CHAPTER VII
SUMMARY AND CONCLUSION

Adolescence is a transitional period from childhood to adulthood. Furthermore, adolescence is a time of self discovery and physical as well as cognitive development. Feldman and Middleman (2002) assert that it is within this context that adolescent sexual development and sexual behaviour occur. While curiosity and experimentation are normal, sexual behaviour place adolescents at risk for undesirable consequences including pregnancy and sexually transmitted diseases. Hoffman & Futtermann (1996) have noted that adults often hold ambivalent attitudes towards young people, viewing them simultaneously as ‘small’ adults and as immature inexperienced and untrustworthy children. They have also noted that many adults also have difficulty acknowledging adolescents as sexual beings, and therefore adolescent sexuality is viewed as something that must be controlled and restrained.

Despite the potential advantages of parent-adolescent communication, many parents worldwide are reported to be uncomfortable talking about issues related to sexuality, especially with their children (UNDP, 2002). In India parent-adolescent discussions on sexuality are dictated by socio-cultural orientation. Conversely, the traditional channels of sex education, traditional practices and social norms that have been hailed for moulding adolescent sexual behaviour are diminishing due to changing lifestyles.

Sex education is somewhat more contentious issue in Indian society than in western world. NACO (2006) has reported that in India people in the age group of 15-29 years account for 34 % of AIDS burden. This clearly indicates that young people are at high risk of getting HIV infection. It further indicates that 73 % of adolescents have misconceptions about modes of HIV transmission and tendency to experiment. Considering the vulnerability of the adolescents particularly to HIV infection, and the role of communication in promoting healthy behaviour, there is a need to understand the factors and processes that constrain and/or enhance communication and dialogue on
sexuality among young people and their parents and teachers in a developing world like India. It is believed that perception of adolescents, teachers and parents on sex education will add vital inputs to the solution. By studying issues pertaining to sexuality of adolescents their needs regarding sex education can be understood in 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.

The present study was mainly centered on perception of adolescents, their parents and teachers on the pubertal concerns of adolescents and sex education programme. The present research was designed to focus 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.

The objectives of the present study were:

- To study the demographic and socio-economic profile of adolescents, their parents and teachers.
- 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.
- To explore the preferred content and significance of sex education according to adolescents, their teachers & parents and difference in their approaches.
- To find out the role of different precipitating factors influencing the perception of adolescents, parents and teachers regarding sex education in schools (rural-urban background, Age, Sex, Caste, socio-economic status etc.).
To highlight the functional and dysfunctional aspects of sex education as perceived by adolescents, teachers and parents with the aim of suggesting policy recommendation.

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

For the present study the selected locale was Sangrur district of Punjab. 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. The research design for the present study was descriptive in nature. The units of analysis were adolescents in the age group of 14-18 years studying in the classes IX to XI and their teachers and parents. Out of 21 Government Senior Secondary schools in Sangrur tehsil (15 rural and 6 urban in two Blocks), only 50% of total senior secondary schools were selected. Total 10 senior secondary schools were selected on the basis of random sampling. 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, i.e by having 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 are three (IX –XI) thus, six adolescents from one school were included. In all 60 adolescents were studied. 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. From each selected school six teachers who were teaching class IX to XI were selected through random sampling. Two teachers (one male and one female) were selected from each class on random basis. The total number of teachers was 60 from 10 schools.

SUMMARY OF THE RESULTS

Results presented in the six chapters are summarized below:

“The First Chapter” of the study outlines the general introduction of adolescents, overview of sex education, sex education in different countries,
adolescent education programme in India, review of literature including both studies supporting and negating sex education and gaps in literature. The present study was mainly centered on perception of adolescents, their parents and teachers on the pubertal concerns of adolescents and sex education. Thus pubertal transitions, channels of information on pubertal changes or sexuality, sex education and contemporary sex education policy were the main areas of concern for the present study. The review of literature was done in order to cover all major elements related with the problem of study viz- male-female difference, factors influencing socialization of adolescents, difference of order of birth on adolescents, adolescence as a stage and its concerns, pubertal transitions and its consequences, information channels about puberty and sexuality, 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.

In the present research "multiple level approaches" was adopted. Behavior change is generally complex; there are countless influential factors that influence group and individual behaviors. 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. 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 explain sexuality education. In addition to social learning theory, social cognitive theory was also found to be quite important to explain Sexuality Education. Social cognitive theory emphasizes the affective or emotional learning domain, an invaluable component of learning about human sexuality. Social ecological model is also seen as useful in the present study. The social ecological model helps to understand factors affecting individual behavior and also provides guidance in developing successful programs through social environments.

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. There were total of 180 respondents in the present study.

One of the objectives of the present study was to understand the profile of the respondents. Thus "Second Chapter" dealt with the socio economic profile of the respondents. The chapter has been divided into three main sections i.e. adolescents, parents of adolescents and teachers.

There were 30 male adolescent students and 30 female adolescent students included in the study. There were 10 male and 15 female adolescents in the age group of up to 15 years, 18 male and 12 female adolescents were in the age group of 15-17 years and 2 male and 3 female adolescents were in age group of more than 17 years. The failure rate in a particular class was less for female adolescents resulted in lower age of female adolescents. Thus there were more male adolescents of higher age than female adolescents. The adolescents from class 9th, 10th and 11th were included. There was equal distribution i.e. 33.3% of both male and female adolescents in all the three classes. These three ascending levels of classes were taken to assess the perception and gradual transformation of attitude among adolescents towards pubertal transitions and sex education. There were 86.7% of male adolescents and 76.7% of female adolescents who hailed from rural background. A few adolescents from urban areas were also attending these schools due to their proximity to the cities. There were 43.3% of male adolescents who had both brother(s) and sister(s). In case of female adolescents, 53.3% of them had only brother(s) as siblings. There was no case of female adolescent having only sister(s) as sibling. Results show that there was male preferred attitude among families of adolescents. There were 70% siblings of the female adolescents and 50% siblings of male adolescents who were students and attending the school. The educational exposure of adolescents and their siblings was similar as most of the adolescent respondents and their siblings were school going. There were 36.7% of the male adolescents who were second born while 53.3% of female adolescents were first born adolescents. It was important to note that only male adolescents were at 4th and 5th born position and there was no female
adolescent at these last positions. The reason can be the desire for one or more male child in the families of respondents.

The socio-economic profile of the parents of the male and the female adolescents is elaborated in the second section. There were 70% fathers of the male adolescents and 46.7% mothers of the female adolescents in the age group of 45-55 years. Average age of the fathers was higher than that of the mothers. There were 93.3% of the mothers of the female adolescents who were married, while all the fathers of the male adolescents were married. There were two cases in which mothers of the female adolescents were widows. There were 73.3% of the mothers of the female adolescents who were married at the age of 15-20 years. There were 50% of the fathers of the male adolescents who got married at the age of 20-25 years while 33.3% of them were married between the ages of 15-20 years. In case of the male adolescents a large number of mothers were illiterate. There were 60% of the fathers of the male adolescents who had educational qualification up to high school. There were 50% of the mothers of the female adolescents who had education up to high school. There were 26.7% of mothers who were illiterate, while 10% fathers were illiterate in the sample under study. A majority of the mothers of the male adolescents i.e. 90% were housewives/not working. There were 13.3% fathers of the male adolescents who were labourers, 26.7% of them were farmers, 23.3% of them were engaged in private jobs and 26.7% fathers were running their own small business. A majority of the mothers of the female adolescents i.e. 66.7% were housewives or not working. In case of fathers of the female adolescents, 30% of them were engaged in Government jobs while 26.7% of them had their own small business, 13.3% of them were engaged in farming. Findings show that Parents of the female adolescents had comparatively higher occupational status than parents of the male adolescents. Caste background shows that 46.7% parents of the male adolescents belonged to middle caste and 43.3% of them belonged to the lower caste. In case of parents of the female adolescents 53.3% of parents were from middle caste background and 33.3% of parents belonged to the lower caste. There were a few parents who belonged to upper caste. Religious profile shows that there were 70%
parents of the male adolescents and 63.3% of the parents of the female adolescents who were Sikhs. However 26.7% parents of the male adolescents and 30% of the parents of the female adolescents were Hindus. There were few parents who were Muslims. There were 50% parents of the male adolescents and 63.3% of the parents of the female adolescents who had up to 5 members in their family. There were 43.3% parents of the male adolescents and 30% parents of the female adolescents who had 5 to 10 family members. A majority of the female adolescents i.e. 76.3% belonged to nuclear families whereas 50% of the male adolescents belonged to nuclear families. Data shows that a majority of male adolescents i.e. 73.4% lived in small houses (up to 4 Marla house), while 23.3% of them lived in medium houses. On the other hand 43.3% of the female adolescents lived in medium houses while 16.7% lived in big houses. It was found that 46.7% of parents of the male adolescents owned land while 56.7% parents of the female adolescents owned land. Among those who possessed land majority owned small chunk of land i.e. less than five acres. A majority of the fathers of male adolescents i.e. 73.3% reported Rs. 20,000 as their total monthly family income while 23.3% reported their total family income between Rs. 20,000 to Rs. 40,000. There were 43.3% of the mothers of the female adolescents who had total family income up to Rs. 20,000 while 40% of them had total family income from Rs 20,000 to Rs 40,000. Families of female adolescents had comparatively higher monthly income than families of male adolescents.

The socio-economic profile of teachers is described in the third section.

