Thus the comprehensive sex education is given in Netherlands.

In **Sweden**, sex education has been a mandatory part of school education since 1956. The subject is usually started at grades 4–6, and continues up through the grades, incorporated into different subjects such as biology and history. Sweden became the first European country to establish compulsory sexuality education in all schools. Sexuality education is provided by schools and Non-Governmental Organizations. It is included as a part of the general health objectives for public health work. The Swedish sexuality education conveys facts about sexual and reproductive health such as anatomy, sexual functions, sexual orientations, STIs, HIV/AIDS, abortion, relationships and contraceptives etc.
In Finland: The Ministry of Social Affairs and Health began publishing an annual sexuality education magazine in 1987, which was sent to all 16-year-olds. Since 2000, it has been sent to 15-year-olds. It focuses on adolescent sexuality, particularly sexually transmitted infections, and includes articles about dating, first sexual intercourse, prevention of pregnancy (including clear instructions on how to use a condom), sexual orientations, and commercial sex. Sexuality education had been a mandatory curriculum subject, but in the mid-1990s the situation changed, and it was left to individual schools to determine. In 2001, it again became mandatory for grades seven through nine (ages 13 to 15), as part of Health Education. It is now introduced at earlier grades, but again, how it is taught is a decision for individual schools.

Bulgaria: Starting in the 1990s, newly established NGOs began to provide sexuality education using an interactive approach to teaching. Since 1996, the Bulgarian Family Planning and Sexual Health Association (BFPA) - the IPPF Member Association in Bulgaria - and the Ministry of Education have used peer education methods to teach sexuality education in and out of schools. Special educational materials and a manual have been produced on sexual health and life skills in an effort to prevent teenage pregnancies and STIs.

Cyprus: Sexuality education was introduced in Cyprus by the Cyprus Family Planning Association (CFPA) in 1972. In 1979, the CFPA conducted a national survey on the need for sexuality education, which led to the formation of a multi-disciplinary committee on the topic. In 1992, the Ministry of Education decided that Health Education should become mandatory in school curricula and family and sexuality education was incorporated into the Health Education curriculum. In the same year, many school teachers, health visitors and CFPA staff were trained to teach Health Education.

Czech Republic: Under Communist rule in the former Czechoslovakia, sexuality education was virtually non-existent. Until 1989, sexuality education was mainly included in Biology lessons. It was later included in 'Care of Child', 'Specific Education for Girls', 'Education for Responsible Marriage and Parenthood' and 'Family Education'. In 1994/95, there was much debate about whether to make sexuality education an obligatory part of the
curriculum. A modified programme, which the Ministry of Education supported, was developed by various academics, sexologists and teachers. However, a total reorganization of the educational system is currently underway, and this may lead to greater decision-making power for individual schools and therefore changes in curricula.

**Estonia:** In 1963, personal hygiene lessons were integrated into the national curriculum, which gave teachers who were willing the possibility to include sexual health in lessons (although this wasn’t widely practiced). In 1980, a lesson called ‘Family Studies’ was integrated into the secondary education national curriculum, which provided further opportunities for discussion of sexual health issues. In 1996, a national curriculum for basic and secondary education was approved, which introduced a new mandatory subject - ‘Human Studies’. Human Studies included sexuality education themes and both the information and social skills related to sexual health were then required to be offered at school. The latest national curriculum in Estonia was approved in 2002.

**Norway:** Sexuality education in Norway is called 'Seksualundervisning' and is integrated into the curriculum, mainly through Biology lessons. Parents cannot withdraw their child from mandatory school programmes, although a tiny minority does very rarely and usually for religious reasons. Teachers (mainly Biology teachers) are responsible for provision, but often the topics deemed more 'difficult' are dealt with by school nurses. (cited from www2.hu-berlin.de/sexology/BIB/SexEd/SexEd.html)

**AFRICA**

Sex education in Africa has focused on stemming the growing AIDS epidemic. Most Governments in the region have established AIDS education programs in partnership with the WHO and international NGOs. These programs commonly teach the 'ABC' of HIV prevention. It is a combination of abstinence (A), fidelity to your partner (Be faithful) and condom use (C). The efforts of these educational campaigns appear now to be bearing fruit. In Uganda, condom use has increased, youths are delaying the age at which sexual intercourse first occurs, and overall rates of HIV infection have been
Egypt teaches knowledge about male and female reproductive systems, sexual organs, contraception and STDs in public schools at the second and third years of the middle-preparatory phase (when students are aged 12–14). There is currently a coordinated program between UNDP, UNICEF, and the ministries of health and education to promote sexual education at a larger scale in rural areas and spread awareness of dangers of female circumcision.

South Africa is faced with the social problems of teenage pregnancy; HIV/AIDS and child abuse/rape. In order to address these problems the Government has implemented a primary intervention strategy namely, introducing the teaching of sexuality education to learners at school. The Department of Education embarked on a Sexuality Education Programme (SEP) that formed part of the Life Orientation Learning Area in the year 2002. In 2006 sexuality education, as part of the Life Orientation learning area, was introduced for the first time in KwaZulu-Natal as a compulsory subject at the Further Education and Training (FET) level, beginning with the Grade Ten learners.

UNITED STATES

In the beginning of the 20th century, debates over sex education became prominent in schools throughout U.S.A. There was a call to cover the moral, the health and the esthetic aspects Carter (2001) has reported that there was a move away from teaching solely about disease prevention. By the 1920s a general consensus began to emerge that too much emphasis on disease was improper preparation for healthy adult sexuality. Moran (2002) argues that while society seemed to teach more in sex education, the majority of sex education classes were aimed at preventing disease and mortality rather than on preparing for sexual maturity.

Throughout the 1940s the Public Health Service pushed for sexual education and there was increasing support for broader sex education and social hygiene. By the 1950s, the focus of sex education programs began to shift towards family living. Sex education was transformed into family life
education. In 1964, as sex was becoming more visible to youth via a more overt media targeted at teens in particular, the private organization SIECUS (Sexuality Information and Education Council of the United States) was created to challenge inadequate sex education. With the creation of SIECUS, opponents no longer remained quiet because there was now a clear target to attack.

In 1986 U.S. General C. Everett Koop issued a report calling for comprehensive AIDS and sex education in public schools. Sex education suddenly became much more visible as an extremely important defense against the spreading of AIDS, as many people felt that knowledge as a vital prevention tool. It was believed at that time that if youth were taught to not engage in any sexual activity until they were married, they would halt the progression of the AIDS epidemic.

Almost all U.S. students receive some form of sex education at least once between grades 7 and 12; many schools begin addressing some topics as early as grades 5 or 6. However, there is decentralization of decisions about sex education curriculum in U.S. Many states have laws governing what is taught in sex education classes or allowing parents to opt out. Some state laws leave curriculum decisions to individual school districts. Darroch et al (2000) have reported that most U.S. sex education courses in grades 7 through 12 cover puberty, HIV, STIs, abstinence, implications of teenage pregnancy, and how to resist peer pressure. Other topics, such as methods of birth control and infection prevention, sexual orientation, sexual abuse, and factual and ethical information about abortion, varied more widely from one state to another.

CANADA

Until 1960’s there were no organized sex education programs in Canada. In those few cases where sex was discussed, little or no information was given other than vague references to the avoidance of temptation. During the 1970’s some of the provinces developed policies and guidelines for the teaching of sex education. The implementation of sex education programs
was left to individual school boards. In these days comprehensive sex education is given in Canadian schools.

LATIN AMERICA

Mexico has a history of advancing sexual and reproductive health and rights. In the 1970s, Mexico implemented a progressive family planning policy. In 1993, the Mexican government and civil society partnered to create national, school-based health textbooks, making them universal in the country's primary and secondary schools. A network of adolescent-friendly health centers was also created. In 1994, Mexico was the second country in the world to adopt national strategies as outlined in ICPD Programme of Action (POA), and the first in Latin America.

During the past decade, Mexico made great strides in reducing HIV/AIDS and unwanted pregnancies. For decades, a national, collaborative effort among the Mexican Government and NGOs focused on advancing sexual and reproductive health and rights, and, more specifically, on comprehensive sexuality education and sexual health services for adolescents.

The conservative forces within Mexico and from the U.S. were threatening this progress by attempting to implement abstinence-only and marriage promotion programmes. In response to these new threats, SIECUS began a collaborative relationship with Demysex, a network of NGOs in Mexico working on issues of sexuality education, gender, sexual orientation, and reproductive health issues affecting women and girls, to develop and implement a proactive, long-term advocacy plan to protect and continue to advance sexual and reproductive health and rights in Mexico (Verrilli, 2006).

AUSTRALIA

There is no universal provision of sex education across Australia. States have their own sex education programs of varying quality and relevance. Sexual Health and Relationship Education (SHARE) program runs in South Australia. Sex education in Australia mainly focuses around HIV and STDs. The participation of parents is also there in sex education programme.
New Zealand

Sexuality education is a key area of learning in Health and Physical Education in the New Zealand Curriculum. This means that it must be included in teaching programmes at both primary- and secondary-school levels. Sexuality education in schools provides students with opportunities to develop, knowledge, understandings, and skills relating to sexual development – physical, emotional, social and knowledge, understandings, and skills to enhance their sexual and reproductive health.

ASIA

The state of sex education programs in Asia is at various stages of development. Indonesia, Mongolia, South Korea and Sri Lanka have a systematic policy framework for teaching about sex within schools. Malaysia, the Philippines and Thailand have assessed adolescent reproductive health needs with a view to developing adolescent-specific training, messages and materials. Myanmar, Nepal and Pakistan have no coordinated sex education programs.

Japan: Japanese sex education made progress only after World War II. Nevertheless, even as the 21st century began, neo-conservatives attacked the superior sex education provided by those teachers who deal with the developmental stages of children and with their needs. As a result, sex education in Japan was forced to retreat. More precisely, sex education in and around Tokyo collapsed, with instructions such as, ‘Don’t teach the names of the sexual organs, or about sexual intercourse and condoms’. It is said that there is a school in which not even menstruation is taught, because the teachers are afraid of being attacked. The sex education is not an independent statutory subject in classes. As a result, sex education in each school differs. For example, sex education is taught as a part of a variety of subjects, and there are no special teachers for sex education. Instead, the Ministry of Education, Culture, Sports, Science and Technology (MEXT) operates in a manner that increases the confusion in schools.

Bangladesh: The Bangladesh Rural Advancement Committee (BRAC) set up an Adolescent Reproductive Health Education (ARHE) programme in 1995, to
provide information about reproductive health to adolescents. The current ARHE curriculum, introduced in 1998, includes education on the physical and mental changes experienced during adolescence; female and male physiology; and the process of reproduction, including conception, pregnancy, childbearing, guidance on the age at which marriage and childbearing should take place; STDs, family planning and disease prevention; substance abuse, including smoking; and gender issues, including inequality between males and females, the need for respect between sexes, the role of males and females in reproduction, and violence against women and young girls.

**Indonesia:** After 1994, ICPD, the need for sexuality education for youth was articulated. There had been numerous activities in this context in Java, where half the population of Indonesia live, were directed at adolescents. Sex education is aimed to make sexuality in the young a theme of education because of its perceived dangers. Such educational efforts rely upon moral and medical principles that describe child and youth sexuality as unhealthy and morally devastating.

**Malaysia:** In the context of Muslim majority countries, sex education is a taboo subject to be taught at schools. A recent report by New Straits Times (a Malaysian daily newspaper) indicates that Malaysia is yet to consider introducing a comprehensive sexuality education at secondary and primary schools (Sipalan & Majawat, 2009). In Malaysia, the Cabinet has approved the introduction of “Reproductive and Social health education” into the school syllabus after years of deliberation (Abas, 2006). The details of guidelines have already been produced by the Ministries of Education and Women, Family and Community Development (Abas, 2006). These guidelines cover diverse topics on sexuality which include among other things the type of touching that is allowed, contraception, teenage crushes, the dangers of online predators, HIV/AIDS, and sexual orientation.