The present study was conducted in 10 schools. All of these were Government Senior Secondary schools. A total of sixty i.e.30 male and 30 female teachers were interviewed from the selected schools. There were 63.4% each of the male and female teachers who held post graduate degrees in science or humanities with degree in education. However there were 26.7% of male teachers and 20% of female teachers who had graduation degree with degree in education. There were only 6.7% of male teachers and 10% of female teachers who had qualifications like M.C.A or P.G.D.C.A etc. There were 30% of the male teachers and 26.7% of the female teachers who taught humanities while 10% of male teachers and one case of female
teacher who dealt with medical/non-medical subjects. There were 16.7% of female teachers and one case of male teacher who taught Social Studies and English. There were 23.3% of the female teachers and 26.7% of the male teachers who taught Mathematics and Sciences. There were 10% each of male and female teachers who taught vernacular languages like Punjabi, Hindi and Urdu. There were 60% of the male teachers and 63.3% of the female teachers who taught from classes 6th to 10th. However there were 40% of the male teachers and 36.7% of the female teachers who taught students of 9th to 12th classes. Half of the male teachers i.e. 50% and 43.3% of the female teachers joined teaching between the ages of 20 to 25 years. There were 23.3% of the male teachers and 30% of the female teachers who took up teaching profession at the age of 25 to 30 years. However there were more male teachers who joined teaching profession at later age than the female adolescents. There were 33% of the male teachers and 30% of the female teachers who had teaching experience of 20 to 30 years. There were 50% the female teachers and 30% male teachers had teaching experience of 10 to 20 years. All the female teachers stated self-interest as the main reason for taking up teaching. However 36.7% of the male teachers reported that they joined teaching profession as they had no other alternative or could not get in desired profession. Results show that teaching was not the profession of preference for the males. The analysis of satisfaction level of teachers showed that female teachers had higher level of satisfaction in comparison than male teacher. A majority of the male teachers i.e. 70% and 76.7% female teachers had total family income (monthly) ranging from Rs 30,000 to Rs 60,000. Results show that female teachers had higher monthly income than male teachers because these were dual earners families. There were 86.7% of male teachers and 80% of female teachers who belonged to urban background. It was found that a majority of the male teachers i.e. 83.3% and 96.7% female teachers owned a house. There were 60% of the male teachers and 63.3% of the female teachers who belonged to nuclear families. A majority of male teachers i.e. 60% and 70% female teachers had up to 5 family members. The more prevalence of nuclear families in teachers resulted in number of family members from 1 to 5. There were 46.7% of the male
teachers in the age group of 45-55 years and 46.7% of the female teachers were in age group of 35-45 years. There were 16.7% each of male and female teachers in the age group of 25-35 years. There were 13.3% of the female teachers and 10% of the male teachers who were more than 55 years old. The age of female teachers was comparatively less than that of the male teachers. There were one case of unmarried male and three cases of unmarried female teachers and remaining all of them were married. Unmarried teachers were of lesser age and were new entrants in the profession of teaching. There were 53.3% of the male teachers who were married at age group of 23 to 28 years. There were 13.3% of the male teachers who reported that they were married at the age group of 18 to 23 years whereas 30% of the spouses of male teachers were married at the age of 18-23 years. There were 53.3% female teachers who were married at the age group of 23 to 28 years followed by 36.7% in the age group of 18-23 years. A majority of the spouses of the female teachers i.e. 66.7% were married at the age group of 23-28 years and 13.3% were married at the age group of 28 to 33 years. A majority of the spouses of the male teachers i.e. 63.3% belonged to middle caste. There were 16.7% of male teachers who belonged to lower caste and 20% of the male teachers were from upper caste. One male teacher belonging to lower caste was unmarried. There was a single case of inter caste marriage in which the male teacher belonging to lower caste married in upper caste. A majority of the female teachers i.e. 63.3% belonged to middle caste and 30% of them belonged to lower caste. There were two cases where the spouses of the female teachers belonged to upper caste. All marriages of female teachers were in same caste thus there was observance of caste endogamy. There were 63.3% of the male teachers and 46.7% of female teachers who belonged to Sikh religion. However 36.7% of the male teachers and 50% of the female teachers were Hindus. One female teacher belonged to Muslim religion. Religious endogamy was observed in the sample. The 43.3% spouses of the male teachers were Graduates/with Diplomas, 30% were holding Post Graduate Degrees/with Diplomas and 23.3% were educated up to high school. On the other hand a majority of the spouses of the female teachers i.e. 63.3% were holding post
Graduate Degrees/with Diplomas and 23.3% were Graduates. There was only one case where the spouse of the female teacher had attained education up to high school. All the female teachers were dual earner couples while there were 36.7% of the male teachers who were single earners. A majority of the male teachers i.e. 76.7% and 86.7% female teachers had 1-3 children. There were 13.3% male teachers who had no issue. Two male teachers and one female teacher had 3-5 children. There were 43.3% male teachers who had both male and female children. There were 30% male teachers who had only male child/children while 10% of the male teachers who had only female child/children. A majority of the female teachers i.e. 56.7% had both male and female children. There were 23.3% of the female teachers who had only male child/children. Only 10% of the female teachers had only female child/children. There were 33.3% of the male teachers and 36.7% of the female teachers whose children were school going. There were two male teachers and one female teacher who had very small kids. There were 33.3% of the male teachers and 30% of the female teachers whose all children were college going.

"CHAPTER-3" documents the viewpoint of adolescents on various pubertal or sexual concerns and various information channels regarding sexuality. This chapter tried to cover the second, third, fourth and fifth objective of the study. The perception of adolescents regarding adolescent sexuality and sex education is recorded in this chapter.

Results show that there were 60 % of the male adolescents in the age group of upto 15 years who noticed physiological change in less than a year's time. There were 33.3 % and 27.7 % of the male adolescents in the age group of 15-17 years who had noticed pubertal change for 1-2 years and 2-3 years respectively. In the age group of more than 17 years, all the male and female adolescents had noticed pubertal change for more than 3 years. There were 60 % of the female adolescents in the age group of up to 15 years who reported that they noticed pubertal changes for 1-2 years. However 88.7 % female adolescents in the age group of 15-17 years had noticed pubertal changes for more than 3 years. It was also found that girls mature at an
earlier age than boys as there was no female adolescent who noticed physical changes in less than 1 year period.

Results on pubertal changes show that there were 80% of the male adolescents in the age group of up to 15 years; all the male adolescents in the age group of 15-17 years and more than 17 years reported the growth of hairs on legs and arms. Facial hair growth was reported by 60% of the male adolescents in age group of up to 15 years and nearly all the male adolescents of age groups of 15-17 years and more than 17 years. All the male adolescent of three age groups reported the increase in height/weight and voice. There were 70% of the male adolescents in age group of up to 15 years and all the male adolescents in the age groups of 15-17 years and more than 17 years who reported hair growth in private parts and development of gonads. It was found that, in all the age group of female adolescents with the increase in age of adolescent, the hair growth on legs/arms also got increased. There was however, only a single case of the female adolescent of age group of more than 17 years who reported growth of facial hair. It was found that the adolescent girls in age group of more than 17 years have facial hair growth especially in upper lip region and they resort to threading and other cosmetic interventions to retain their feminine look. The change in voice was also reported by female adolescents. Female adolescents reported transition from baby voice to more mature voice. Delayed onset of puberty among male adolescents in comparison to female adolescents was recorded.

There were 20% of the male adolescents in the age group of up to 15 years who regarded facial hair growth as most significant pubertal change, 50% the male adolescents and 93.3% of the female adolescents' onset of reproduction as the most significant pubertal change. In the age group of 15-17 years, there were 27.8% of the male adolescents who regarded facial hair growth as most significant pubertal change, 72.2% of the male adolescents and all the female adolescents who felt that onset of reproduction as the most significant pubertal transition. All the adolescents in age group of more than 17 years irrespective of gender reported onset of reproduction as the most significant pubertal transition.
Results show that there were 30% of the male adolescents and one female adolescent who felt less sexual growth than their peers. There were 16.7% of the male adolescents in the age group of 15-17 years who reported sluggish pubertal growth in comparison to their peers. These adolescents with delayed pubertal growth reported anxiety. Nearly all adolescents irrespective of gender reported that improper pubertal transition would result in embarrassment from peer group, negative influence on academics, lower self-esteem and rejection from opposite sex. Nearly all adolescents irrespective of gender stated that in event of improper pubertal transition adolescents adopt various coping mechanisms.

Results show that adolescents were doubtful about their growth, 20% of the male adolescents in the age group of up to 15 years, 38.9% of the male adolescents in the age group of 15-17 years reported that they had developed some disease due to pubertal changes. There were 70% of the male adolescents in the age group of up to 15 years, 88.9% of the male adolescents in the age group of 15-17 years who were uncertain about pubertal changes. There were 86.7% of the female adolescents in the age group of up to 15 years, 91.7% of the female adolescents in the age group of 15-17 years and one in the age group of more than 17 years who feared that they had developed some disease. Among self-reported doubts the female adolescents reported doubts related to menstruation, pimples and weakness/fatigue during menses. However the male adolescents reported doubts about nightfall, negative consequences of masturbation on health and growth of beard.

The pubertal transitions also bring about change in inter-personal relationship. There were 80% of the males and 93.3% of the female adolescents in age group of up to 15 years who reported that they became shy with opposite sex with onset of sexual maturation. In the age group of 15-17 years there were 61.1% of the male adolescents and 75% of the female adolescents who reported that they became shy with opposite sex. Similarly there were 66.7% of the female adolescents in age group of more than 17 years who became shy with opposite sex. There were 60% of the male
adolescents and 80 % of the female adolescents in the age group of up to 15 years who reported that they avoided/hesitated any interaction with opposite sex. There were 38.9 % of the male and 25 % of the female adolescents in the age group of 15-17 years who reported that they became friendly with the opposite sex. In the age group of more than 17 years all the male and one female adolescents reported that they became friendly with the opposite sex.

In the category of up to 15 years there were 80 % of the male adolescents and 86.7 % of the female adolescents who stated that they got more reserved with their fathers. There were 80 % of the female adolescents in the age group of up to 15 years who got more frank with mothers. In the age group of up to 15 years there were 90 % of the male adolescents and 46.7 % of the female adolescents who reported that their fathers started monitoring their movements. Similarly there were 60 % of the male adolescents and all the female adolescents who stated that their mothers became strict with them. In the age group of 15-17 years there were 88.8 % of the male adolescents and 91.7 % of the female adolescents who stated that they became more reserve with their fathers. There were 83.3 % of the female adolescents in age group of 15-17 years who reported that they got more frank with their mothers. All the male and female adolescents in the age group of more than 17 years reported that they became more reserve with their fathers. All the female adolescents in the age group of more than 17 years stated that they became more open with their mothers. There were 50 % of the male adolescents in the age group of more than 17 years who reported stricter attitude of their fathers towards them especially with respect to their movement. But half of the male adolescents and all the female adolescents in the age group of more than 17 years stated that their mothers became more vigilant with respect to their movement.

Adolescents utilize various agencies to address their sexual/ pubertal concerns. All male adolescents in all three age categories reported that they discussed their pubertal/sexual concerns with friends. However in the age group of up to 15 years and 15-17years all the female adolescents reported to have discussed their pubertal/sexual concerns with friends. There were 30 %
the male adolescents in the age group of up to 15 years, 27.8 % in the age group of 15-17 years and one case in the age group of more than 17 years who admitted that they discussed their sexual/pubertal concerns with their teachers. There were 40 % female adolescents in the age group of up to 15 years and 41.7% in the age group of 15-17 years who reported to have discussed their sexual/pubertal concerns with their teachers. A majority of the female adolescents i.e. 86.7 % in the age group of up to 15 years, 91.7 % in the age group of 15-17 years and all the female adolescents in the age group of more than 17years reported that they were discussing their sexual/pubertal concerns with their mothers. Adolescent girls reported that their mothers guided them about menstrual cycle. There were two female adolescents each in early and late adolescence who stated that they discussed their menstrual problems with their Grandmothers. It was noted in study that there were no adolescents of either gender who discussed their sexual/pubertal concerns with their fathers and grand fathers. There were two cases of the male adolescents in the age group of up to 15 years and two cases in the age group of 15-17 years who reported that they were discussing their pubertal/sexual concerns with their elder brothers. There were 40 % female adolescents in the age group of up to 15 years, 25 % in the age group of 15-17 years and 66.7 % in the age group of more than 17 years, who discussed their pubertal concerns with the elder sisters. There were 22.4 % male adolescents in the age group of 15-17 years and all in the age group of more than 17 years and one case of the female adolescents in the age group of 15-17years who discussed their sexual fantasies with their partners.

All the female adolescents reported that their mothers and the friends provided them information about menses. There were 46.7 % female adolescents in the age group of up to 15 years, 33.3 % in the age group of 15-17 years and 33.3 % in the age group of more than 17 years who reported that their elder sisters provided them information about menses. Mothers and friends were found to be the leading agencies for information about menses for their adolescent daughters. It was found that adolescent boys discuss their pubertal/sexual concerns most often with friends. In the age group of up to 15 years there were 30 % of the male adolescents and 46.7 % of the female
adolescents who stated that their teachers took initiative to solve their pubertal concerns. There were 33.3% of the male adolescents in the age group of 15-17 years who reported that their teachers took initiative to address their pubertal concerns. There were 33.3% of the female adolescents in age group of 15-17 years who reported that their mothers took initiative to solve their pubertal concerns. Similar results were found in the age group of more than 17 years.

There were 30% of the male adolescents and 73.3% of the female adolescents in the age group of up to 15 years who stated that adults responded to their queries on pubertal concerns. In the age group of 15-17 years there were 38.9% of the male adolescents and 91.7% of the female adolescents who stated that adults sorted their queries on sexual/pubertal concerns. The female adolescents in the age group of more than 17 years stated that adults responded to their queries on sexual/pubertal concerns. Male adolescents reported that adults explained pubertal changes as a natural process. Female adolescents reported that mostly their mothers responded to their queries in positive way.

All the male adolescents in all the three age groups suggested that schools should provide information on pubertal transition. There were 70% male adolescents in the age group of up to 15 years, 72.2% in the age group of 15-17 years and all the male adolescents in the age group of more than 17 years expected inputs from parents on adolescent sexuality and pubertal transitions. Nearly all the female adolescents in all the three age groups suggested that both the school and parents should provide information on pubertal transition.

The present study revealed that all the male and female adolescents had curiosity to know about physical relationship between male and female. It was found that more than 90% of male and female adolescents in all age categories stated that films and T.V contained scenes on sexual themes. Nearly 80% of male and female adolescents in the age group of 15-17 years and more than 17 years stated that magazines and internet also have erotic content. There were 50% of the male adolescents in the age group of up to

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15 years who had seen blue movies. In this age group there were 80% of the male adolescents and 13.3% of the female adolescents who reported to came across MMS/SMS on sexual topics on mobile phones. There were only two cases of the male adolescents in this age group who viewed porn sites.

In the age group of 15-17 years there were 61.1% of the male adolescents and two cases of the female adolescents who reported to saw blue movie. All the male adolescents of this age group reported that they came across MMS/SMS and read magazines on sexual topics. But there were 33.3% of female adolescents in this age group who reported that they came across MMS/SMS and read magazines on sexual topics. There were 50% of the male adolescents and 16.7% of the female adolescents in this age group who viewed porn sites. All the male adolescents in the age of more than 17 years admitted that they have seen blue movie and SMS/MMS on sexual topics. However half of the male adolescents in this age group had reported that they read magazines on sexual topics and viewed porn sites. There was only one case of female adolescent in this age group who admitted that she had viewed sexual content on media.

Results show that there were 30% male adolescents and 33.3% female adolescents in the age group of up to 15 years who reported schools as the most reliable source of information on pubertal/sexual concerns. However there were 40% of the male adolescents and 20% of the female adolescents in this age group who reported friends as the most reliable source of information on the sexual/pubertal concerns.

There were 66.7% of the male adolescents and 25% of the female adolescents in the age group of 15-17 years who reported schools as most reliable source information for pubertal/sexual concerns. There were 58.3% of the female adolescents in this age group who stated family as the most reliable source of information on pubertal/sexual concerns. There were all the male adolescents in the age group of more than 17 years who reported schools as most reliable source of information for pubertal/sexual concerns. All the female adolescents in the age group of more than 17 years reported
that media act as the most reliable source of information on pubertal/sexual concerns.

Results show that 70% male adolescents in the age group of up to 15 years, 77.8% in the age group of 15-17 years and 50% in the age group of more than 17 years reported age of biological maturity for adolescent boys to be 12-15 years. There were 40% female adolescents in the age group of up to 15 years, 50% in the age group of 15-17 years and 66.7% in the age group of more than 17 years regarded age of maturity for boys to be 15-18 years. There were 40% of the adolescent girls in the age group up to 15 years who were uncertain about age of maturity of adolescent boys. There were 38.9% male adolescents in the age group of up to 15 years, 50% in the age group of more than 17 years who regarded age of biological maturity of girls to be 12-15 years. However there were 90% male adolescents in the age group up to 15 years, 44.4% in the age group of 15-17 years who were uncertain about age of biological maturity of girls. There were 80% female adolescents in more than 17 years of age who regarded age of biological maturity for girls to be 12-15 years. All adolescents mainly associated appearance of secondary sexual characters with age of biological maturity for opposite sex.

There were 50% male adolescents in the age group of up to 15 years, 72.3% in the age group of 15-17 years and 50% in the age group of more than 17 years who stated that age at marriage for boys should be more than 21 years. A majority of adolescent girls viewed more than 21 years as right age of marriage for the boys. There were 80% of adolescent boys in the age group of up to 15 years, 61.1% in the age group of 15-17 years and all in the age group of more than 17 years who regarded right age of marriage for girls to be between 18-21 years. A majority of adolescent girls’ i.e.60% in age group of up to 15 years, 66.7% each in the age group of 15-17 years and in more than 17 years were of the opinion that right age of marriage for girls should be more than 21 years.

There were 80% male adolescents in the age group of up to 15 years, 55.6% in the age group of 15-17 years and 66.7% in the age group of more
than 17 years who did not endorse premarital sex. On the other hand, there were 93.3% female adolescents in the age group of up to 15 years, 91.7% in the age group of 15-17 years and 66.7% in the age group of more than 17 years disapproved of pre-marital sex. Adolescents stated that social taboo and social stigma associated with pre-marital sex act as the prominent reason for their opinion.

It was found that that there were 70% of the male adolescents in the age group of up to 15 years and all the male adolescents in the age groups 15-17 years and more than 17 years who reported that AIDS could prevented by the use of the condoms. There were 73.3% female adolescents in the age group of up to 15 years, 83.3% in the age group of 15-17 years and all in the age group of more than 17 years who endorsed use of condoms for prevention of HIV/AIDS control.

All the male and female adolescents in the study correctly identified sexual activity as mode of spread of AIDS. There were four male and five female adolescents in the age group of up to 15 years and 15-17 years who reported kissing and mosquito bite as reason for spread of AIDS. It was found the both male and female adolescents in the study had good knowledge about mode of spread of AIDS. Adolescents stated that they had a lesson about AIDS in their curriculum and their science teachers taught them about it.

All adolescents favoured the inception of complete sex education in the schools. Adolescents irrespective of gender and age reported that sex education would result in closer teacher-pupil relationship. In the age group of up to 15 years, there were 40% male and 80% female adolescents who reported that sex education should be introduced at 6th-8th class. However there were 60% of the male adolescents and 20% of the female adolescents in the age group of up to 15 years who favoured the inception of sex education at class 9th-10th. In the age group of 15-17 years a majority of the male adolescents i.e. 88.9% favoured inception of sex education in the classes of 9th-10th. However a majority of females i.e. 83.3% in age group of 15-17 years favoured the inception of sex education in class 6th-8th. In the age
group of more than 17 years all the male adolescents favoured inception of sex education at 9th-10th class level. All the female adolescents in the age group of more than 17 years favoured the inception of sex education at the 6th-8th class level.

There were 60% male adolescents in the age group of up to 15 years, 66.7% in the age group of 15-17 years and 50% in the age group of more than 17 years who suggested the involvement of parents in impartation of sex education. All the female adolescents in all three age categories recommended the involvement of parents especially mothers in imparting sex education. All the adolescents irrespective of the age and gender suggested the involvement of teachers and counselor in the sex education. Similarly nearly all the adolescents irrespective of the age and gender suggested the involvement of doctor for the success of sex education.

All the male adolescents and 53.3% of the female adolescents in the age group of up to 15 years favoured inclusion of lecture method, discussion, books, literature/charts and multimedia as techniques for imparting sex education. In the age group of 15-17 years a majority of both male and the female adolescents reported that use of books, charts/literature, class room discussion and multimedia as medium of instruction for imparting sex education. All the males and the female adolescents in the age group of more than 17 years except one stated that discussion, books, charts and multimedia techniques should be used for imparting sex education.

A majority of the male adolescents i.e. 90% and 66.7% female adolescents in the age group of up to 15 years reported that sex education should be provided by same gender teacher i.e. male teacher to boys and female teachers to girls in separate tutorials. In the age group of 15-17 years there were 61.1% of the male adolescents and 75% of the female adolescents who reported that sex education must be provided by same gender teacher in separate tutorials. All male and the female adolescents of age group of more than 17 years stated that same gender teacher should be employed to impart sex education. Adolescents argued that it is easy to point
a query to same gender teacher of the same gender than to teacher of the opposite gender.

In the age group of up to 15 years, there were 60% of male adolescents and 53.3% of the female adolescents who regarded age group of 30-40 years as most suitable age of the teacher for imparting sex education. There were 66.7% both male and female adolescents in the age group of 15-17 years who regarded age group of 30-40 years as most suitable age for teacher for imparting sex education. All the male adolescents and 66.7% female adolescents in the age group of more than 17 years who reported suitable age of teacher for imparting sex education as 30-40 years. All the male and the female adolescents stated that in event of sex education not launched as a separate subject it should be integrated with science subject. However adolescents who were in middle or late adolescence also recommended that some topics of sex education should be integrated with social science, moral/population science and physical education. All adolescents irrespective of their gender and age favoured the inception of comprehensive sex education.

In the nutshell the present study revealed that pubertal transitions play the central role in the lives of adolescents but at the same time adolescents are in dilemma about these pubertal changes. Adolescents were found to be ill-informed about puberty and are not aware with the mechanism to cope up with pubertal transitions. It was found in the study that adolescents are in the great need of correct and reliable information on the multifarious changes happening to them. Indian culture and value system also act as impediment in the way of free flow of correct and reliable information from adults to adolescents. Adolescents supported the inception of complete and comprehensive type of sex education in schools and also suggested the collaborative role to parents and doctor (medical staff) in the overall curriculum of sex education.