**Thailand:** According to Thai social and cultural norms in the past, sexuality was a subject not to be discussed in public and too little factual information and guidance were provided (MOPH & WHO, 2003). Thai Government has now adopted sex education in school-based programmes. Sex education has
been integrated in school curriculum at primary level and secondary level and has been revised many times (MOPH & WHO, 2003).

China: In China, sex education traditionally had been integrated in the reproduction section of biology textbooks. However, in 2000 a new five-year project was introduced by the China Family Planning Association to promote reproductive health education among Chinese adolescents and unmarried youth. This includes discussion about sex within human relationships as well as pregnancy and HIV prevention. The comprehensive sex education is provided in China.

SEX EDUCATION IN INDIA

The most publicly known sexual literature of ancient India is the texts of the sixty four arts. These texts for example Kama Sutra were written for and kept by the upper castes and nobility, their servants and concubines, and those in certain religious orders. These were people that could also read and write and had instruction and sex education. In medieval period due to Muslim invasions there was no such literature. The effects of British education, administration, scholarship of Indian history and biased literature all led to the effective 'colonization' of the Indian mind with European values. India became more conservative after being influenced by European ideas. At the same time, translations of the Kama Sutra and other 'exotic' texts became available in Europe, where they gained notorious status and may have triggered early foundations of the sexual revolution in the west. It was only after independence that Government of India started working for the welfare of the country & first time issue of adolescent sexuality in the form of Population Education was raised.

In this year 2005, the Government of India and its agencies have advocated sexuality education and prepared a program for its implementation, the inhibition associated with the word "sex" as well as preconceived irrational fears and increasing resistance from political opponents have scuttled the Sex Education programme. Twelve Indian State Governments had gone against the Adolescent Education Programme(AEP) introduced by the Central Government in association with the National AIDS Control Organization
(NACO) and the United Nations Children's Fund (UNICEF). AEP which is meant for secondary and higher secondary classes with the objective to empower the adolescent population to make informed choices and develop life skills for addressing psychological, social and health concerns.

There is no consistency of sex education programme in schools. This might be because the sex education policy of the country is not clear, even though the guideline for sex education implementation in schools is clearly identified. Policy reflexes politics and the views of politician towards sex education. Some countries have clear sex education policy, such as many developed countries in Europe, the US, and Australia, but many countries still struggle to develop clear sex education policy, and India is included in this group.

Many politicians in India still have negative attitudes to sex education. Some politicians believe that it is inappropriate to teach children about sexuality. Politicians acted to approve a proposal of sex education course very slowly and argued about who could teach the sex education course. According to them sex education is anti-cultural, indecent and can confuse adolescents who might think that they needn't show restraint when it comes to sex.

The Central Government in India has not taken any further action with respect to states banning sexuality education program proposed by it. The Central Government has justified its inaction by pointing out that under the federal structure of the Indian Constitution, Education and Health are both subjects that can be largely executed by State Legislatures and Governments. However, the Central Government has forgotten that under international law, federalism or any other such argument is not an excuse for the violation of international commitments. Lack of compulsory comprehensive sexuality education in schools, according to the Report of the United Nations Human Rights Council Report, violates the human rights of Indian adolescents and young people as recognized under international law. (YCSSR, 2008).

What sexuality information should be given to young people? When should sexuality education start? Who should provide sexuality education?
How effective is the school-based sexuality education, are important issues that needs to be scientifically discussed and consensus on these issues should be arrived. Appropriate balance between the eagerness and ambitious proposals of the NGOs to implement varied sexuality education in schools and restrictive approach of the politicians needs to be arrived at so that the process of imparting sexuality education to stakeholders is well regulated and less controversial.

REVIEW OF LITERATURE

There exists an extensive literature on sex education. A group of researchers discuss the necessity of sex education; others question the very need of sex education. One group insists on providing the abstinence-only sex education while others favour comprehensive sex education. There are studies aimed at proving legitimization/ non-legitimization and need/ negation of sex education in schools. In the sex education debate, the question of whether the state or the family should teach sexual mores is a contentious issue. Those who oppose sex education claim that sex education will break down pre-existing notions of modesty and encourage acceptance of practices such as homosexuality and premarital sex which are deemed immoral. The present study is mainly centered on perception of adolescents, their parents and teachers on the pubertal concerns of adolescents, sex education and sex education policy.

The review of literature has been divided into following sections in order to cover all major elements related with the problem of study viz-, Issues relating to adolescence as a stage, pubertal transitions and its consequences, information channels used by adolescents, vulnerability of adolescents and various factors influencing sex education and sex education policy like need and use of sex education, role of parents, teachers, culture, media and peer group etc.

Issues related to Adolescence and Pubertal Concerns of adolescents

Dunham et al (1986) has stated that the adolescent mind is essentially a mind of the moratorium, a psychosocial stage between childhood and adulthood, and between the morality learned by the child, and the ethics to be
developed by the adult. The onset of puberty is not only a stage of human life but lead to permanent change in for the rest of life. Adolescence is the stage in which all the pubertal changes occur. Blos (1962) has stated that adolescence is the sum total of all attempts of adjustment to the stage of puberty, to the new set of inner and outer endogenous and exogenous conditions which comforts the individuals. Carnegie Council on Adolescent Development (1989) regards adolescence as the period of transition. Dillon (1934) and Isaacs (1933) have stated during adolescence period both boys and girls experience the transitions related to sex. Jersild (1961) has referred to transition towards sexual maturity as the precursor of stress among the adolescents. Adolescence encompasses somatic and hormonal changes (Marshall, 1978) Cognitive transitions (Keating, 1990) and Social changes (Hill, 1983).

**Pubertal transitions and its consequences**

The transition from childhood to adulthood takes place through the period of adolescence. A number of researchers have reported that adolescent girls reach morphological puberty significantly earlier than boys. Sexual maturation in girls is clearly marked by the menarche but it is less definite for boys because the growth of genitalia, voice change and spermarche appear at different times over a period of several years. (Brooks-Gunn, 1987; Chilman, 1990; Herner et al, 2004; Ostovich and Sabini, 2005; Peterson and Offer, 1979). Ostovich and Sabini (2005) have reported that adolescent girls reach puberty significantly earlier than boys. Chilman (1990) reports that sexual-maturation is clearer and less prolonged for girls than boys. Brooks-Gunn (1987), Herner (1984) and Peterson and Offer (1979) have reported that girls usually reach pubescence sexual years before boys – an average age of 12 years for girls and 14 years for boys. Collins (1999) reports that in female adolescents there is less definite voice changes in comparison to male voice change which is definite and clear. Udry (1989) reports that sexual maturation and voice change in boys and menarche in girls are the highly significant pubertal transition. Reddy et al (1979) have reported gonadal growth as most significant pubertal change. Banikarim et al (2000) and Dasgupta and Sarkar (2008) have reported that parents regard
sexual growth as most significant change. Davis (1944) has reported that any disturbance in normal pubertal transitions have implications for adolescents. Offer (1969) has reported stress or turmoil and Chilman (1990) has reported lower academic achievement among adolescents as the direct fall out of abnormal pubertal transitions.

The pubertal changes induced multifarious transition in the behaviour of adolescents. Adolescents exhibit changes in their behaviour and relationship like reserved relationship with their parents as reported by Schmidt and Urdze (1983) and more individuated relationship with their parents as reported by Steinberg (1987). Stemmier and Peterson (1999) have stated that adolescents begin to spend lesser time with their parents and Trujillo (2000) has reported that adolescents face more difficulty in communication with their parents. Crouter et al (1995) have reported that parent-adolescent involvement is characterized by an overall pattern of gender intensification in which girls become increasingly involved with their mothers and boys with their fathers; and this pattern is exacerbated in significances where adolescents have a younger, opposite-sex sibling.

**Channels of information on pubertal transitions**

Most of the adolescents possess incomplete information about pubertal transitions Chhabra(1992) has reported that most of the adolescents desire to understand their normal course of pubertal transitions. Kaur (2000) and Ghule et al (2007) have reported that adolescents have misconceptions about pubertal transitions. Peer group act as the most important source of information on pubertal transitions and adolescents judge their pubertal transitions by taking reference from their peers and spend subsequently more time interacting with them in comparison to adults (Aquilino ,1997, Larson et. al.1994; Rossi and Rossi ,1990). Chilman (1990) has suggested that adolescents attach great significance to their pubertal changes in consonance with other in their peer group. Rosenthal and Feldman (1999) have reported that parents are not preferred source of information regarding sexuality. Adults constrict their conversations with adolescents on biological factors as reported by O’ Sullivan et al (2001) and Somers and Paulson (2000). Croft
and Asmussen (1992) report that adults neglect their responsibility to address questions of adolescents regarding pubertal/sexual concerns and show reluctance to address any such query. Somers and Paulson (2000) have reported that parents are reluctant to discuss personal dimensions of sexual activity. They further report that adults do not act as significant information channels for discussing sexual/pubertal issues with adolescents.

Banikarim et al (2000); Dasgupta and Sarkar (2008); Drakshayani et al (1994); and Miller (1998) have reported that mothers remain the most important source of information for the adolescent girls regarding menstruations. Chilman (1990) has reported that mothers supply correct information about menstruations to their daughters. Abrahm (2000), Awashti and Pande (1998); Murthy (2000) have reported that in Indian context parents rarely provide the desired support to growing adolescents regarding pubertal and sexual changes. Thornburg, (1972, 1981) shows that few parents contribute significantly to the transmission of sexual and contraceptive information to their children. Mahajan and Sharma (2005) state that sex is still considered as a taboo subject in Indian society and parents choose to avoid any discussion on topics of sex and contraception. Russo (1992) has emphasized that parents’ level of comfort in discussing sexuality is central to effective communication with adolescents. Baldwin and Baranoski (1990) have found that adolescents who get sex education in the home also report better communication with their mothers and are also more likely to be satisfied with family interactions. Allen & Barber (1992) have reported that most parents and teachers experience so much shame when they talk about sexuality or pubertal transitions with adolescents.

Boler et al (2003) and Nath et al (2008) report that in India teachers play a major role in giving adolescents information on HIV/AIDS but they teach only biological or etiological aspects of the disease. Reddy et al (1979), Schultz and Boyd (1984), has reported that even teachers show an overall reluctance in teaching about sexual issues. Peltzer and Super (2006) have stated that parents are the most reliable channel to provide information on pubertal issues to their adolescent children. Phatak (1994) has emphasized the need to strengthen the institutions like family, community and school as a
source of correct information to adolescents regarding their pubertal concerns.

Media has emerged as the most powerful and easily accessible source of information on nearly all topics encompassing pubertal and sexual issues. Engle et al (2006) has reported that mass media has considerable influence on adolescents. Brown et al (2005) have reported that the mass media act as a kind of sexual super peer, especially for earlier maturing girls. Moses and Parveena (1983) argue that adolescents rely on peers and media i.e. print, and electronic for getting information on sexuality. Brown et al (1990) have reported that in the recent times there is an increase in number of adolescents using media for assessing sexual themes. Media acts as a source of information on sexuality related topics either through direct or indirect reference (Mohan, 2002). Apart from the unrealistic body image, the media may provide a feminine and masculine image that convinces young boys and girls to indulge in risk-taking behaviour. (Masters et.al.1995; MOPH & WHO, 2003).

Vulnerability of Adolescents

Adolescence is the most vulnerable period of human life. Four factors make youth's vulnerable to risky behavior—lack of information and awareness, lack of health services, lack of decision-making power, and lack of resources (McCausley and Salter, 1995.). STIs including HIV are most common among young people aged 15-24 years and it has been estimated that half of all HIV infections worldwide has occurred among people aged less than 25 years (WHO, 1995). Sweat and Denison (1995) have reported that the risk of STI/ HIV infection among adolescents in developing countries is coupled by socio-cultural, political and economic forces such as social taboos, poverty, unemployment etc. Awasthi and Pande (1998) have reported that adolescents lack knowledge about pubertal transitions and STDs. Aggleton and Rivers (1999) have found that prevalent ideologies of masculinity and femininity which prescribe virginity in unmarried girls and promiscuity for boys facilitate the transmission of STI among adolescents.
McCayle and Salter (1995) report that adolescents in developing countries lack information about contraceptive methods and their correct usage. Morris et al. (1994) argue that adolescents are apparently unlikely to use contraceptive or condoms during sexual activity and this act make them highly vulnerable towards HIV/STD. Gupta et. al. (1996) have reported that female adolescents are more ignorant about sexual matters and are more vulnerable. Malnutrition, risk of poor health, becoming victims of antisocial activities, brewing and sale of illicit liquor, sex exploitation, prostitution and drug peddling have been reported as threats for adolescents from slums in a multi indicator survey (Khosla 1977). Kakkar (1979) states that the movement of adolescent girls are monitored more than adolescent boys and have less chances of formal education.

According to Jha (2002) adolescents have shown steady increase in pre-marital sex in modern times which has resulted in exacerbated risk of HIV/AIDS. The numbers of adolescents who engage in sexual relations are increasing. In most of the world, the majority of young people become sexually active during their adolescent years, both in and outside marriage (IPPF, 2001). The proportion of sexually active adolescents is about one-half to two-thirds in Latin American and Caribbean countries, three-quarters or more in much of developed countries and 90% in a number of sub-Saharan African countries. The IPPF report also states that 38% of women aged 19 or younger in sub-Saharan Africa, and 28% in Latin America and the Caribbean, have their first sexual intercourse outside marriage. About 30% of girls aged 15-19 years in sub-Saharan Africa, and 34% of girls in this age group in Asia (excluding China), are married. In the US, 47% of high school students have ever had sexual intercourse and 14% of high school students admit to four or more sex partners (Grunbaum et al., 2004). In Sweden, 64% of 17-year-old student girls have experienced their first intercourse and 16% had this before the age of 15 (Edgardh, 2000).
FACTORS INFLUENCING SEX EDUCATION AND SEX EDUCATION POLICY

There exists an extensive literature on sex education. A group of researchers discuss the necessity of sex education others question the very need of sex education. One group insists on providing the abstinence-only sex education while others favour comprehensive sex education. There are studies aimed at proving legitimization/ non-legitimization and need/ negation of sex education in schools. In the sex education debate, the question of whether the state or the family should teach sexual mores is a contentious issue. Those who oppose sex education claim that sex education will break down pre-existing notions of modesty and encourage acceptance of practices such as homosexuality and premarital sex which are deemed immoral.

Abstinence-Only Sex Education

The proponents of abstinence-only education argue primarily that sex before marriage is inappropriate or immoral and that abstinence is the only method which is 100% effective in preventing pregnancy and STIs. (Abstinence Clearinghouse, 2001). Many such groups emphasize that condoms are not fool-proof in preventing pregnancy or STIs, and that sexual activity outside marriage can result in “serious, debilitating, and sometimes, deadly consequences.” In addition, many abstinence only advocates are deeply concerned that information about sex, contraception and HIV can encourage early sexual activity among young people. (Concerned Women for America, 2001). These advocates credit the decrease in teenage pregnancy largely to the advancement of the abstinence-only message. Abstinence-only advocates claim that there are reliable studies that indicate the positive effects of abstinence-only programs. (Jones et al. 1999).

Comprehensive Sex Education

A wide range of national organizations support comprehensive sexuality education. Most proponents of comprehensive sex education argue that sexuality education should encourage abstinence but should also provide young people with information about contraception and STD and HIV prevention (hence the title “abstinence-plus” programming). According to
SIECUS, comprehensive school-based sexuality education that is appropriate to students' age, developmental level, and cultural background should be an important part of the education program at every age. SIECUS defines a comprehensive sexuality education program as one that “respects the diversity of values and beliefs represented in the community and will complement and augment the sexuality education children receive from their families.” Comprehensive sex education proponents argue that “[b]y denying teens the full range of information regarding human sexuality, abstinence-only education fails to provide young people with the information they need to protect their health and well-being.” (NARAL, 1999). And surveys of young people conducted by the Kaiser Family Foundation have found that “students who have sex education – regardless of the curriculum – know more and feel better prepared to handle different situations and decisions than those who have not.” (Kaiser, 2000). Comprehensive sexuality education is an effective strategy to assist young people in delaying sexual intercourse, reduce the frequency and number of sexual partners, decrease the number of forced teen marriages, reduce the rates of STIs, and increase the use of contraception (Gourlay, 1996; Halstead & Reiss, 2003; Kirby, 2002; Levine, 2002; Makol-Abdul et al. 2009).

Why there is need of Sex Education?

Ainsworth and Over (1994) and Friedman (1993) have reported that demographically adolescents compose approximately one-third of the world's population. It is necessary to recognize the problems and needs of vulnerable adolescents and devise a mechanism to help population living in this age group. Traditional education system has failed to equip youth with the requisite information and skills necessary to handle complex developmental tasks at a younger age, leaving youth ill-prepared and vulnerable to the negative consequences of sexual behavior (Asmussen and Croft, 1992). Forrester (2009) suggests that it is now widely accepted that young people have a right to sex education, partly because it is a means by which they are helped to protect themselves against abuse, exploitation, unintended pregnancies, sexually transmitted diseases and HIV/AIDS.
Different researchers have proposed different reasons for the need of sex education which are given below:

**Understanding Sexuality & Sexual Health**

According to Kirkendall (1965) the purpose of sex education is not primarily to control and suppress sex expression, as viewed in the past, but to indicate the immense possibilities for human fulfillment that sexuality offers.

Schulz and Williams (1969) state that helping young people to find well thought out and comfortable patterns for expressing their sexuality is the ultimate aim of sex education. Mukhi (1983) reports that young people not only require education and guidance in understanding body changes and the reproductive system but also about other dimensions of growing up, thus properly designed curriculum of sex education is the need of the hour. Knowledge must be imparted in such a manner as to facilitate the comprehension of child regarding his/her bodily changes. The appropriate stress in sex education programme should include more than only the study of physiological aspects of sex. The sex role of male and female should also be touched in sex education. By imparting such education the need for each individual to develop an appropriate sex role can be accomplished. (Curtis and Bindwell, 1977). Kaur (2000) has revealed that most of the adolescents possess incomplete information about sex related matters and it is also found that the available source of information is devoid of proper information. Effective sex education may be thought of in its own forms of three R’s- Respect, Responsibility and Restrain. Sex education should help adolescents to understand that the misuse of sexuality has the risk of dire consequences.

Ghule et al (2007) report prevalent misconceptions and negative attitude toward sexuality and sex health among college students. The students don’t show a positive attitude toward sex related matters. They feel that sex education is the solution to the problem because it provides students with more scientific information and deter them for gathering incomplete and fractured information from the sources such as media, pornography and peers.
Self development & adjustment

D'souza (1969) argue that through sound sex education, boys and girls can be made to more secure in what it means to be "man-in-making" or "woman-in-making". Sex education in its broadest sense helps us to learn about being man and woman and becoming what we can become to the best of our ability. More (2012) has conducted a study on the attitude of youths towards sex education as well as effectiveness of sex education programme on such attitude. Effect of sex education programme has been found to be positive. After treatment approximately 65% student’s attitude is high (in which 34% attitude is very high) towards sex education. Also both male & female college student’s attitude is found to be high towards sex education.

Sexuality education and information are also essential to each person's ability to develop themselves and their sense of self-worth, particularly in regard to any decision regarding their sexual and gender identity and sexual behaviour as an aspect of their personhood (International Council on Human Rights Policy, 2012). According to Marker (1983) sex education brings about wholesome adult attitude and behaviour that assures desirable home-making, the establishment and building of families. Sex education must take into account the social and moral aspects of relationships along with the physiological aspects. Sex education should be aimed to enable adolescents to increase their knowledge, explore attitudes and values and develop life skills which would help them to establish sound relationships and make appropriate decisions regarding sexual behaviour. (Lenderyou and Porter, 1994). Jain (1986) states that sexual mores should be left to the family, and family should try to help self adjustment among adolescents.

Avoidance of high risk behaviour among adolescents

Researchers indicate that premarital sexual experience in India is not as common as in Western Countries but it is also not as rare as perceived widely in Indian context and is gradually rising. The numbers of adolescents who engage in sexual relations are increasing. Biswas (1994) finds that a sizable proportion of unmarried students visit prostitutes. It is argued that eight per cent of the customers of prostitutes are students including
adolescents. On similar lines Gilada (1994) has reported that 30 per cent of clients in Bombay red-light area are students and most of them are adolescents. Savara and Sridhar (1994) have found that the prevalence of premarital relations among STD patients is high. The adolescents who suffer from STD/AIDS are found to be engaged in un-protected pre-marital sexual activities. Wang et al (2005) report more and more Chinese adolescents are engaging in premarital sexual activity. As a result, the numbers of unplanned pregnancies and STIs among Chinese young adults have increased markedly.

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

Adolescents need sex education because of early initiation of sexual activity; they often have sexual intercourse, high-risk sexual behaviour and the inadequate levels of knowledge of means of protecting their sexual health. (Basu,1994 ;Singh et al, 2005)

The information and knowledge about risks to sexual health and means of preventing unhealthy or undesired outcomes are important for young people's sexual health. (Blanc & Rutenberg ,1990). The adolescents are in need for information regarding safe and healthy sexual behaviours. Sex education interventions are thus recommended to help adolescents to prevent any bad consequence of ill-informed or uninformed sexual activity. Sex education is needed to counter adolescents pregnancy, STI, HIV/AIDS. Sex education could impart the knowledge of sources of risk and means of
protection, and behaviours such as delaying age at first intercourse or abstinence till marriage, (Singh et al. 2005).

Kim (2001) has explored the negative sexual health behaviour of Korean adolescents. In order to save adolescents from the vices adolescents should be given appropriate knowledge and properly designed sex education. Reddy et al (2005) have advocated sex education for girls as more important. Anandhi (2007) argues that sex education can counter problems of adolescents. In order to make healthy and responsible decisions about whether to have intercourse and how to protect themselves and their partners from unwanted pregnancies and STDs, young men and women need relevant information and education. Sex education is best way to prevent unintended pregnancy, STDs, and also provide adolescents with the information and skills they need to use contraceptive and disease prevention methods effectively when they become sexually active. (; Holzner and Oetomo 2004; SIECUS,1996).

Stable Family life & Family Planning-

Gupta et al (1979) have found that knowledge of students regarding population dynamics is poor. Girls seem to be better informed than boys with respect to information on human reproduction. The study advocates that the introduction of sex education comprising of information related to pregnancy control methods would help in achieving population control. Archard (2000) argues that sex education can empower young people by increasing their freedom to make competent choices about their own sexual behaviour. As it helps young people to understand 'the importance of marriage for family life, stable and loving relationships, respect, love and care'. Sexuality education and comprehensive access to sexual information contribute to health through promoting individuals' ability to have preferences for, and act on, decisions that protect their health, as well as determine the number and spacing of children. (International Council on Human Rights Policy, 2012).