The “FOURTH CHAPTER” has focused on the perception of parents regarding adolescent sexuality and sex education is described in this chapter. In this chapter has targeted in the second, third, fourth and fifth objectives of
the study. The perception of parents was probed on the adolescent sexuality encompassing the issues like pubertal transitions, behavioural changes, vulnerability of adolescents, information agencies, age of biological maturity for adolescent girls and boys, suitable age of marriage, opinion regarding pre martial sexual activity etc. The parents were also probed about their opinion on content and significance of sex education, degree of sex education in schools and implication of sex education on teacher-pupil relationship. For the present study 30 fathers of male adolescents and 30 mothers of female adolescents studying in the classes 9th to 11th class of 10 Government Senior Secondary Schools in district Sangrur, Punjab, India were contacted.

Results show that both mothers and fathers in the study admitted multifaceted transitions among adolescents due to puberty. There were 83.3 % of the fathers and 66.7 % of the mothers who treated onset of reproduction as the most significant pubertal change. However, there were two cases of fathers and 13.3 % of the mothers who reported appearance of secondary sexual characters like beard, development of breast etc. as the most significant pubertal change. Apart from somatic variations changes in the behaviour of adolescents was also reported by both the mothers and fathers. It was found that more than 90 % of both fathers and mothers reported that during puberty adolescents exhibit erratic behaviour, assert their identity, show inclination towards opposite sex, indulge in sexual deviance, experiment with drugs/alcohol especially male adolescents and show reluctance to spend time with family members. Data also revealed that nearly 80 % of both fathers and mothers stated that adolescents show lack of interest in their studies, become disobedient and obstinate. All the mothers and fathers reported transition in the behaviour and higher vulnerability among adolescents as the prominent reason to monitor the activities of adolescents. All parents stated that they monitor activities of their adolescents to protect them. There were 70 % of the mothers who stated that monitoring helped them to understand the emotional problems of their adolescent daughters pertaining to menses. There were 80% of the fathers who stated that they could help their adolescent sons in coping with peer pressures by monitoring their activities.
It was found that all the mothers and fathers reported that friends acted as information agencies for pubertal concerns of adolescents. All the fathers and mothers reported that mothers play a significant role in providing sexual information especially to adolescent girls regarding menstruation. It is noteworthy to mention that all the mothers and fathers in the present sample disapproved fathers and grandfather acting as information channels on pubertal transition. There were one case of the father and 56.7 % of the mothers who stated that teachers act as information agency for adolescents. Similarly there were 10 % of the fathers and 53.3 % of the mothers who reported that doctors also act as information agency for adolescents. There were 23.3 % of the fathers who reported that elder brothers provide pubertal/sexual information to their younger brothers. There were 46.6 % each of the fathers and the mothers who reported that elder sister provide menstrual information to their younger sisters. There were two cases of the fathers and two cases of the mothers who reported that grandmothers also act as source of information for their grand-daughters. There were 30 % of the fathers who stated that boy friend or girl friends also provide information on pubertal concerns. All the mothers and fathers reported that male adolescents discuss their pubertal concerns most often with their friends. All the fathers reported that the female adolescents discuss their pubertal concerns most often with their friends. However a majority of the mothers i.e. 70 % reported that the adolescent girls discuss their pubertal/sexual concerns both with mothers and friends.

There were 66.6 % of the mothers who counsel their adolescent daughters. They explained to their daughters about menstruation and how to cope with the stress related with it. There were 63.3 % of the mothers who stated that they provide only required information to their daughters such as maintaining hygiene and personal care during menses. However there was no reported case of father who addressed pubertal concerns of adolescents. The main reason behind such reluctance on the part of fathers was social taboos surrounding sex. Data show that there were 73.3 % of the fathers and 60 % of the mothers who regarded school is the most reliable agency for disseminating information on pubertal/sexual concerns. There were 36.7 % of
the mothers who regarded family as the most reliable source of information on pubertal/sexual concerns for adolescents. Only one case of mother felt that doctors are most reliable source of information, whereas 13.3 % fathers reported family and doctors at par when it comes to providing information.

There were 73.3 % of the fathers and 60 % of the mothers who reported age of pubertal onset is 12-15 years for boys. There were 13.3 % of the fathers and 40 % of the mothers who stated that age of pubertal onset among boys is 15-18 years. A majority of the fathers i.e. 73.3 % and 76.7 % of the mothers reported that age of pubertal onset among girls is 12-15 years. There were 26.7 % of the fathers and 23.3% of the mothers who reported age of less than 12 years as pubertal onset age for girls. It was found that 60 % of the fathers and 70 % of the mothers reported more than 21 years as the right age of the marriage for boys. There were 43.3 % of the fathers and 70 % of the mothers who reported right age of the marriage for girls should not be more than 21 years. All the mothers and the fathers regarded pre-marital sexual activity as completely wrong and unacceptable.

There were 93.3 % of the fathers and 83.3 % of the mothers who reported that they have heard about AIDS. However there were two cases of the fathers and 16.6 % of the mothers who showed complete ignorance in this regard. Results depict that parents had partial knowledge of modes of spread of AIDS. It was also found that fathers had little more knowledge about AIDS in comparison to the mothers. All the parents who responded to the queries of AIDS reported that adolescents should be imparted knowledge about AIDS as it is a fatal disease.

There were 13.3 % of the fathers and one case of the mother who reported that educating adolescents about contraception techniques is going to be highly useful. There were 26.7 % each of the father and the mother who regarded education on contraception is useful for adolescents. Parents who regarded contraception education highly useful reported that it would protect adolescents from AIDS/STD and unwanted pregnancy. However those who regarded information on contraception useful stated that it would protect adolescents against unwanted pregnancies. There were 60 % of the fathers
and 70% of the mothers who were quite apprehensive about providing information related to contraception. They were of the opinion that it would encourage sexual experimentation and open sex in society. There were a majority of the fathers i.e. 76.7% and 80% of the mothers who favoured imparting of partial sex education to the adolescents. There were 20% of the fathers and 13.3% of the mothers who favoured the provision of sex education with little reference to contraception techniques.

There were 43.3% of the fathers and 66.7% of the mothers who reported that inception of sex education will affect the teacher pupil relationship. At the same time most of them were unable to elaborate changes in relationship. They stated that the change would largely depend upon attitude and values of teacher. There were 46.7% of the fathers and 20% of the mothers who stated that sex education would not produce any drift in teacher-pupil relationship. However there were three fathers and four mothers who were uncertain about the effect of sex education on teacher-pupil relationship.

A majority of the fathers i.e. 63.3% favoured inception of sex education at 9th-10th class level. However 20% of fathers favoured inception of sex education at 6th-8th class. Similarly a majority of mothers i.e. 76.7% favoured inception of sex education at 9-10th class. Nearly all the mothers and fathers suggested the involvement of the parents, the teachers and the doctors (medical experts) for the provision of sex education.

There were a majority of the fathers i.e. 73.3% who reported that teachers should be given the lead role in imparting sex education. There were 20% of the fathers who reported that doctor should be entrusted with the lead role in imparting sex education. In case of the mothers there were 63.3% who suggested that teachers should be the main agent for imparting sex education. However, there were 33.3% of the mothers who reported that parents especially the mothers should be the main agent for imparting sex education. Fathers favoured non familial agencies i.e. teachers and doctors to take lead role in imparting sex education. But the mothers entrusted both
teachers and parents especially mothers to take lead role in imparting sex education.

Parents suggested the inclusion of multiple techniques while imparting sex education to adolescents. There were 70% of fathers and 56.7% of mothers suggested class room lecture method, 26.7% of fathers and 13.3% of mothers suggested inclusion of multimedia, 56.7% of fathers and 40% of mothers suggested usage of charts, 86.7% of fathers and 13.3% of mothers suggested discussion and all fathers and 50% of mothers suggested distribution of books/literature as multiple techniques to be used in imparting sex education to adolescents. Parents suggested collaborative involvement of these multiple teaching techniques for imparting sex education. There were 90% of fathers and all mothers who stated that sex education should be given by the teacher of the same sex as that of the adolescent in separate tutorials. They cited the reason for their same gender choice as it is against cultural norms and values of the society which forbids an adolescent to discuss their issues of sexuality with the teacher of opposite sex.

All the fathers and 73.3% of the mothers reported that the most suitable age of the teacher for imparting sex education is 30-40 years. However, there were 26.7% of the mothers who favoured 20-30years as most suitable age of the teacher for imparting sex education.

There were 83.3% of the fathers and 93.3% of the mothers who reported that topics of sex education should be integrated with science subject. There was one case of father and 33.3% of mothers who reported that sex education should be integrated with Physical Education. All the fathers and a majority of the mothers reported that sex education of adolescents would reduce anxiety of the parents about their adolescent sexuality and would make adolescents more knowledgeable about STD/HIV. There were 83.3% of the fathers and 70% of the mothers who opined that sex education would construct wholesome attitude among adolescents towards their pubertal transitions. There were only 40% of the fathers and 30% of the mothers who viewed increase of knowledge about contraception among adolescents as beneficial aspects of sex education. Thus a majority of
the parents favoured the inception of abstinence-only sex education in schools.

In the present study an attempt has been made to explore the opinion of respondents about significance and content of sex education. Data show that there were 66.7% of the fathers and 62.5% of the mothers who were illiterates viewed negative significance of sex education. Similarly among the parents who had qualification up to high school there were 61.1% of the fathers and 66.7% of the mothers who perceived negative significance of sex education. There were 80% of the fathers and 60% of the mothers with graduation degree who perceived negative significance of sex education. All father and the mothers who were post-graduates viewed negative significance of sex education. In the category of illiterate parents there were 66.7% of the fathers and all the mothers showed propensity towards the content of abstinence-only sex education. Similarly there were 66.7% of the fathers and 73.3% of the mothers with high school education who supported the abstinence—only sex education. There were 66.7% of the fathers and 73.4% of the mothers who were graduates regarded topics of abstinence-only sex education as suitable for adolescents. However in case of post-graduate parents there was a single case of father who supported comprehensive sex education. There were 50% of mothers holding post-graduate degrees who supported abstinence-only sex education.

There were 55% of the housewives who viewed negative significance sex education. The parents who were engaged in menial type of jobs, 63.6% of the fathers and 71.4% of the mothers perceived negative significance of sex education. There were 36.7% of the fathers and 33.3% of mothers, who were engaged in middle level of jobs, perceived negative significance of sex education. However there were 75% of the farmers who showed negative significance of sex education. There were 75% of the housewives who favoured inception of topics as prescribed in abstinence-only sex education. Similarly in case of parents engaged in menial type of jobs there were 72.7% of the fathers and 85.7% of the mothers who favoured abstinence-only sex education. There were 54.5% of the fathers and 66.7% of the mothers
engaged in middle level of occupations favoured the abstinence-only sex education. There were 87.5% of the farmers who favoured abstinence-only sex education. No significant association was found between the occupation of parents and their viewpoint on significance and content of sex education.