Improvement in Mental & physical Health-

According to Alasaker (1992) mental health of the child is either at risk or resilience during puberty. The uninformed child is at the great risk or highly
vulnerable to get into the mental illness. The rise in suicides and delinquent behaviour is the direct output of mental illness. To prevent such fatal changes use of sex education in schools is essential. Helen et al (2004) have stated that the effective approach on sex education is needed to solve the whole problem of sex and emotional health of adolescents. Sharma (2005) has opined that students must feel comfortable seeking counselling on sex-related issues. Each of their questions, no matter how private, needs to be answered. The openness in conversation would decrease frustrations and aggressions linked to sexuality amongst youth.

**Good Values & Low Risk Behaviour**

Scales (1981) advocates that sex education will promote good sexual health by supporting values such as the following:

(a) Knowledge about sexuality is helpful, not harmful, and controversy is an integral part of dealing with difficult issues.

(b) Self-esteem is central to effective decision-making. Adolescents who feel poorly about themselves more readily succumb to outer pressures. Sex education could help adolescents with low self esteem.

(c) Sex is not the same as love and this confusion can only be addressed in sex education.

(d) Sex education helps children to make distinctions in the kinds of relationships they want with different people, including platonic relationships, sexual friendship, and passionate love.


Zelnik and Kim (1982) have found that those adolescents who take sex education are less likely to engage in premarital intercourse. Those who take sex education related to birth control education are less likely to become pregnant because they use contraceptive. Wang et al (2005) report that comprehensive sex education program, including information on abstinence,
contraception and healthy sexual behaviors, was carried out in a suburb of Shanghai. It reduced incidences of unsafe sex, increased contraceptive and condom use.

According to SIECUS (1996) in order to make healthy and responsible decisions about whether to have intercourse and how to protect themselves and their partners from unwanted pregnancies and STDs, young men and women need relevant information and education. Thus there is great need of sex education for adolescents. Alexandros and Forrest (1999) indicate that the first and foremost priority of sex education should be providing correct information to adolescents about sexuality and prevention of STD's. The second and third priority of sex education should focus on human relationships.

PERCEPTION OF ADOLESCENTS ABOUT SEX EDUCATION

Current information show that adolescents are inadequately informed regarding their own sexuality, physical well being and their health and the major source of information for them is media and peers. Whatever knowledge they have is incomplete and confused. A survey done with 959 adolescent girls on the issues of sexuality shows that regardless of age and education all the subjects have expressed the need for the introduction of sexuality education into academic curriculum (Maitra, 1994). In his study Bailie (1991) has found that most students want to discuss issues which they regard as important, rather than have topics imposed on them, and that they should have the opportunity to ask questions. They want teaching to be done in the form of small discussion groups, of boys and girls. They also express a need to ask questions in a private and confidential setting. They request the use of more visual aids, and express their dislike of lectures. Almost all the groups feel that sexuality education should take place during normal school hours and that the time allocated to this subject is insufficient.

Adolescents often look to their families as one of several preferred sources of sexual health information (King et al., 1988; McKay & Holowaty, 1997). A 2008 survey of parents and teenage children aged 13 to 18 years reports that around two-thirds of young people seek advice from their parents.
if they need contraception or think they have an STI, and around three-quarters seek advice if they had an unplanned pregnancy. In this study, more parents have thought that their teenage children would ask them for help or advice than actually would. However, the survey shows that young people prefer to talk about sex with their parents (72%), followed by friends (68%) and the internet (61%) (Marie Stopes International, 2008). In addition, most young people agree that sexual health education should be a shared responsibility between parents and schools (Byers et al., 2003).

In India, young people and especially young girls are reported as having consistently poor knowledge about sex and reproduction, including modes of transmission for HIV and the use of condoms as a preventive measure. Parents and family members are reluctant to discuss sexual matters with young people. Women interviewed in a variety of contexts have reported that they have been told very little about sex and reproduction prior to marriage (Bang et al, 1989). In rural and urban areas young people, especially girls, remained uninformed since sex and reproduction are considered distasteful and embarrassing subjects (Jejeebhoy, 1998). In a study that has been conducted in Mumbai, one mother reports that adults do not want to frighten young girls by talking about sex (George & Jaswal, 1995). By way of contrast, and like many of their counterparts in countries elsewhere in the world, young men in this same context are encouraged to be sexually experienced, but reliable sources of information are few and far between. The peer group therefore constitutes an important source of information, as does the developing mass media (Jejeebhoy, 1998).

Due to peer love and peer pressure, which is a part of their growing up, children tend to discuss sexuality with friends and classmates. This often leads to anxiety, negative attitude, phobia and misconceptions as they cannot decide about the correctness of the information they get (Chauhan, 2006). Most teenagers turn to their peers as sources of sex education rather than teachers and school counsellors (Etsane, 1997; Hlalele, 1998; Makanya, 1993; Seydel, 1992). According to Larson and Richards (1994), adolescents spend substantially more time interacting socially with peers than parents and peers act as great supplier of information. Although peers appear to be the main
source of information, one of the main problems in teenage relationships is that the teenagers generally do not communicate their feelings about sex to each other (Seydel, 1992).

Many adolescents experiment with a new experience including sexual activity because of peer pressure. Peers have strong influence on adolescents’ desire to have sexual relations. Some wish to achieve the transition to adulthood at an earlier age than their peers (Rosenthal, et al. 1999). Others want to have experiences to share with their friends; some feel embarrassed if they do not have sexual experience or remain virgins (Sadock, 2005). Finkel and Finkel (1975) have reported that peers are the main source of sex information for males than females. The information gathered from the peer group is usually ill-equipped and make adolescent more vulnerable to venereal diseases.

During the past several decades, attitude towards sexual activity has changed dramatically. Views regarding premarital sex, extramarital sex and specific sexual acts are probably more open and permissive today than they have been at any time in recent history. Young people are exposed to sexual stimuli through television, magazines and motion pictures to a greater extent than ever before. These sources mostly lack any value and distract the adolescents (Soreson, 2000; Moses and Parveena 1983). Brown et al (1990) have stated that the major influence in development of sex behaviour in adolescents is the media. Exposure to sexual beliefs and practices promulgated by T.V, films, radio, videos, sex magazines tend to explore the fears and hopes of adolescents. Adolescents are frequently exposed to sexual material on television, in movies, and in magazines. Most sexual behavior on television takes places between unmarried adults and ignores the potential negative consequences of sexual intercourse; music videos often combine sex and violence (Huston et al. 1998). However, the effect of media exposure on adolescents’ sexual attitudes and behavior has not been sufficiently studied. Experimental studies show that exposure to sexual content can lead to more permissive attitudes about premarital sex, but a link between exposure and adolescent intercourse has not been established (Huston, et al. 1998).
Effective methods of birth control have lessened the fear of pregnancy. All these changes have given adolescence more freedom. These changes also produce more conflict, however, since guidelines for "appropriate behaviour" are less clear-cut than they were in past. (Joshi, 2004) Chhabra (1992) has reported that the attitude toward sex and reproduction is changing among adolescents. Matanagnon (1982) argues that adolescents show liberal attitude towards sex and openness is growing towards sex related issues among adolescents. According to him, most adolescents desire to understand physiological, behavioural, and social aspects of their life.

According to Maitra (1994), 84 per cent secondary school attendees favour the inception of sex education in schools. The students report that school based sex education represents a feasible mechanism to their needs of sexuality education. Adolescents feel that the sex education they receive in school is inadequate, and they want open discussions on the topic of sex with their parents (Fay & Yanoff, 2000; National Campaign, 2003). The vast majority of parents and children look to schools to provide the education because schools have the resources, the training, and the commitment to a common curriculum, whereas the home environment may have limited or incorrect information and an unwillingness of parents to talk about sex with children (ACPD, 2001; Archard, 2000).

SEX EDUCATION AND PARENTS

A public opinion survey of 1,050 adults nationwide by Hickman-Brown Research has found that 84% of adults support sex education for junior high students and 93% support this education for high school students.

In U.S.A, a number of surveys report that a majority of parents contend that they prefer more comprehensive sex education for their children. (Survey on Public Support, 2004). The results show that while parents emphasize abstinence only sex education, they want more comprehensive sex education programs. Kirby et al (1982) have demonstrated that parents welcome the opportunity to participate in a parent-child sexuality program. Geasler et al (1995) state that a lack of knowledge of sexuality and what is normal and acceptable at various ages among adolescents is of concern to parents.
In 2004, National Public Radio (NPR), the Kaiser Family Foundation and the Kennedy School of Government released a poll that indicates:

- Ninety-three percent of parents of junior high school students and 91 percent of parents of high school students believe it is very or somewhat important to have sexuality education as part of the school curriculum.
- Ninety-five percent of parents of junior high school students and 93 percent of parents of high school students believe that birth control and other methods of preventing pregnancy are appropriate topics for sexuality education programs in schools.
- Approximately 75 percent of parents believe that the topic of sexual orientation should be included in sexuality education programs and "discussed in a way that provide a fair and balanced presentation of the facts and different views in society."
- Eighty-eight percent of parents of junior high school students and 85 percent of parents of high school students believe information on how to use and where to get contraceptives is an appropriate topic for sexuality education programs in schools.

McKay et.al (1998) have found that "strong majority" of Canadian parents i.e.95% have approved that sexuality education should be provided in school; while the majority of them i.e. 82% are in favour of school-based sexual health education that begins in the elementary level. Vashishta and Rajshree (2012) report that parents of adolescents in UP, India have favourable attitude towards sex education.

Ram and Singh (2012) find gender differences in relation to formalization of sex education and the role of parents in imparting sex education. The implication of the study is that male and female students have different set of perception as far as formal delivery of sex education is concerned. The gender difference in relation to role of parents in sex education can be discovered due the anatomy of gender and relation of parents with their male and female children.
NCTSN (2009) have suggested that parents play a pivotal role in helping their children develop healthy attitudes and behaviour towards sexuality and have further reported that by talking openly with children about relationships, intimacy, and sexuality, parents can foster their healthy growth and development. In order to control STD/HIV in adolescents, sex education should be started in homes by parents. Sexual behaviour is formed during childhood and the right direction shown by parents is extremely important. (Rosenthal and Feldman 1999). Allen & Baber, (1992) feel that parents prove to be highly important in sex education of their children. Alexander (1984) reports that parents’ view sex education are beneficial to adolescents and want to be the primary sex educators of their children, and want schools to supplement their efforts. Young people whose parents discuss sexual health and safe sex with them have been shown to engage in less risky sexual behaviour than those whose parents do not (Holtzman & Rubinson, 1995). Peltzer and Super (2006) have explored the involvement of parents and community in life skills & sex education. Results indicate that a majority of the teachers recognized the importance of parental & community involvement.

Schmidt and Urdze (1983) on the other hand report that parental sex education is completely insufficient. The reason for this is that parental education is hampered or prevented by a generally reserved relationship between parents and adolescents, lack of parental sex knowledge and a taboo against sexual question in the parental home. Croft & Asmussen, (1992) report that parents may neglect the responsibility because they are uncomfortable with their own sexuality or are uncertain about what children need at different ages. Huston et al., (1990) and Klein & Gordon, (1992) have found that there is fear in the parents that knowledge of sexuality among adolescents would result in their premature participation in sexual behavior. They feel uncomfortable in communicating about sexuality issues, appeared to be a significant deterrent for some parents.

Alter & Wilson (1982) have identified five areas where parents need help: addressing their own conflicting feelings about sexuality, exploring their own attitudes and values, obtaining accurate information, developing their communication skills, and understanding their roles as sexuality educators.
They feel that in order to use parents in sex education the above areas need proper strategy.