There were 59.1% of the fathers and 66.6% of the mothers earning up to Rs 20,000 per month and perceived negative significance of sex education. There were 57.1% fathers and 61.5% mothers with the income of Rs 20,000 to Rs 40,000 per month but perceived negative significance of sex education. In the income group of more than Rs 40,000 per month, all the fathers and 80% of the mothers who reported negative significance of sex education. There were 68.2% of the fathers and 75% of the mothers with monthly income of up to Rs 20,000 who stressed on abstinence-only sex education. Similarly in income group of Rs 20,000 to Rs 40,000 there were 71.4% of the fathers and 69.2% the mothers who favoured abstinence-only sex education. All the fathers and 80% of the mothers with monthly income of more than Rs 40,000 favoured abstinence-only sex education.

Results indicated that both the fathers and the mothers admitted the vulnerability of adolescents and acknowledged the need of right support and guidance for adolescents in the era of HIV/AIDS. A majority of parents suggested the inception of sex education on the lines of abstinence-only sex education. It was evident from the study that there is great influence of Indian culture and value system on the opinion of parents concerning various issues related to adolescent sexuality and sex education.

The summary of “CHAPTER-5” documented the perception of teachers regarding adolescent sexuality and sex education. This chapter aimed to cover the second, third, fourth and fifth objectives of the present study with reference to teachers. The present chapter focused on the perception of teachers about the most significant pubertal change, behavioural transitions among adolescents, class-room problems, knowledge about HIV/AIDS, integrating sex education with school subjects and beneficial aspects of sex education etc.
There were 26.7 % of the male teachers and 23.3 % of the female teachers who reported emotional development as most significant pubertal change. However a majority the male teachers i.e. 70 % and 60 % the female teachers reported onset of reproduction as the most significant pubertal change. Teachers irrespective of gender also reported multiple changes in the behaviour among adolescents. There were 80 % of the male teachers and all the female teachers who reported that adolescents exhibit erratic behaviour. Similarly there were 73.3 % of the male teachers and all the female teachers who reported that adolescents show obstinate behaviour. All the male teachers and 83.3 % of the female teachers reported that there is high risk of sexual deviance during adolescence. There were 90 % of the female teachers and 73.3 % the male teachers who reported that adolescents disobey. There were 83.3 % of the male teachers and 93.3 % of the female teachers who reported that adolescents assert their identity. All the male teachers and the female teachers reported that adolescents show greater involvement with the opposite sex. There were 80 % of the male teachers and 63.3 % the female teacher who reported that during adolescence, there is less interest in studies. Apart from above mentioned changes all the teachers reported that adolescents get conscious of their physical appearance.

A majority of teachers reported that they find involvement of adolescents with opposite sex as major problem in the classroom. Teachers irrespective of gender stated that adolescents are exchanging love-letters in class; there are love affairs, heart -breaks which they find difficult to handle. A large majority of the teachers i.e. 80 % male teachers and 90 % of the female teachers reported that adolescents especially boys indulge in vagrancy and truancy There were 50 % of the male teachers and 40 % of the female teachers reported that a few adolescents bring cheap literature or pornographic material in classes which they share with other adolescents. Some of the teachers reported that adolescents write cheap/obscene comments on desk/walls of schools. All the teachers reported that the male adolescents were more involved in such activities in comparison to female adolescents. Male and female teachers also reported other gender specific problems. Male teachers cited that male adolescent students have tendency
to bunk classes and leave the school in recess. Teachers also reported of enhanced vulnerability among male adolescents to smoke, use tobacco products/drugs/alcohol etc. Female teachers reported specific problems among the female adolescents like bad temperament, depression and emotional instability.

All the male and female teachers reported that friends acted as information agencies for pubertal concerns of adolescents. There were 26.6% of the male teachers and 46.7 % of the female teachers reported that teachers acted as information agencies on pubertal/sexual concerns. There were 30 % of the male teachers and 26.7% of the female teachers who reported that doctors act as important source of information on pubertal/sexual concerns for adolescents. There were 40 % of the male teachers and all the female teachers who stated that mother provided menstrual information to their adolescent girls. Statistically the association was found between the gender of teacher and their opinion about mother as source of information. All the female teachers and 40 % of the male teachers reported that mothers act as important source of information. It is noteworthy to mention here that both male and female teachers disapproved fathers and grandfather as information channels on pubertal transition. There were 36.7 % of the male teachers and 30 % of the female teachers who reported that elder brothers provide pubertal/sexual information to their younger brothers. However there were 36.7 % of the male teachers and 63.3 % of the female teachers who reported that elder sister act as channel of information for their younger sisters. There were 26.7 % of the female teachers who mentioned grandmother as important information agency. There were 63.3 % of the male teachers and 13.3 % of the female teachers who stated that love partners also become a channel for discussing pubertal/sexual concerns.

All the male and female teachers stated that male adolescents discuss their pubertal concerns most often with their friends. All the male teachers reported that the female adolescents discuss their pubertal concerns most often with their friends. However 63.3 % of the female teachers reported that the adolescent girls discuss their pubertal/sexual concerns with both mothers
and friends. There were 80% of the male teachers and 43.3% of the female teachers who regarded school as most reliable agency. There were 56.7% of the female teachers who stated family as most reliable agency for pubertal/sexual concerns of adolescents. There were 13.3% of male teachers who regarded doctor (medical experts) as the most reliable source for addressing pubertal/sexual concerns of adolescents.

There were 70% of the male teachers and 56.7% of the female teachers who reported the age of biological maturity to be 12-15 years boys. There were 30% of the male teachers and 43.3% of the female teachers who stated that age of biological maturity for boys to be less than 12 years. A majority of the male teachers i.e. 93.3% and all the female teachers reported that for female adolescents age of biological maturity is less than 12 years. There were 80% of the male teachers and 93.3% of the female teachers who reported right age of marriage for boys should be more than 21 years. Similarly there were 70% of the male teachers and 73.3% of the female teachers who reported the right age of marriage for girls to be 21 years. It was found that teachers irrespective of gender stated pre-marital sexual activity as wrong and unacceptable. All the male and female teachers identified correct mode of spread of AIDS. There were 23.3% of the male teachers and 13.3% of the female teachers who regarded educating adolescents about contraception techniques as highly useful. There were 13.3% of the female teachers and 36.7% of male teachers who stated that educating adolescents regarding contraceptives is useful. These teachers suggested that this knowledge would help adolescents to protect themselves from AIDS/STD and unwanted pregnancy. However there were 40% of the male teachers and 73.3% of the female teachers who regarded education pertaining to contraceptives for adolescents as useless. It was found that a majority of teachers backed abstinence-only sex education and a few male teachers supported the little reference to contraception techniques.

There were 40% of the male teachers and 70% of the female teachers who favoured imparting complete sex education. There were two cases of female teachers who categorically opposed any type of sex education for
adolescents. Male teachers showed more inclination towards the inception of sex education with little reference to contraception however female teachers showed reserved behaviour towards inclusion of information related to contraception in the sex education programme.

Mixed response of teachers was recorded in the present study about the influence of sex education on teacher pupil relationship. There were 40% of the male teachers and 46.7% of the female teachers who reported that inception of sex education would affect teacher – pupil relationship. There were, however, 36.7% of the male teachers and 40 % of the female teachers who stated that sex education would not influence teacher pupil relationship. There were 23.3% of the male teachers and two cases of the female teachers who were uncertain about effects of sex education on teacher-pupil relationship.

Equal number of both male and female teachers’ i.e.63.3% who favoured introduction of sex education at 9th-10th class level. There were 23.3% of the male teachers and 13.3% of the female teachers who argued that sex education should be introduced at middle school level and there were 13.3% of the male teachers and 16.7% of the female teachers who favoured sex education at senior secondary level.

There were 90% of the male teachers and 93.3% of the female teachers who emphasized the role of the parents for imparting sex education. All male teachers and 93.3% of the female teachers suggested the involvement of teachers and medical experts in sex education. There were 70% of the male teachers who reported that teachers should be entrusted with the lead role in pursuit of provision of sex education. However there were 20% of the male teachers who reported that doctors should take the leading role. There were 53.3 % of the female teachers who reported that teachers should provide sex education. There were 30% of the female teachers who reported that parents especially the mothers should be the main agency for imparting sex education.

Regarding techniques used for teaching sex education it was found that more than 90% of the teachers irrespective of gender favoured inclusion
of multiple techniques like class-room lecture, discussion, books and charts for imparting sex education in schools. None of the teacher favoured the use of multimedia for instructing adolescents about sexuality. The teachers irrespective of gender suggested that male teacher should teach adolescent boys and female teachers should teach adolescent girls about sex education.

There were 33.3% of the male teachers who reported 30-40 years as the most suitable age for a teacher for imparting sex education. However 36.7% of the male teachers and 33.3 % of the female teachers reported the age group of 40-50 years as most suitable for imparting sex education. Interestingly there were 30% of the male teachers and 13.3% of the female teachers who reported 50 years and more as the most appropriate age for imparting sex education. All the male teachers and 93.3 % of the female teachers felt that sex education can be integrated with Science, Moral/Population Science and Physical Education. However there were half of the teachers of both genders who stated that few topics of sex education should be integrated with social science as it would increase the knowledge of adolescents about various dimensions of gender and culture.

It was found that all the male teachers and 93.3% of the female teachers reported that inception of sex education in schools would reduce the anxiety of the parents, increase the awareness among adolescents regarding STD/HIV and construct a wholesome attitude among adolescents towards their sexuality and various pubertal transitions. There were 60% of the male teachers and 26.7% of female teachers who reported that sex education would make adolescents more informative about various contraceptives techniques. It was found that more male teachers regarded imparting contraception information as beneficial in comparison to female teachers. Female teachers did not approve of contraception information as beneficial for adolescents rather felt that such information could be misused. There were two female teachers who categorically denied any beneficial effects of sex education and regarded it as harmful. Overall results show that a majority of the teachers in the present study viewed sex education in positive light with beneficial outcome.
In the present study an attempt was made to explore the opinion of teachers about significance and content of sex education. All the male teachers in age group of 25-35 years, 37.5% in the age group of 35-45 years, 69.2% in the age group of 45-55 years and one case in the age group of more than 55 years viewed positive significance of sex education. It was also found that that 80% of the female teachers in age group of 25-35 years, 28.7% in the age group of 35-45 years and 14.2% in the age group of 45-55 years viewed positive significance of sex education. Data show that 80% of the male teachers and 60% of the female teachers in the age group of 25-35 years suggested that the content of sex education should be comprehensive. However in the age group of 35-45 years there were 62.5% of the male teachers and 64.3% of the female teachers who recommended abstinence-only sex education. There was a single case of female teacher in this age group who categorically opposed any form of sex education in the schools. There were 71.4% of the male teachers and 85.7% of the female teachers in the age group of 45-55 years who suggested the content of sex education based on abstinence-only type of sex education. Similarly in the age group of more than 55 years there were two male teachers and 75% of the female teachers who favoured abstinence-only sex education. There was a single case of female teacher in this age group who opposed any move to impart sex education in the schools.

There were 34.6% of the male teachers and 54.2% of the female teachers from urban background who perceived negative significance of sex education. Similarly the half of the both male and the female teachers belonging to rural areas perceived negative significance of sex education. It is pertinent to mention here that there was a single case of female teacher each from rural and urban background who categorically opposed any form of sex education in schools. It was found that there were 38.5% of the male teachers and 75% of the female teachers belonging to urban areas who suggested abstinence-only sex education. Half of the male teachers and 60% of the female teachers from rural areas suggested abstinence-only sex education.
There were 37.5% of the male teachers and 66.7% of the female teachers who were Graduates placed negative significance to sex education. There were 38.1% of the male teachers and 56.5% of the female teachers with Post Graduation degree perceived negative significance of sex education. Additionally male teacher with Diplomas in subjects like Physical Education/Drawings and Computer Applications also perceived negative significance of sex education. It was found that there was a single case of female teacher who categorically opposed any form of sex education in the schools. Data show that 50% of the male teachers and 83.3% of the female teachers holding Graduation degrees favoured inception of abstinence-only sex education. In case of Post-Graduate teachers there were 38.1% of the male teachers and 65.2% of the female teachers who favoured abstinence-only sex education curriculum. The female teacher of vocational stream categorically denied any form of sex education in schools.

It was found that in case of married teachers there were 41.4% of the male teachers and 63 % of the female teacher who perceived negative significance of sex education. It was found that more married male teachers had positive attitude towards comprehensive sex education in comparison to married female teachers. Data indicates that out of unmarried teachers all the male teachers and 66.7% of the female teachers perceived positive significance of sex education whereas, more married teachers, perceived negative significance of sex education. There were 41.4% of the male teachers and 74% of the female teachers who were married and favoured abstinence-only sex education. However all unmarried male teachers and 66.7% of the female teachers favoured the inception of abstinence-only sex education in the schools.

In case of P.G.T. teachers there were 46.2% of the male teachers and 60% of the female teachers who perceived negative significance of sex education. In case of T.G.T. teachers there were 33.3% of male teachers and 80% of female teachers who viewed negative significance of sex education. In case of teachers teaching other subjects like, Computer Applications, Drawing, Physical Education there were 80% of the male teachers and 40%
of the female teachers who had negative attitude towards sex education. Data show that in case of P.G.T. teachers there were 69.2% of the male teachers and 80% of the female teachers who recommended abstinence-only sex education. There were 66.7% of the male teachers and 73.3% of the female teachers who were T.G.T. teachers and favoured abstinence-only sex education in the schools. Results show that male T.G.T teachers had negative perception about the significance of sex education but favoured abstinence-only sex education. The teachers teaching subjects like Computer Applications, Drawing, Physical Education etc. there were 80% of the male and 60% of the female teachers who showed inclination towards abstinence-only sex education.

It was found that 50% of the male teachers and 50% of the female teachers with teaching experience of up to 10 years felt negative significance of sex education. This number decreased with teachers having teaching experience of up to 20 years i.e. 33.3% for male teachers and 26.7% for female teachers. This number decreased further as the years of teaching experience increased to 30 years. There were 60% of the male teachers and 77.8% of the female teachers with teaching experience of up to 30 years who viewed negative significance of sex education. Half of the male teachers and 50% of the female teachers with up to 10 years of teaching experience favoured comprehensive sex education. This number decreased as the number of teaching years increased. There were 55.5% of the male teachers and 60% of the female teachers with teaching experience of up to 20 years who recommended the inclusion of topics pertaining to abstinence-only. In case of teachers with teaching experience of up to 30 years there were 60% of the male teachers and 88.7% of the female teachers who favoured abstinence only sex education.

There were 10 nodal teachers (5 male and 5 female nodal teachers) included in the present study. These nodal teachers stated that they were forced by their school heads to act as nodal teacher. There were a number of activities carried out by these nodal teachers like establishment of the red ribbon club and organizing the rally for creating the awareness about AIDS.
Nodal teachers were, however, found to be reluctant to install a query box for adolescents on pubertal concerns. These nodal teachers reported that AEP was not up to the mark and stated that it defeats the purpose for which it is launched. They stated that AEP helps adolescents in enhancing their knowledge about AIDS but provides little information on sexual hygiene and protection. Nodal teachers suggested sufficient training for nodal teachers, innovation in teaching methodology, involvement of parents, proper evaluation of AEP and inclusion of medical practitioners for proper functioning of AEP. Nodal teachers also favoured the provision of incentives in the form of additional pay and recognition for their involvement in AEP.

In the nutshell the present study revealed that teachers acknowledge the vulnerability of adolescents and suggested the inception of sex education in schools. The study further revealed that teachers suggested the inception of abstinence-type of sex education with constricted reference to contraception techniques like condoms. It was found that nodal teachers didn't regard AEP not up to the mark and suggested multiple changes in the planning and execution of the programme. Teachers further opined that curriculum of sex education should be redesigned meticulously with novel techniques. There should be collaboration of teachers, parents and medical professionals while imparting sex education.

"CHAPTER-6" is an overview the sex education programme in India. The description and critical evaluation of AEP has also been done. This chapter aimed to cover the sixth objective of the present study. Further an effort was made to highlight the perception of the respondents and the insights of researcher in the form of suggestions about sex education.

In the year 2005, MMRD in collaboration with NACO has launched 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 by addressing their psychological, social and health concerns. It is interesting to note that in Indian context the term 'Adolescent Education Programme' is used instead of 'sex education'. The main goal of AEP is to reach youngsters at an impressionable age before they become...
sexually active. The laying of foundation for a responsible lifestyle, including healthy relationships and safe sex habits is another aim of programme. The specially developed AEP focus primarily on prevention of AIDS by spreading awareness among adolescents.

In the state of Punjab AEP was initiated in the year 2005 in all the Government schools in the classes of 9th and 11th. PSACP started this programme following the guidelines of NACO has been AEP modules are designed keeping in the mind that teachers have the ability to impart sex education to adolescents. In one academic year, the minimum of sixteen hours have been allocated. Two nodal teachers i.e. one male and one female have been engaged to carry out this programme at the school level. Nodal teachers are trained at seminars or workshops to understand various aspects of the AEP and equip them to run this programme at school level. Each nodal teacher is supplied reference books published by Department of Education under the guidance of PSACP.

The outline of actual execution of AEP is described in the reference material especially designed to guide and help nodal teacher. The reference material is provided to nodal teachers in the shape of a module to explain the various aspects of AEP. The name of the module is ‘Adolescent Education Programme-Developing Life Skills”. The scope of this module is not only restricted to spread the awareness about HIV/AIDS but also to help develop life skills among adolescents. In the reference material the whole AEP is divided into four main sessions. Each session is nearly allotted four hour and thus a total of sixteen hours were allocated for the whole programme in the session. These sessions are Childhood to Adolescence: A Path, Sexual and reproductive health of Adolescents, Mental Health and Substance abuse and control of HIV and its associated life skills. The first section attempts to shape behaviour of adolescents by developing inter-personal skills. The second session mainly imparts knowledge about sexual and reproductive health and attempts to promote abstinence from sexual activity among adolescents. Third session mainly addresses the mental health, problem of substance abuse and its associated life skills. Fourth session deals with various aspects of HIV/AIDS and STI.
The critical evaluation of AEP in the present study indicated various shortcomings. It is essential to mention that all respondents (except nodal teachers) had no knowledge about AEP. The plausible reason could be that very less time is devoted to AEP and most of the activities are conducted just on paper. Thus the views of respondents were not specific to AEP and reflect their general perception about sex education programme. The various shortcomings of AEP can be discussed at three levels. These are shortcomings related to content, planning and execution.

The following shortcomings were observed under the content.

The first session of AEP programme has five sub-sessions each having its own content and objective. Each sub-session is allocated one hour duration. The major shortcoming in this session is the paucity of adequate time. The scope of sub-sessions exceeds the time allocated. The time allocated to these sub-sessions should be increased. The first sub-session aims to develop ten healthy life skills as identified by UNESCO and WHO. But each life skill is not described properly and few examples are provided for reference which elucidates the benefits of these life skills among adolescents. The reference material is inadequate for the development of life skills like micro thinking, inter-personal relationship and effective communication. More elaboration is needed in the section describing compromising skills i.e. controlling emotions and tackling peer pressure. The second section lacks adequate literature/reference material. The third sub-section lacks information about biological facts about the pubertal transitions. For the fourth sub-section lacks sufficient material/literature as it is not always feasible for the nodal teacher to sufficiently equipped as they lack basic training in the field of adolescent psychology. The fifth sub-section addresses the queries of adolescents by effective and efficient utilization of query box by adolescents. But only fifteen minutes are allocated for this section which is totally insufficient.

There is a sheer casual approach towards AEP. Weak rationale, undefined means to achieve the objectives of the programme and lack of personalized approach are few shortcomings in the planning of AEP. Further
the absence of feedback system and non-inclusion of holistic approach has adverse effects on the outcomes of AEP.

Among shortcomings related to execution of AEP it was found that for years, research has highlighted the need to provide effective, comprehensive sexuality education to young people. Indian Government is still struggling to develop a clear sex education policy because of preconceived irrational fears and increasing resistance from politicians. The Central Government has thrown the ball in the court of State Governments. At the ground level there is no set criterion for the appointment of nodal teacher. Mostly the duty of nodal teacher is assigned to a non-willing or over-burdened teacher. The nodal teachers are not provided full-fledged and extensive training to implement AEP. Moreover the trainers which are supposed to provide training to the nodal teacher are also not well screened. There is not much emphasis on imparting methodological skills to nodal teacher. The training is held in a casual manner which results in the poor outcome. The nodal teachers are not reimbursement for their additional work of AEP. Similarly there is no recognition of these nodal teachers for their involvement in AEP. The current AEP expects the nodal teacher to deal with all problems of adolescents single handedly without any assistance from medical staff. Above all there is no monitoring to access the outcome of AEP.

After summarizing the results an effort has been made to highlight the main findings of the study.

**MAIN FINDINGS**

The main findings have been discussed keeping in mind the main objectives of the study.

The first objective of the study focused on the demographic and socio-economic profile of adolescents, their parents and teachers.

The adolescents, parents and teachers constituted the sample of the present study. There were 60 adolescents i.e. 30 male and 30 female adolescents. The adolescents were studying in classes 9th, 10th and 11th from the 10 Government senior secondary schools situated in Sangrur district, of
Punjab (India). 60 parents’ i.e 30 fathers of the male adolescents and 30 mothers of the female adolescents were included in the study. A total of 60 teachers i.e 30 male and 30 female were also studied.

- **Profile of the adolescents** A majority of the adolescents were from rural areas. A majority of the male adolescents had siblings of both sexes while a majority of the female adolescents had only brother(s) as their siblings. A majority of the female adolescents were on 1st position of birth order. While a majority of the male adolescents were on 2nd and 3rd birth position. There was a male preferred attitude among the families of adolescents. A majority of the respondents and their siblings had similar educational exposure as most of them were of same age group and school going.