**Parent–child communication**

Communication and discussion about sexual matters within the family, parental beliefs, knowledge, and values of discomfort with sexual issues convey and have impact on adolescents' attitude and behaviour (Bacon, 1999). Where parents and children do not communicate about sexual matters, this can have a negative impact on adolescent sexual behaviour; adolescents whose parents talk to them about sex are less likely to engage in risky sexual behaviour (Coleman, 1992; Welling et al., 2001). Studies highlight that parent-child communication supports adolescents' sense of self-efficacy for condom use and for communication with sexual partners about risks for sexually transmitted diseases (Blake et al., 2001; Hutchinson & Cooney, 1998). Australian research has shown that adolescent children whose parents have communicated with them about sex are more likely to delay sex than their peers whose parents have not communicated (Marie Stopes International, 2008; Moore & Rosenthal, 2006).

Gender differences have been reported concerning young people's preferences about, and experiences of, communication with their parents. Young men consider their parents an important source of information. However, compared to young women, few boys report learning mostly from their parents about sex (Ballard and Morris, 1998). Communication between parents and their sons is noted to be infrequent. For example, Nolin and Petersen (1992) have reported that only half of the boys in their study have been engaged in a conversation with their parents about sex, social issues relating to sex, or contraception. Other studies have reported that the majority of parents had never had a meaningful discussion with their sons about sex, safe sex, sex before marriage or peer pressure (King and Lorusso1997; Raffaelli et al.1998).

A US study that sought to understand boys' communication with their parents reports that, of the almost 300 college students who have been asked
retrospectively what their parents have told them about sex, nearly a quarter answered ‘nothing’ (Epstein and Ward, 2007).

Hurrelmann (1989); Klein & Gordon, (1992) report that only 13 percent of adolescents admit that their parents are the primary communication partners on the question of sexuality. Adolescents who have communicated with their parents share good relationship with them. 83 per cent girls have discussed matters regarding sexuality with their mothers. The discussion on the matters of sexuality with fathers is very low. Boys prefer outer sources like peer group, media, internet etc to gather information in the matters related to sex than parents. The mothers prove to be their daughter’s most frequent source of information. Marsman and Herold (1986) have found that most mothers support the teaching of sex education but are divided on values that should be taught. Thus the involvement of mothers is needed to make the whole programme of sex education a success. (Angelino, 1958).

The role of fathers in sexuality education with their children has not been extensively researched, but a small, qualitative study has looked specifically at this role. Fathers are characterized as frequently being puzzled, confused or concerned about their family communication about sexuality (Kirkman et. al 2002). Some fathers blame the inadequate education they had received themselves as adolescents. Kirkman et al. (2002) have suggested that puberty may disrupt father–child relationships, particularly father and daughter relationships, and that this may be due to the intrusion of sexuality, which complicates their relationships. Many fathers assign anything to do with intimacy to the female parent. Coles and Strokes (1985) have concluded that most teens find it difficult to talk about sex with their parents. "Three out of four say it's hard to talk with their fathers and 57% find their mothers tough going. 45% report that their parents teach them nothing about sex". Gender of the parent and the child has been related to sexual communication, with mothers being more likely to talk with their children about sexual topics than are fathers, and mothers being more likely to talk with daughters than with sons and fathers more likely to talk with sons than with daughters (Dilorio et al. 2003; Swain et al. 2006).
Parents who have frequent discussions about sexuality with their children while they are growing up discuss more sexual topics. The older parents report less liberal attitudes towards sexuality than younger parents (Fisher, 1988; Geasler et al 1995; Roberts et al. 1978). Hodson and Wampler (1988) report both middle class and working class parents indicate a high degree of comfort in discussing sexuality topics with their adolescent children. However, working class parents prefer mothers to provide information to the child, whereas middle class parents prefer involvement of both the parents. Alexander (1984) reports that parents are willing to become the primary sex educators of their adolescent children. They want teachers to supplement their efforts.

Geasler et al (1995) report that a number of issues concerned parents about sexuality education, which may constitute barriers to effective communication. Personal timing is seen as important to the parents. They are concerned about when is the 'right' time to provide information, and this creates discomfort about the amount of information children actually need. Others chose not to decide when such communication is appropriate, but to 'keep alert and answer questions' (Geasler et al. 1995). Other parents worry that they might give their children too much information, and many are motivated to withhold information by a desire to protect their children's innocence.

Lively & Lively (1991) argue that healthy sexuality is fostered most effectively by the parents. They suggest that children's sexuality should be promoted as a natural procedure for their development and growth. Couchenour & Chrisman (1996) assert that the role of parents should be extended to supply correct information about pubertal transition. Wilson (1991) suggests holding family orientation meeting to share materials and information about healthy sexuality development in young children. Eisenberg et al (2004) suggest that campaigns encouraging parents to talk with their teenagers about sexuality should provide parents with medically accurate information on the effectiveness, safety and usability of contraception. Thus parents can be utilized to promote wholesome attitude among adolescents.
Older Siblings' Influences on Younger Siblings' Sexuality

Researchers find that older siblings influence their younger siblings' attitudes and behaviors regarding sexuality through modeling and by serving as comparative references. Consistent with social learning theory (Bandura, 1977), researchers suggest that younger siblings may observe their older siblings' parenting behaviors and sexual permissiveness and subsequently use this knowledge as a point of reference in shaping their own behaviors and attitudes (East, 1996; East & Shi, 1997). Studies show that older siblings' sexual activities are associated with adolescents' risky sexual behaviors and less conservative attitudes about sex. In contrast with the younger siblings of virgin adolescents, the younger siblings of nonvirgin adolescents are more likely to be sexually active (Rogers & Rowe, 1988; Widmer, 1997) and to have sex at younger ages than their older siblings did (Haurin & Mott, 1990). It is estimated that adolescent girls with childbearing older sisters are more accepting of nonmarital adolescent childbearing, suggest younger ages for life course transitions (i.e., childbearing), are more likely to experience early initiation to sexual activity (East, 1996; East et al., 1993; Friede et al., 1986), have higher rates of sexual activity (East et al. 1993), and are more than two times as likely to become pregnant than girls whose sisters are not adolescent mothers (East & Shi, 1997).

Sibling Discussions About Safe Sexual Behaviors The majority of research in this area emphasizes how older siblings' attitudes and behaviors can negatively influence their younger siblings' sexual behaviors. However, some research highlights the positive role of older siblings. When older siblings believe that individuals should wait until age 17 to have sex, younger adolescent siblings are more likely to be virgins (Widmer, 1997). Further, because adolescent sibling relationships often involve emotional support and communication, when younger siblings become sexually active, they may rely on their older siblings as important sources of information about sex and birth control (Goetting, 1986; Tucker et al., 2001). Adolescents may feel more comfortable with and get more accurate information from an older sibling than...
from friends (Lamb, 1982). Similarly, adolescents may feel more comfortable asking siblings (rather than parents) about sexual issues, because they perceive their siblings to be less critical or punitive (Haurin & Mott, 1990; Lamb, 1982) or less embarrassed by such issues (Hutchinson & Cooney, 1998). Older siblings also may feel nurturing and protective of their younger brothers and sisters (Furman & Buhrmester, 1985; Goetting, 1986) and use discussions about birth control to protect them from potential harm.

**SEX EDUCATION AND TEACHERS**

There is no doubt that the single, most important aspect of the school situation in terms of influencing adolescent attitudes as well as success at school, is the teacher, who is also the most important determinant of the success or failure of a sexuality education programme (Cassell & Williams, 1989; Etsane, 1997; Van Rooyen, 1997). According to Mkumbo (2012), Teachers' attitudes towards sexuality education are among the important predictors of their willingness to teach sexuality education programmes in schools. Tijuana et al. (2004) have pointed that teachers are gatekeepers of knowledge and skills for the large majority of young people. According to UNAIDS, (2006) there is a great need for promoting awareness regarding sex with the help of teachers.

In Scotland, teachers feel they are the most appropriate source of health education for young people. There is a general recognition that ongoing professional development is needed to sustain teacher's confidence to delivering effective sex education. Outside speakers serve the purpose of updating teacher's expertise and subjecting pupils to appropriate contact with health professionals within the controlled context of a school programme (Scottish Executive, 2003).

A persistently raised question is whether teachers with certain demographic characteristics are more likely to be effective sexuality educators in public schools than others. This issue is frequently raised when there is discussion at the school district level over the introduction of sexuality education programs. Demographic variables such as age, sex, race, marital
status, number and age of children, size of residential community, years of teaching experience and religious affiliation have been studied in relation to teachers' attitudes toward sexuality education and sexuality (Greenburg, 1970; Juhasz, 1970; Rubin, 1970).

Rao and Gopal (1981) have found that a majority of the teachers favour the introduction of sex education but want that it should be introduced either in the lower classes or at the university stage. Vashishta and Raashree (2012) report that teachers of High Secondary School in UP, India strongly favour sex education for adolescents. Tashiro et al. (2011) report that the position of sexuality education in the schools in Japan has become unclear and ambiguous, but female teachers are eager to teach sex education. Onwasigwe et al. (2006) in their study in Nigeria, report that teachers show their willingness to offer sex education to adolescents irrespective of religion, sex and marital status. Some teachers opine that sex education should be taught in schools as a part of the population education programme. Reddy et al. (1979) have found that teachers in general have a favourable attitude towards the introduction of sex education. However, there is a difference in the attitudes of male and female teachers. The male teachers favour guiding only male students and female teachers prefer female students. The teacher presenting the content should be the same gender as the group of students, as this would not only enable them to feel more comfortable and dare to participate, but would also help them to identify more readily with the teacher. This is of particular importance where a parental figure is lacking: the teacher becomes the important role model and identification (Van Rooyen, 1997).

Teachers in both rural and urban districts of Tanzania support comprehensive school-based sexuality education. Furthermore, the results show that the majority of the teachers want sexuality education to begin early during primary education (ages 10-13) rather than during secondary education (ages 14 and above). Teachers support a wide range of sexuality education topics to be included in the school curriculum. This implies that teachers view school-based sexuality education not only as an important strategy for protecting young people from HIV/AIDS and other sexual health problems (diseases
prevention model), but as an important strategy for promoting healthy adolescent sexual development (Mkumbo, 2012).

There are also teachers who show an overall reluctance in teaching sex education and most termed it as a sensitive topic for teaching. A qualitative study by Kibombo et al (2008) reveals that teachers feel constrained to speak about sexual matters with their students because of cultural inhibitions, potential backlash from parents for ‘spoiling their children’ and fear of being ridiculed by their students. Singh (2006) has found that in Indian settings teachers are reluctant to teach the direct meaning of menstruation and other changes accompanying adolescence and only resort to teach physiology of reproduction and use separate classes of male and female to teach anatomy of sexual organs Maticka-Tyndale et al (2004) report that teachers have difficulties while discussing issues such as condoms, even after training. Boler et al. (2003) state that in both India and Kenya, teachers play a major role in giving young people information on HIV/AIDS. They restrict teaching only to biological aspects and leave out those that have to do with sex and relationships. Many of them are reluctant to teach this topic because they lack of knowledge and skill in providing or discussing sensitive topics (Smith et al., 2003). Teachers are also concerned about the reaction of parents and societies, because there is a norm that sexuality is not a subject to be discussed in public. Poor knowledge of teachers and attitudes towards sex discourage sex education learning (MOPH&WHO, 2003; UNESCO, 2001; Uraiwan, 2010).

A thriving sexuality education program rests on the expertise of the teachers (Haignere & Culhane 1996). Their knowledge, skills and attitudes determine whether or not adolescents will take the issue of sexuality education seriously. Teaching about sexuality can be difficult because the personal nature of the topic can arouse anxiety or create embarrassment. For this reason, a sexuality educator must possess several key characteristics, including enthusiasm for and comfort with the subject matter, a thorough knowledge of human sexuality, respect for adolescents, clarity about his or her own personal values, the ability to accept the values and beliefs of others, and good group facilitation skills (Manley, 1986).
On the basis of evaluative study in South Africa, Visser (2005) argue that the sex education programme has failed because of teachers non-commitment, poor teacher pupil relationships, negative attitudes of teacher towards 'sex'. Wight and Scott (1996) argue that there is a lack of confidence among teachers working in the area of sex education. Teachers feel embarrassed while talking about sex in class, as they lack knowledge about specific aspects and for many, it challenges their personal beliefs and values. Lenderyou and Porter (1994) argue that while imparting sex education to adolescents, teachers need to be confident and competent to handle the sensitive issues implicit within sex education. They must feel comfortable with the content and be able to discuss personal aspects and facilitate discussion in a non-threatening way for both pupils and the teacher. They further point out that teachers should teach within a moral framework without preaching or moralizing to young people. Coote (2000) argue that proper attitude of teacher is required to achieve the aim of sex education. Wight and Scott (1996) have suggested a specific teacher training before utilizing them for sex education.

Good sexuality educators possess the ability to lead discussions while not being judgmental and moralistic (Greenberg, 1989). In an environment that encourages open, communication, adolescents are able to express their feelings about sexuality and are inspired to make responsible decisions. This does not mean that controversial perspectives cannot be presented. Good teachers are able to question students to get their input about sensitive topics. Strategies used to facilitate sexuality discussion include role plays, small-group exercises, trips, whole-group discussions, interactive video games, and homework with parents (Gingiss, 1992).

It can be concluded from these studies that teachers play a significant role in the sex education to students. Their effectiveness depends largely on their characteristics and their level of training in various aspects related to sexuality.

SEX EDUCATION, CURRICULUM & TEACHING TECHNIQUES

A number of researchers have carried out studies on type of sex education to be imparted to students in the school.
Hafner (1988) states that sex education curriculum need to demonstrate effectiveness in increasing adolescents' knowledge of the cause, transmission, and prevention of AIDS. Lindberg et al (2006) have mentioned that efforts are needed to expand adolescents' access to medically accurate and comprehensive reproductive health information. They are of the opinion that only comprehensive sex education can help adolescents fully rather than abstinence—only curriculum. Sexual health advocates and educators need to focus on developing medically accurate, unbiased information sources and disseminating this information through reliable media like schools; and monitoring the quality and accuracy of available resources (Kirby et al, 2005). Mullins (2005) reports that adolescent boys and girls have different needs and these personal differences must be taken into account while designing the sex education curriculum. Iwu et al (2011) recommend comprehensive programme on sex education in the school curricula and integrate it with science because science teachers can be effective in its implementation.

Robin (2004) has suggested focusing on curriculum development, which has effectiveness of sexual risk reduction for adolescents. According to Holzner and Oetomo (2004) along with the schools, mass media can be used to impart sex education to adolescents. Croft and Asmussen (1992) report that parents especially mothers and teachers share many similar ideas of beneficial aspects, timing and content of sex education. They further recommend strengthening of collaborative efforts between parents and teachers to achieve the aims of sex education.

Landry et al (2003) have argued that the content of sex education varies from region to region and also the instructors' approach of teaching about abstinence or contraception. They have found that there is an overwhelming support among the teachers for teaching adolescents to be abstinent. In fact, almost all sex education teachers in their study presented abstinence as the only or the best option for teenagers.

The teaching techniques are seen to be helpful in achieving the goals of sex education. Barak and Fisher (2001) have reported that existing sex education programs are generally delivered via relatively passive classroom-instruction techniques.
based pedagogical techniques and are questionably effective in achieving their aims. They further state that in order to increase learner’s participation relevant materials including text, multimedia components, and links to associated internet resources should be used to achieve goals of sex education.

Kirby (2002) has suggested several school-based sexual health intervention programs to make it effective:

(a) the use of multi-dimensional, age appropriate teaching methods and culturally specific behavioral goals,

(b) effective training for the teachers,

(c) a theoretically grounded approach, including theories of social learning, social influence and/or reasoned action,

(d) a focus on reducing specific risk behaviors that lead to unintended pregnancy and HIV infection,

(e) opportunities to practice communication and negotiation skills necessary for sexual limit setting, negotiating contraception use,

(f) interactive exercises to communicate health risks and how to avoid these, and

(g) discussion and activities that address pressures related to adolescent sexual behavior.

Finally, a comprehensive school-based sexuality education that addresses the socio-cultural, biological, psychological, and spiritual dimensions should be part of the curriculum in school, and should be appropriate to the age, maturity level, cultural background, and respect the diversities of values and beliefs in the society (Low, 2009).

SEX EDUCATION AND CULTURE

The role of culture in imparting sex education to adolescents has been studied by many researchers.

Tabifor (2000) has argued that the HIV/AIDS has forced many cultures, especially African, to talk about sex even among groups where it was traditionally held as a taboo subject, such as among parents and their
children, teachers and pupils and people of opposite sexes. Rabenoro (2004) has conducted a study in Bestimisaraka region of Madagascar. ‘Sex’ is a taboo, and this cultural trait affects the sexuality education offered in schools. Sex education is widely considered “useless” partly because many drop out before joining the upper classes where it is taught. Teachers in such a cultural background are unwilling to cover sexuality topics within the classroom freely. Alexander (1984) reports that parents of adolescent want diverse topics of sex education to be covered by the schools and these should be introduced not later than 9th grade. However Indian parents show reluctance for the provision of sex education. Thus culture in which parents are living influences their opinion about introduction of sex education. Wright (2005) states that religious and cultural taboos exert a powerful influence on sexual attitudes or behaviours and on the discourse about sex education. Tashiro et.al.(2011) report that the conservative elements in Japanese society find sexuality education as bad, because they relate it with pornography.

There were some cultural groups in which informal groups used to provide informal sex education to adolescents. Elwin (1947) in his study of a few Indian tribes in central India during 1930s and 1940s has given detailed descriptions of premarital sexual activity among them. For example, his description of institutionalized premarital relationships among the Muria Gonds indicates that almost all adolescent boys and girls of that tribe had premarital sexual relations in village dormitories known as ghotul, where all of them usually spent their nights. Similarly Biswas (1956) and Mukherjee (1962) have reported that in Bihar and Orissa, there is a permissive attitude towards premarital sex in tribe named Santal. According to Bhagat (2004) there is a social taboo surrounding sex education in modern India. Nag (1995) advocates abstinence only sex education in India and reports that comprehensive sex education is more compatible with Indian culture.

The acceptability of the phrase “sexuality education” in Malaysian cultural and religious context is debatable given the taboos associated with it. In Malaysian context, sexuality education is predicted to be most attuned with their learning preferences and cultural environment, which include single-sex classes, teachers of the same sex, teachers who are particularly well-trained
in effective conveying of sex education, and opportunities for peer-education activities that involve problem-solving and interactive styles of learning (Bennett, 2007). There is also general consensus among Muslim teachers and parents that sex education should be commensurate with age, maturity and physical development (Bennett, 2007). In addition, there is a prevalent concern that the images and material used in sex education should respect religious notions of modesty by illustrating human bodies and reproductive physiology in a way that does not comprise crude or personalized images (Sanjakdar, 2004).

EVALUATION OF SEX EDUCATION PROGRAMME

Health promotion model has been employed for advocating sex education in schools (Scales, 1986) but social context has changed so much that there is a paradigm shift in thinking about sex education. All over the world there is numerous sex education courses conducted for adolescents and there exists several well-planned sex education curriculum guides. However, there is a paucity of information or data concerning objective evaluation of sex education programs.

Parcel and Luttmann (1981) have tried to evaluate the effects of sex education among adolescents. They find that brief sex education intervention does increase adolescents understanding of sex related information. However, a change in knowledge does not lead to a change in other outcomes such as reduction in guilt or worry associated with sexuality among adolescents. Kirby et al. (2005) report on the basis of evaluation of HIV education programs on sexual behavior of youth in both developing and developed countries that sex education helps adolescents in making them more informed about sexual matters.

According to Currie et al. (1997) a majority of the young people show the attitudinal change with early inception of sex education. Frederick et al. (1969) have studied the change in attitudes of professional persons who are enrolled in a sex education institute. It has been found that professionals show increase in liberal attitude towards sex education after their enrolment in sex education institute.
In the US comprehensive, reality-based education has not been widely implemented. Evaluations of the effectiveness of sexuality education is based on efforts that has been half hearted at best (Planned Parenthood, 2001). Knowledge alone is not enough to change behaviour. Programmes that have relied mainly on conveying information about sex or moral precepts—how the body's sexual system functions, what teens should and shouldn't do—has failed. However, programmes that focuses on helping teenagers to change their behaviour using role playing, games, and exercises that strengthen social skills has shown signs of success (Avert Organisation, 2001; Baer, 2003; Willenz, 2005).

In 2001 Kirby has reviewed research on a wide range of programmes, including curriculum based sexuality and abstinence education for teens and pre-teens, sex education for parents, contraceptive and family planning clinics and programmes, early childhood programmes, youth development and service learning programmes, and community based, multiple-component initiatives. According to him current evidence about the success of these programmes is inconclusive. This is due, in part, to the very limited number of high-quality evaluations of abstinence-only programmes available and because the few studies that have been completed do not reflect the great diversity of abstinence only programmes currently offered. However, the early evidence about abstinence-only programmes is not encouraging (SIECUS, 2005).

Rashid (2000) has found that sex education helps to break the silence and shame about 'sensitive' topics, and has thus affected relationships between adolescents and their parents, and among adolescents themselves. It has also reported that with the increasing exposure of adolescents to outside influences, a large number of the mothers worry that they are unable to control their adolescent boys and girls, and feel that 'life skills' and 'health education' are important for their children. Some are of the opinion that providing sexuality information about reproductive health will encourage promiscuous behaviour, most have accepted the need for it.
Despite their increasing numbers, few of the sexuality education and pregnancy prevention programmes in developing countries have been evaluated. An evaluation study of the Sex Education Programme in Jamaica has been conducted in 1995-1997, to assess its impact. The project shows no effect on initiation of sexual activity, but it has a positive short-term impact on use of contraception at first intercourse. Adolescents in the intervention group are more than twice as likely to use contraception. The project also has a positive short-term influence on several aspects of the adolescents' knowledge of and attitudes about sexuality and pregnancy. (Publica, 2000).

Subsidised by the Dutch government, the "Lang leve de liefde" ("Long Live Love") package, developed in the late 1980s, aimed to give teenagers the skills to take their own decisions regarding health and sexuality. Nearly all secondary schools provide sex education. The media encourages open dialogue and the health-care system guarantees confidentiality and a nonjudgmental approach (Wikipedia, 2006).

According to the review commission by the WHO in 1993, there is no support for the contention that sexuality education encourages sexual experimentation or increases activity. After analyzing more than 1,000 reports on, sexuality education programmes worldwide, it has been concluded that the course does not lead to earlier sexual intercourse rather, in many cases the result is a delay in the initiation of sexual activity. This is because the content of these courses is largely about providing factual information and skills building; skills that equip children to take responsible decisions about their future (SIECUS, 2000).

Inconsistency in results of evaluations of sex education programs is not surprising, given the heterogeneity of researched initiatives. Inconsistent results among existing studies suggest that work remains to be done to determine which components of sex education are most effective in promoting healthy sexual behavior (Jacobs & Wolf, 1995).