- **Profile of the Parents** A majority of the Parents were in the age group of 45-55 years. The fathers of the male adolescents were found to be of higher age group than the mothers of the female adolescents in the present sample. The Parents of the male adolescents were of lower socio-economic status in comparison with the parents of the female adolescents. A majority of the parents of the adolescents both male and female were from middle and lower caste background and exhibited caste endogamy. It was found that the parents of the female adolescents had comparatively higher occupational status, monthly income and education than the parents of the male adolescents.

- **Profile of the teachers** All the teachers in the sample under taken had required qualification for teaching. In the Government School. Most of the teachers in the sample were well-experienced. Results show that teaching was not the most preferred profession for the male teachers. Results show that the female teachers had higher level of satisfaction in comparison than the male teachers. A majority of the teachers had urban background with their own house and lived in a nuclear family setting. A majority of them were dual earner couples. A Majority of the teachers were married and had two children of both the sexes i.e. one male and one female child. Most of the teachers in the sample
belonged to middle caste followed by lower caste and exhibited caste endogamy.

The Second objective discussed the issues and problems of pubertal transitions and explored different channels of information used by adolescents and perceived by their parents and teachers.

- **Perception of the Adolescents** It was found that the female adolescents of lower age have noticed pubertal changes more recently in comparison to the female adolescents of higher age group. Results indicate that the girls mature at an earlier age than the boys. Similar findings have been reported by other researchers like Chilman (1990), Herner (1984), Ostovich and Sabini (2005), Peterson and Offer (1979). It was found that there were a less number of the male adolescents in comparison to the female adolescents in early adolescence stage who noticed growth of hair on their private parts. This might be because of delayed onset of puberty among the male adolescents in comparison to the female adolescents. Corroborative findings were reported by Brooks-Gunn (1987); Herner (1984), Peterson and Offer (1979). Female adolescents regarded onset of menses as the most significant pubertal change however male adolescents in middle and late adolescence stage stated that onset of reproduction process as the most significant pubertal transitions.

Adolescents irrespective of gender stated that any deviation from normal pubertal transitions have negative consequences like embarrassment from peer group, negative influence on academics, lower self-esteem and rejection from opposite sex. Similar findings were reported by Davis (1944) and Offer (1969).

Both male and female adolescents showed transition in behaviour towards opposite sex and with the increase in age from early to late adolescents the gradual shift from shy/hesitating behaviour to friendly behaviour was observed. Larson et al (1994) reported similar results. The adolescents also reported changes in relationship with parents due to pubertal growth. It was found that both male and female adolescents became reserved with their
fathers. Steinberg (1987); Schmidt and Urdze (1983) reported similar findings. Female adolescents reported more cordial behaviour with their mothers as they discuss their menstrual concerns with their mothers. Corroborative findings were reported by Crouter et al (1995).

It was found that both male and female adolescents addressed their pubertal or sexual concerns with number of different persons. Corroborative findings were reported by Hill (1983). Adolescent boys discuss their pubertal/sexual concerns most often with friends. However in case of the female adolescents they discussed their pubertal/sexual concerns most often with mothers, friends and sisters. Corroborative findings were reported by Drakshayani et al (1994) and Banikarim et al (2000).

All the female adolescents reported that their mothers and the friends provided them information about menses. Similar findings were reported by Chilman (1990) and Drakshayani et al (1994). The male adolescents, on the other hand, reported that adults do not take initiative to solve their problems pertaining to pubertal concerns. Similar findings were reported by Abrahm (2000), Awasthi and Pande (1998) and Murthy (2000).

Adolescents reported that adults usually ignore any query related to sexual concern and discourage them from sex talk. These findings are in agreement with the findings of Allen & Barber (1992). Results depicted that adolescents irrespective of gender favoured the involvement of schools and parents for the provision of information related to pubertal or sexual concerns. Similar suggestion was made by Phatak (1994).

A majority of both male and female adolescents reported that use of media like Movies, Television, Magazines etc to get information on sex related topics. Corroborative findings were reported by Engle et al (2006) and Brown et al (2005). Results further depicted that adolescents use media to view sexual activities. They reported enjoyment and encouragement from peers as the reason behind viewing sexual activity on media. Similar findings were reported by Brown et al (1990).
Results depicted that the male adolescents regarded school and friends as most reliable agencies for addressing their pubertal or sexual concerns. However, the female adolescents regarded family and school as the most reliable agency for addressing their pubertal/sexual concerns. Corroborative findings were reported by Chilman (1990).

**Perception of the Parents** It was found that most of the parents stated onset of reproduction as most significant pubertal transition among the adolescents. Results of the present study are in congruence with findings of Banikarim et al (2000) and Busch et al (1998).

Parents reported transition in behaviour of the adolescents due to pubertal changes. They stated that pubertal changes induced transition in behaviour of adolescents such as erratic behaviour, obstinate behavior, sexual delinquency, self assertion, affinity towards fashion, imitation of actor/actress, reluctance to spend time with family members and tendency towards disobedience.

Parents stated that monitoring of adolescents is essential as it helps them prevent them from going astray, coping with pubertal transitions and peer pressure. Similar observations were made by Benson et al (1998) Stemmler and Peterson (1999). All the parents reported that friends act as information agency for adolescents. All the parents were of the opinion that mothers provide menstrual information to their adolescent girls. Mothers viewed teachers and medical practitioners as important information agents for adolescents. Parents disapproved fathers and grandfathers as agents of information for adolescents on pubertal transition. Findings partially support Somers and Paulson (2000) and fully support Drakshayani et al (1994) and Larson and Richards (1994).

It was found that fathers were of opinion that both male and female adolescents discuss their pubertal concerns most often with their friends. Similar findings were reported by Aquiliono (1997); Rossi and Rossi (1990). But mothers were of opinion that female adolescents discuss their pubertal concerns equally with their friends and mothers and adolescent boys with their friends only. Similar findings were reported by Banikarim et al (2000) and
Busch et al (1998). Results, however, do not fully support the findings of Rosenthal and Feldman (1999) who argued that mothers play main role in providing sex education to their adolescent daughters.

It was found that fathers avoided any intervention on sexual information to their adolescent children. The mothers supplied required information on menstruation to their adolescent daughter but didn't cater to the needs of sons. Corroborative findings were reported by Chilman (1990). However present study is not in full agreement with Mahajan and Sharma (2005).

- **Perception of the Teachers** It was found that most of the teachers irrespective of gender associated maturity of reproduction organs as the most significant pubertal transition. Similar findings were reported by Reddy et al (1979). Both the male and the female teachers stated that adolescents exhibit disobedience, assertion for identity, lack of interest in studies, consciousness of their physical appearance; spend more time in front of the mirror and increase inter-gender attractions as major behavioural transitions among adolescents. Teachers reported that there are a few adolescent students who indulge in truancy, and substance abuse. They are likely to fall in high risk behaviour to order to show masculinity. Similar findings were reported by Trujillo (2000). Bad temperament, depression and emotional instability are other main problems cited by female teachers among the adolescent girls. Teachers irrespective of their gender stated that they monitor the activities of adolescents because of their higher vulnerability towards vices which could spoil their whole life. Similar findings were reported by Benson et al (1998).

Teachers stated that adults with the exception of mothers play only a constricted role as information agency on pubertal concerns for adolescents. The peer group acts as important information agency on pubertal concerns for adolescents. Similar findings were reported by Larson and Richards (1994). Female teachers reported that female adolescents discuss their pubertal concerns most often with their mothers and friends while both the male and the female teachers opined that the male adolescents discuss their pubertal concerns most often with their friends. Similar findings were reported by Aquilino (1997); Rossi and Rossi (1990); Larson and Richards (1994).
The third objective of the study explored the preferred content and significance of sex education according to adolescents, their teachers & parents.

**Content and Significance of sex education according to adolescents**

Adolescents in the present study favoured the inception of complete and comprehensive type of sex education in schools. They reported that sex education in schools would not have negative influence on teacher–student relationship. Most of them opined that as teachers never supply any wrong information and it would help them to sort out their pubertal concerns adequately in a positive manner. Female adolescents favoured inception of sex education at 6th-8th class whereas male adolescents favoured inception of sex education at 9th-10th class. The plausible reason of this difference in perception about inception of sex education between male and female adolescents could be early sexual maturation among the girls than the boys. Thus female adolescents seek information on pubertal changes at an early age in comparison to male adolescents.

Adolescents suggested that curriculum of sex education should be designed by parents, teachers, counselors and medical practitioners. It was found that both male and female adolescents favoured the use of multiple teaching techniques for imparting sex education. Adolescents reported that discussion, books, charts/literature and multimedia should be used as techniques for imparting sex education. Corroborative findings were reported by Barak and Fisher (2001).

Adolescents irrespective of gender reported that sex education should be provided by same gender teacher i.e. male teacher to boys and female teachers to girls in separate tutorials. Adolescents argued that it is easy to discuss sex related queries to same gender teacher. Most of the adolescents in all three age groups suggested the most suitable age of the teacher for imparting sex education should be 30-40 years.
All the adolescents reported that sex education should be integrated with Science, Social Science, Moral/Population Science and Physical Education.

Content and Significance of sex education according to Parents

A Majority of the parents opined that school-based sexuality education is an important and effective way of enhancing and regulating young people's knowledge, attitudes and behaviour. They regarded schools as the most reliable agency for disseminating information on pubertal/sexual concerns. Similar observations were forwarded by (Berger, 2005; Kirby, 2001; WHO, 1999).

Parents favoured abstinence-only sex education with very little reference to contraception techniques like condoms etc. There were a majority of the fathers of the male adolescents and the mothers of the female adolescents who regarded education of contraception for adolescent as useless. A majority of mothers of the female adolescents and the fathers of the male adolescents did not regard information on contraception as beneficial outcome of sex education. Corroborative findings were reported by Mahajan and Sharma (2005).

A majority of the fathers and the mothers feared that the inception of sex education would affect existing teacher pupil relationship. At the same time most of them were unable to elaborate change in relationship and stated that the type of change would largely depend upon attitude and values of teacher and their student.

A majority of the parents favoured inception of sex education at 9-10th class stage in the schools. Similar findings were reported by Alexander (1984). It was found that the fathers favoured non familial agencies i.e. teachers and doctors to take the lead role in imparting sex education. The mothers of the female adolescents entrusted both teachers and parents especially mothers to take the lead role in imparting sex education. Results partially support the findings of Bhasin and Aggarwal (1999).
A majority of the fathers of the male adolescents and mothers of the female adolescents suggested class-room lecture method and distribution of literature as suitable techniques for teaching sex education in schools. They further favoured same gender teacher i.e. male teacher to boys and female teacher to girls for imparting sex education in separate tutorials. Similar findings were reported by Yarber and McCabe (1981). Parents further suggested that the most suitable age of the teacher for imparting sex education is 30-40 years.