NEGATING SEX EDUCATION

A large number of studies have focused on negative attributes of sex education. The main opposition to sex education is from conservative group
leaders. In Indian context it is deemed as anti-cultural. Mahoney (1979) reports that adherence to traditional premarital sexual norms is an important factor for distinguishing pro- and anti-sex education individuals. Subjects who feel that sex education threatens the traditional sex role norms and sexual values are more likely to oppose sex education. According to Moran (2002) even sex educators fear that their teachings may arouse precocious sexual behaviour. Aggleton and Crewe (2005) argue that teaching about sexuality leads to ‘experimentation’. Spanier (2007) argues that even when youth have informal sex education, there are indications that pressures and experiences confronting young people in a given dating or peer group situation take precedence over all past sexual socialization influences. With the widespread availability of information, the influence of the media and the breakdown of traditional family structures, sexual behaviour among adolescents may be described as being in a state of flux.

Anandhi (2007) cites the case of India where many States have banned sex education in schools on the ground that it corrupts the youth and is against Indian cultural values. The Government of Maharashtra has decided to ban sex education not only in state-run schools but also in schools that come under the CBSE because sex education offends “Indian values”.

Lahoti (2007) takes the case of Switzerland where about 80 teachers of a school developed sexual relations with their students. He is of the opinion that sex education should be boycotted as it pollutes the minds of adolescents. Namani (2007) has mentioned that school teachers feel embarrassed while discussing sex related matters. She further states that it is socially and scientifically wrong to display the vulgar pictures of human body in classes.

GAPS IN THE LITERATURE

The review of literature aimed to have an overview on the studies regarding issues concerning pubertal transitions, sex education and sex education policy. The studies on socialization of adolescents, various aspects related to the stage of adolescence and vulnerability of adolescents were included in the review of literature. From the above review of literature, it can
be deduced that the number of studies were mainly centered on the biological, medical and psychological aspects of adolescence. There was dearth of literature on the factors influencing the knowledge of adolescents about their pubertal transitions, social aspects of adolescence, elements resulting in the escalation of vulnerability among adolescents and new patterns of socialization among adolescents.

In case of sex education the majority of literature is found to be focused around the validation or invalidation of its inception in school curriculum. There are number of studies which point towards the utilization of sex education for adolescents.

Most of the studies on sex education find it as a tool to control spread of HIV/AIDS among adolescents. The cultural confrontation with sex education is also touched in number of studies. It is clear from the review of literature that the issue of sex education is more widely discussed in developed countries than in developing countries. There is paucity of literature on this topic in developing nations. There were very few studies on the varied aspects of sex education policy and the apparent cause for this is that the policy of sex education is in infancy.

Not much attention has been given to collectively interpret the perceptions of adolescents, their teachers and parents regarding sex education. The present research has focused on all parties concerned on sex education namely adolescents, their teachers and parents. It is believed that parents and teachers are more near to adolescents and are functional ends of sex education i.e. they are entrusted to impart sex education. It is assumed that for successful implementation of sex education programme the adroit utilization of teachers and parents is vital. Through present study an attempt has been made to fill in the gap in the existing literature.

THEORETICAL FRAMEWORK

The theoretical framework seeks to address both the functional knowledge related to sexuality and the specific skills necessary to adopt healthy behaviors and reflect the tenets of social learning theory, social cognitive theory and the social ecological model of prevention. Behavior
change is generally complex; there are countless influential factors that influence group and individual behaviors. Theoretical framework is important because it identifies patterns and causal relationships among beliefs, attitudes, and actions. An established framework is necessary to develop and implement interventions that promote behavior change. Theories help explain behaviors and behavior change at the individual, interpersonal, community, and ecological levels.

**Social learning theory**, recognizes that learning occurs not merely within the learner but also in a particular social context. Social Learning theory has been applied to sexuality education. Humans learn most of their behavior from observing others. We watch how another person (the model) behaves, and make note of the consequences of those behaviors. We then decide if we're going to reproduce those behaviors, based on the outcomes that we see, the regard that we have for the model, and our sense of self-efficacy. It is possible for a person to learn a behavior, but still not be motivated to replicate it. (Bandura, 1966). Social norms develop when behaviors are continuously reinforced through many social interactions, especially when individuals who are considered role models promote the behavior, and then the behaviors are replicated. This theory informs many social learning activities, from classroom education to mentoring programs to television commercials. Social learning can reinforce prosocial or antisocial behaviors. Since Social Learning theory aims to change behavior in participants, it is a good fit for prevention-based sexuality programs — for example, those that aim to prevent pregnancy by preventing sexual involvement or increasing condom use — as opposed to more comprehensive family life programs. Social Learning Theory is a particularly good fit for pregnancy, STI and HIV prevention programs because:

- Sexual behavior is influenced by personal knowledge, skills, attitudes, interpersonal relationships, and environmental influences. All of these factors are addressed in SLT.
- Adolescents receive few, if any, positive models for healthy sexual behavior. Modeling positive and healthy sexuality-related behavior to youth is extremely important. Because sexual behaviors often happen
in private settings, much of what adolescents observe modeled about sex takes place on TV and in movies, popular music and magazines. The majority of this modeled behavior — early sexual activity, violence combined with sex, no mention of protection, no discussions about risks — is counter to what family life educators are trying to teach youth.

• It provides youth with behavioral skills practice. Adolescents actually practice the skills — for example, saying "no" to pressure to have sex, or putting on a condom — that they will use in their real lives. In the area of sexuality, teens often do not get a chance to "practice" these prevention skills before they are in the actual situations where they need them. Teaching adolescents specific behavioral skills is crucial in an effective prevention program. Unfortunately, many sexuality programs over emphasize cognitive learning and fail to address the behavioral aspects of becoming and staying sexually healthy.

In addition to social learning theory, social cognitive theory is also important to explain Sexuality Education. Like social learning theory, social cognitive theory emphasizes self-efficacy, but adds in the motivation of the learners and an emphasis on the affective or emotional learning domain, an invaluable component of learning about human sexuality (Bandura, 1989). Social Cognitive Theory asserts that providing information alone is not sufficient to change behavior, rather sustained behavior change requires the skills to engage in the behavior and the ability to use these skills consistently and under difficult circumstances. It posits that behavior change requires four components:

1. An informational component to increase awareness and knowledge of health risk and to convince people that they can change their behavior (educating people about HIV and showing them they can change).
2. A component to develop the self-control and risk-reduction skills needed to prevent the behavior (showing people what their risks are and how they can change them).
3. A component to increase an individual's self-efficacy in implementing these behaviors (specific efforts to show people how to use condoms, how to negotiate safer sex, how to say "no").

4. A component to build social support for the individual as s/he engages in the new behaviors (support groups).

Finally, the social ecological model of prevention also informed the development of these standards (Glanz and Rimer, 1997; McLeroy et al. 1988). This model focuses on individual, interpersonal, community and society influences and the role of these influences on people over time. Developmentally, the core content and skills in early years of individual focus on their immediate surroundings (e.g., their family). At the middle and high school levels, core content and skills focus on the expanding world of adolescents that includes their friends and other peers, the media, society and cultural influences. Behavior change is generally complex; there are countless influential factors that influence group and individual behaviors. Social ecological model is important because it identifies patterns and causal relationships among beliefs, attitudes, and actions. An established framework is necessary to develop and implement interventions that promote behavior change. Theories help explain behaviors and behavior change at the individual, interpersonal, community, and ecological levels.

The social ecological model helps to understand factors affecting behavior and also provides guidance for developing successful programs through social environments. The socio-ecological approach recognizes that an individual's decisions and behaviors result from interactions with his/her social and physical surroundings. In addition to an individual's own knowledge, ideas, and beliefs about our behavior, each person is influenced to some extent by the people, institutions, and society around him or her. Individuals can make the personal decision to change a behavior, but they are more likely to be able to sustain a change if interventions take place at all of these levels, which are described in more detail below.

The Social-Ecological Model
Intrapersonal An individual’s knowledge, attitudes, and skills that influence personal behavior.

Interpersonal The influence of other individuals’ knowledge, attitudes, skills, and behaviors on an individual.

Institutional The influence of an organization’s culture, policies, and practice on individual behavior.

Community Social norms in a community influence behavior.

Societal Societal expectations, including public policy, have a strong yet diffuse pull on behavior.

Effective interventions incorporate all five levels of the model, so that positive behaviors are reinforced in multiple contexts.

In the present research "multiple level approach" was adopted to study the views of different parties within the secondary schools in the Sangrur tehsil i.e adolescents, teachers and parents. The aim was to present the holistic picture about sexuality and sex education for adolescents. It helped to examine the views of adolescents, parents and teachers about sex education.

OBJECTIVES OF THE STUDY

1. To study the demographic and socio-economic profile of adolescents, their parents and teachers.

2. To discuss the issues and problems of pubertal transitions and explore different channels of information used by adolescents and perceived by their parents and teachers.

3. To explore the preferred content and context of sex education according to adolescents, their teachers & parents and difference in their approaches.

4. To find out the role of different precipitating factors influencing the perception of adolescents, parents and teachers regarding sex education in schools.
5. To highlight the functional and dysfunctional aspects of sex education as perceived by adolescents, teachers and parents with the aim of suggesting policy recommendation.

6. To examine the existing programme on sex education in the State and draw suggestions for future sex education programme.

Research Questions

1. Does the socio-economic status (sex, caste, age, income etc.) interfere with the perceptions of parents and teachers about inception of sex education in schools?

2. Does the age of adolescents influence sex education as viewed by respondents?

3. Does the sex of adolescents influence sex education as viewed by respondents?

4. What are the sources from where adolescents presently receive sex education or information about sex?

5. What is the role of parents and teachers at present in imparting sex education to adolescents?

6. What are the functions and dysfunctions of sex education according to parents, teachers and adolescents?

METHODOLOGY

Research is an objective, impartial, empirical, logical analysis, and recording of observation. It is a systematic attempt to obtain answers of meaningful questions about a phenomenon or event through the application of scientific procedures. Thus, for the logical analysis of the problems, an appropriate methodology and procedure are required.

Rationale and Locale for present research:

The present study attempts to highlight the issue of pubertal transitions and the perception of adolescents, their parents and teachers on imparting sex education through sociological perspective. It is a fact that changes in society and educational structure go hand in hand. All societies are changing
and these changes must be synchronized with the changes in family and educational system. In modern times there is greater onus on schools to socialize children. The shrinking role of family adds more concern about education in schools. As our Indian society, is in transitional stage we need to update our functioning of educational system. Sex education is some-what more contentious issue in our society than in western world. Modern society is continuously threatened from growing problems directly related to flawed sexual behavior in our adolescents. It reflects that there is some flaw in our education system. Other problems like AIDS and wrong sex behavior of adolescents is also haunting our society. Social concerns such as adolescent pregnancy, vulnerability and spread of STD among adolescents have forced both parents and teachers to think seriously on sex education. It is believed that the sex education can help us in this area. The views of adolescents on sex education would help us to understand their problems of sexuality and their stand with regard to sex education. The perception of adolescents would help us to understand their knowledge deficit about sexuality and their vulnerability. The inputs from adolescents, parents and teachers would be useful for grasping sex education in holistic manner. Sociological analysis of perception of teachers, adolescents and their parents about sex education would add vital inputs to the solution. The views of parents and teachers are highly valuable because they are genuinely responsible and worried about right kind of socialization of adolescents. The teachers and parents know the gravity of problem arousing from mal-learning during puberty among their children.

For the present study the selected locale is Sangrur district of Punjab. The word “Punjab” is made up of two Persian words ‘Panj’ and ‘Aab’. Panj means five and Aab means water. This name was probably given to this land because this region has close contacts with Persia. Punjab was known to be the ‘land of five rivers’ because five rivers ran through it. It is bordered by Pakistan on the west, the states of Jammu and Kashmir on the north, Himachal Pradesh and Haryana on the east and Rajasthan on the south. Presently Punjab has 20 districts and has three major regions i.e. ‘Malwa’ ‘Majha’ and ‘Doaba’.
Sangrur is in the Southern part of Punjab and it is one of the old districts of Punjab. It lies in Malwa region of Punjab. According to Census (2011), the percentage literacy rate in the district is 74.2 percent among males, 62.9 percent in among females and 68.9 percent overall. The sex ratio of Sangrur district is 883 females per 1000 males and 835 females per 1000 (0-6 years of age). Presently it has five tehsils viz – Sangrur, Malerkotla, Sunam, Dhuri, Moonak. Sangrur tehsil consists of two blocks Sangrur and Bhawanigarh. Sangrur is main city of Sangrur tehsil. The main towns in Sangrur tehsil are Sangrur, Bhawanigarh and Longowal. All the main administrative offices are in Sangrur city.

The total number of schools in the district of Sangrur is 199 Middle Schools, 173 High Schools and 110 Senior Secondary School in both rural and urban areas. The logic behind the selection of Sangrur district is that nearly no work has been done in this field in this area. For the present study Sangrur tehsil is selected. The reason for selection of Sangrur is that it represents one of the less developed districts of Punjab. Sangrur is at 15th number in literacy rate among all the districts of Punjab and the society here is mostly agrarian. Most of the studies on adolescent sexuality have been done in industrialized metros like Delhi, Kolkata etc. The study of Sangrur tehsil provided us with vital inputs on pubertal concerns of rural adolescents, teachers and parents about sex education from a less developed district. Moreover, Times of India (2006) has reported that in Sangrur, there is 37 percent rise in drug addiction among adolescents in one year. In the last five years Sangrur has shown an upward trend in HIV cases. In the year 2007 (The Tribune, 2 Dec) has reported 100 cases of HIV positive from Sangrur district in the period of only ten months. Such changes foster the researcher to ponder over the issues of sex education. It is clearly implied from the reports that the population in general and particularly of adolescents is under threat from this dreaded disease. Moreover there are very few studies which touch all three parties involved in sex education, viz, adolescent, parents and teachers. The present study attempts to see the views of adolescents, parents and teachers in sex education in a holistic manner from a less developed district of Punjab.
Design of the Study

A research design is a plan and strategy of investigation conceived so as to obtain answers to the research question and choice of research design depends upon the objectives of the study that one is going to analyze.

In the present study, an attempt was made to study the perception of adolescents, parents and teachers about Adolescent Sexuality and Sex Education. For the present study research design is descriptive in nature. A descriptive research is one which describes, records, analyses and interprets the conditions that exist. Descriptive research design helps to relate the studies conducted by various researchers and to see whether they are applicable or helpful in the present scenario.

Unit of analysis

In the present study unit of analysis were adolescents studying in the classes IX to XI and their teachers and parents. The age group of 15-17 years was earmarked for the present study. The perceptions of adolescents, teachers and parents were analyzed in this study.

Universe

The universe for the present study was the entire population of adolescents studying in classes IX -XI and their parents and teachers in district Sangrur. Since it was not feasible to go to all the Government Senior Secondary schools of Sangrur district, only schools situated in Sangrur tehsil were selected for the present research. While selecting the sample size it has been kept in mind that sample size should be sufficiently large to enable us to arrive at satisfactory conclusions and at the same time it should be sufficiently small as is manageable by a single researcher.

Sampling for Schools

A preliminary survey was conducted by the researcher by visiting the district. In this context researcher met D.E.O (District Education Officer) and District Science Supervisor to assess the ground for the research. The list containing number and name of school was procured by the researcher from District Education Office for the purpose of research. The list contained tehsil wise schools. The research work was done in Sangrur tehsil. From the list
procured from the D.E.O office it was noted that there are 21 Government senior secondary schools in Sangrur tehsil (15 rural and 6 urban in two Blocks). It was decided to focus the study only to senior secondary schools, so that responses of adolescents in the age group of 14-18 years from IX –XI classes from these schools could be procured. It was decided to take 50percent of total senior secondary schools. Thus 10 senior secondary schools were selected on the basis of random sampling. The average number of students from classes IX –XI is approximately 150 in Senior Secondary Schools.

**Sampling for Adolescents**

From each selected school, six adolescents were contacted for the present research. An attempt was made to give equal representation to both male and female adolescents, in the 50:50 ratio of male and female adolescents. Two adolescents (one male and one female) were selected from each class on random basis. As number of classes were three (IX –XI) thus, six adolescents from one school were included. In all 60 adolescents were included in the sample under study.

**Sampling of Parents**

The parents of the selected adolescent students were contacted. In the case of female adolescents, their mothers were included in the study and in case of male adolescents, their fathers were interviewed. Thus six parents were contacted from each school. In all 60 parents were interviewed.

**Sampling for Teachers**

From each selected school six teachers were selected through random sampling. Only those teachers who were teaching class IX to XI were selected for interview. Two teachers (one male and one female) were selected from each class on random basis. An attempt was made to give equal representation to both male and female teachers. There were 30 male and 30 female teachers. Thus total 60 teachers from 10 schools were included in the sample.

Following table describes the sampling of adolescents, parents and teachers.
Table: 1 Distribution showing number of schools, adolescents their parents and teachers in the sample

<table>
<thead>
<tr>
<th>Name of Tehsil - SANGRUR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of selected Senior Secondary Schools – 10</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Number of Respondents</th>
<th>Sex of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
</tr>
<tr>
<td>Adolescents</td>
<td>30</td>
</tr>
<tr>
<td>Parents</td>
<td>30</td>
</tr>
<tr>
<td>Teachers</td>
<td>30</td>
</tr>
<tr>
<td>Total</td>
<td>90</td>
</tr>
</tbody>
</table>

**Technique of data collection**

There are different techniques of data collection in social sciences and to ensure the reliability of data, suitable tools have to be devised. For the present study interview schedule was used for collecting information from adolescents, their parents and teachers. Through interview schedules an attempt was be made to collect information about pubertal concerns, content of sex education and functional or dysfunctional aspects of sex education. Three different interview schedules were constructed for adolescents, their parents and teachers. Following is the brief introduction to the three interview schedules:

1) Adolescents: The interview schedule of adolescents was mainly divided into two parts. The first part focused on the profile of adolescents and the second part contained questions that assessed the problems of adolescents due to onset of puberty, various information channels used by adolescents, perception of adolescents about the significance and content of sex education. There were a few questions related to menstruation that were exclusively for adolescent girls. (for details see Appendix-1)
2) Parents: The interview schedule of parents was also divided into two parts. First part dealt with socio-economic profile of the parents and second part contained questions that studied the perception of the parents about various problems faced by adolescents due to onset of pubertal transitions, various information channels used by adolescents, the significance and content of sex education and various functional and dysfunctional aspects of sex education. (for details see Appendix-2)

3) Teachers: The third interview schedule was used for teachers and it comprised of three parts. First part dealt with socio-economic profile of teachers and second part contained questions that aimed to gather the perception of teachers on various problems of adolescents due to onset of pubertal transitions. It also consisted of questions that procured information on sources used by adolescents for procuring information on sexuality, the significance and content of sex education, functional and dysfunctional aspects of sex education as perceived by teachers. The third part of interview schedule was exclusively for nodal teachers and contained questions regarding AEP. (for details see Appendix-3)

Tabulation and analysis of data

After collecting the data, using code design, simple frequency tables and cross tables were made. Collected data was coded and analyzed using SPSS(Statistical Package for Social Sciences). Statistical analysis was done to arrive at some conclusions. As the present study was descriptive in nature chi-square and Fisher exact test was used.

The present study is presented in the form of following chapter to describe the findings of the present study.

CHAPTER SCHEME

CHAPTER: 1-INTRODUCTION

The first chapter has outlined the issues faced by adolescents and the need of sex education. The sex education programme run in different countries
and adolescent education programme of India was discussed. Review of literature included both studies supporting and negating sex education. The gaps in literature, and theoretical frameworks used i.e. Social learning theory, social cognitive theory and social ecological model were described. Further, methodology adopted to carry out the research, objectives and research questions, locale of the study, sample, tools and techniques of data collection have been discussed in this chapter.

CHAPTER: 2-SOCIO-ECONOMIC PROFILE OF THE RESPONDENTS

The 2nd chapter of the present study dealt with the socio economic profile of the respondents. This chapter was divided into three main sections. The first section of the chapter focused on adolescents. The adolescents studying in class 9th, 10th and 11th were the respondents for present study. The second section of the chapter highlighted the socio-economic profile of the parents of the adolescents selected for the study. Fathers of male adolescents and mothers of female adolescents were interviewed. The third section focused on the socio-economic profile of teachers. Both male and female teachers in equal proportion were included in this section.

CHAPTER: 3 PERCEPTION OF ADOLESCENTS REGARDING ADOLESCENT SEXUALITY AND SEX EDUCATION

The third chapter discussed the perception of the adolescents on various pubertal issues and sexuality. The pubertal transitions, type and time of pubertal changes, consequences of improper pubertal transitions, coping mechanisms and dilemmas associated with puberty among adolescents were included in this chapter. The influence of sexual maturation on social relations of adolescents was also examined in this chapter. The awareness of adolescents about various mode of spread of HIV/AIDS was included in this chapter. The significance and content of sex education was analyzed according to age and gender of the adolescents.
CHAPTER: 4 PERCEPTION OF PARENTS REGARDING ADOLESCENT SEXUALITY AND SEX EDUCATION

The fourth chapter included the perceptions of the parents regarding adolescent sexuality and sex education. The views of parents about pubertal transitions, behavioural change, and vulnerability of adolescents, information agencies on sexuality concerns and most reliable information agency for imparting information to adolescents were discussed in this chapter. The knowledge of parents about AIDS and usefulness of contraceptives for adolescents were also discussed. The perception of the parents about significance and content of sex education was analyzed according to their education, occupation and income. The functional and dysfunctional aspects of sex education as perceived by parents were also discussed.

CHAPTER: 5- PERCEPTION OF TEACHERS REGARDING ADOLESCENT SEXUALITY AND SEX EDUCATION

The fifth chapter assessed the perception of the teachers about adolescent sexuality and nature of sex education in schools. The perception of teachers about the most significant pubertal change, behavioural transitions among adolescents, class-room problems and reasons for monitoring the activities of adolescents and various information channels of sexual/pubertal information of adolescents was discussed in this chapter. The present chapter further highlighted the knowledge of teachers about HIV/AIDS and their views on comprehensive sex education. The perception of the teachers about significance, content and functional/dysfunctional aspects of sex education was also recorded. The opinion of nodal teachers about various aspects of AEP was discussed in this chapter.

CHAPTER: 6 SEX EDUCATION PROGRAMME AND SUGGESTIONS FOR FUTURE IMPROVEMENT

The sixth chapter was an overview of sex education programme. It included description and critical evaluation of Adolescent Education Programme (AEP). Further an attempt has been made to give suggestions
about sex education programme keeping in mind the perceptions of the respondents and the insights of researcher. Additionally an attempt has been made to enlist various factors affecting the efficacy of sex education programme.

CHAPTER: 7 SUMMARY AND CONCLUSION

This chapter provided an overview of the findings of the study. The summary of the present study was divided into the four sections keeping in mind the objectives of the study. The main findings were discussed in general and in relation to the other research studies with reference to theoretical framework. Limitations were highlighted and possible directions for future research and concluding comments were provided.

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