Both the fathers of the male adolescents and the mothers of the female adolescents stated that in event of not introducing sex education as a separate subject the topics of sex education could be integrated into school subjects like Science, Social Studies and Moral/Population Science.

Content and Significance of sex education according to Teachers

Male teachers regarded schools as the most reliable agency for addressing pubertal or sexual concerns of adolescents. However female teachers favoured the provision of information on pubertal or sexual concerns to adolescents by both school and family. Similar suggestions were forwarded by Lloyd (2005); Peltzer and Super (2006).

Male teachers showed more inclination towards imparting sex education to adolescents as compared to female teachers. A majority of the female teachers favoured partial sex education and prescribed abstinence-only sex education. The present findings do not endorse the findings of Onwasigwe et al (2006) who reported that teachers are willing to offer sex education to adolescents irrespective of religion, sex and marital status.

Mixed response of teachers about the effect of sex education on teacher pupil relationship was recorded. There were a few teachers who reported that sex education would have adverse effect on teacher - pupil relationship while others stated that sex education would not have negative impact on teacher pupil relationship.

Both male and female teachers supported the collaborative involvement of parents, teachers and medical practitioners for provision of sex
education to adolescents. Results coincide with the similar findings of Alexander (1984); Asmussen and Croft (1992).

A majority of teachers irrespective of gender suggested the inception of sex education in schools at 9th-10th class level. The present study endorses the finding of Alexander (1984) Male teachers favoured non familial agencies i.e. teachers and doctors to take lead role in imparting sex education. However female teachers entrusted both teachers and parents especially mothers to take lead role in imparting sex education.

Teachers irrespective of gender suggested inclusion of multiple techniques while teaching sex education like class–room lecture, discussion, books and charts for imparting sex education in schools. None of the teacher, however, favoured the use of multimedia for instructing adolescents about sexuality and stated that more detailed sex education would be embarrassing for them. Teachers (both male and female) reported that sex education should be provided by teachers of same gender i.e. male teacher to adolescent boys and female teachers to adolescent girls. Similar findings were reported by Mullins (2005) and Singh (2006). Teachers suggested that sex educators should be chosen from the age group of 30-40 years and 40-50 years.

A majority of the teachers reported that sex education should be integrated with Science, Moral/Population Science and Physical Education. Results endorse the findings of Iwu et al (2011).

The fourth objective explored the role of different precipitating factors in influencing the perception of adolescents, parents and teachers with regard to sex education.

Different factors influencing the perception of adolescents, their parents and teachers regarding sex education in schools were also probed in the present study. It was found that socio-economic variables of parents and teachers have scant influence on their perception about inception of sex education in schools. Socio-economic indicators of parents and teachers like age, present marital status, age at marriage, education, occupation, caste, religion, background of teacher, subject taught and number of teaching years,
number of family members, type of family, type of house, ownership of land, 
quantity of land owned by parents, total family income has insignificant effect 
on their perception about inception of sex education. The main reason might 
be that pubertal changes have biological genesis. It was observed in the 
present study that all the adolescents favoured comprehensive sex education 
while all the parents favoured abstinence sex education in schools despite of 
differences in their socio-economic status. Similar results were found with 
regard to teachers as a majority of them favoured inception of sex education. 
The main reason behind this pattern seems to be the acceptance among 
parents and teachers (belonging to different socio-economic status) about the 
fact of higher vulnerability among adolescents, negative influence of media, 
lack of any reliable source addressing pubertal/sexual concerns of 
adolescents and the real threat of AIDS/STD which drive them in favour of 
inception of sex education. However gender emerged as an important 
variable in the present study. The Female adolescents favoured inception of 
sex education at an early stage i.e. 6th-8th class whereas male adolescents 
favoured inception of sex education at later stage i.e. 9th-10th class. It was 
found that the fathers of the male adolescents favoured non familial agencies 
i.e. teachers and doctors to take the lead role in imparting sex education 
whereas the mothers of the female adolescents favoured involvement of 
teachers and parents in imparting sex education. Similarly there were more 
male teachers who showed more inclination towards imparting 
comprehensive sex education to adolescents as compared to female 
teachers. A majority of the female teachers favoured partial sex education and 
prescribed abstinence-only sex education.

The fifth objective highlighted the functional and dysfunctional aspects 
of sex education as perceived by adolescents, teachers and parents.

There are various explanations given to highlight the significance of 
sex education like age of biological maturity among adolescents, high risk 
behaviour, threat of HIV/AIDS etc. An effort was made to procure information 
in this regard it was found that adolescents were not fully clear about their age 
of biological maturity and that of the opposite sex. Similar findings were
reported by Awasthi and Pande (1998). Both male and female adolescents mainly associated appearance of secondary sexual characters with age of biological maturity for opposite sex. A majority of the adolescents however had good knowledge about mode of spread of AIDS. Corroborative findings were reported by Nath (2008). A majority of the male and the female adolescents were against pre-marital sex mainly due to social taboo on pre-marital sexual activity. All the adolescents wanted comprehensive sex education. Both male and female adolescents stated that they have many doubts about pubertal transitions and wanted complete information on puberty. Male adolescents reported doubts about nightfall, negative consequences of masturbation on health and growth of beard. Similarly female adolescents stated that they have doubts about menstruation, pimples and weakness/fatigue during menses. Similar findings were reported by Kaur (2000) and Ghule et al (2007). They complained that as their parents and teachers don’t answer their queries they resort to media. Adolescents reported that adults usually ignore any query related to sexuality and discourage them from sex talk. These findings are in agreement with the findings of Allen & Barber (1992). Results depicted that adolescents irrespective of gender favoured the involvement of schools and parents for the provision of information related to pubertal or sexual concerns.

A majority of the parents in the present study suggested that right age of the marriage for girls should be between 18 years to 21 years and for boys it should be more than 21 years. All the mothers and the fathers regarded pre-marital sexual activity as wrong. They stated that there is strong social taboo on any sexual activity prior to marriage and it is regarded as a great vice.

Findings show that a majority of the fathers of the male adolescents and the mothers of the female adolescents were aware of AIDS but they had partial knowledge about the modes of spread of AIDS. The fathers of the male adolescents had little more knowledge about AIDS than the mothers of the female adolescents. Parents were of the opinion that adolescents should be imparted knowledge about AIDS as it is a fatal disease. Similar findings were reported by Ogunjimi L.O (2006).
Results show that a majority of the teachers irrespective of gender reported that for the male adolescents the age of biological maturity is 12-15 years and for female it is less than 12 years. Both the male and female teachers reported the right age of marriage for boys and girls to be more than 21 years. A majority of teachers irrespective of gender regarded pre-marital sexual activity as wrong and unacceptable. It was found that all the male teachers and a majority of the female teachers reported that inception of sex education in schools would reduce anxiety of parents, increase awareness about STD/HIV and construct a positive attitude among adolescents towards sexuality and various pubertal transitions.

The Sixth objective of the study examined the existing programme on sex education in the State & drew suggestions for future sex education programme.

All the adolescents in the present study were not aware of AEP. Similarly none of the parents in the present study ever heard of AEP. All the teachers except for nodal teachers had no knowledge about AEP. The plausible reason could be that very less time is devoted to AEP and most of the activities are conducted just on paper. Apart from their voluntary choice of nodal teachers they also stated that they were forced by their school heads to act as nodal teacher. Nodal teacher were found reluctant to install query box for adolescents to address their pubertal concerns. A majority of the nodal teachers viewed AEP as not up to the mark and stated that it defeats the purpose for which it was launched. Nodal teachers suggested a number of ways for improving AEP. Like provision of specialized trainers for teachers, innovation in teaching methodology, involvement of parents, proper evaluation of AEP and inclusion of doctor/medical staff. Nodal teachers also asked adequate financial provision for their involvement in AEP.

Findings indicate that there is a need to revamp and redesign the content of AEP. The whole content of reference material needs to be supplemented by literature (especially real life stories or case studies) and redesigned by inclusion of graphs, pictures, charts and multimedia. There should be consonance between the content of AEP and time allocated for the
topic. The inadequacies in the reference material provided to the nodal teacher should be removed by rigorous research. In order to increase the efficacy of AEP the reference material should be descriptive and help both the nodal teachers and adolescent students. The main emphasis of AEP is on containing the pandemic of AIDS. The non-involvement of academician, educationist and medical practitioners has resulted in many flaws in AEP.

When developing or enhancing a sex education program—whether at the national, state, local, or school level—a planned approach is essential for success. In order to make AEP effective, there is a need of a broad assessment and understanding of individual, community and social needs. This process involves collaboration with persons for whom the programs are intended to be delivered. School-based sex education can be an effective way to reach young people. It is anticipated that improved knowledge about sexual matters will assist improvement of adolescents' behaviour and promote appropriate behaviour for health benefits of adolescents. To meet the aim of sexual and reproductive health education, the information should be carried out consistently through appropriated approaches.

Nodal teacher act as the executive head of sex education programme in the school. Presently any subject teacher is assigned the duties of nodal teacher. It is observed in the study that nodal teacher should be full-time and specialize in their field of work. The criteria of selection of nodal teacher should be designed to engage the best person with the right attitude for the sex education programme. The age and gender of the person should be given due consideration before appointing him/her as nodal teacher. The training aspect of nodal teacher is also an important factor as the adequate training would result the positive outcome of the programme. The proper evaluation is necessary at the end of the training to ascertain the capabilities of nodal teacher. Thus in order to get fruitful results of sex education programme proper role of efficient nodal teacher is necessary.

The adolescents need guidance and patronage to deal with various pubertal transitions during puberty. The proper communication between teacher and parent results in their better coordination. The parent-teacher
association and mother-teacher associations should provide a common platform and opportunity to discuss various issues related to adolescents. The qualitative outcome of the sex education programme could be enhanced by inclusion of teachers and parents who properly cooperate and coordinate in the whole programme.

RESEARCH QUESTIONS ANSWERED

The present study aimed to answer the research questions such as:

- 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?
- Does the age of adolescents influence sex education as viewed by respondents?
- Does the sex of adolescents influence sex education as viewed by respondents?
- What are the sources from where adolescents presently receive sex education or information about sex?
- What is the role of parents and teachers at present in imparting sex education to adolescents?
- What are the functions and dysfunctions of sex education according to parents, teachers and adolescents?

The section below provides a summary of answers to the above-mentioned questions based on the findings of the present investigation

- It was found that different socio-economic variables of parents and teachers did not influence their perception about inception of sex education in schools. Socio-economic indicators of parents like age, present marital status of parents of adolescents, age at marriage, education, occupation, caste, religion, number of family members, type of family, type of house, ownership of land, quantity of land owned by parents, total family income has no effect on their perception of
inception of sex education. It was observed in the study that all the fathers and mothers favoured the inception of sex education in schools despite of their differences in their socio-economic status. Similar results were found in the case of teachers as a majority of teachers suggested the inception of sex education in schools. The prominent reason behind this pattern seems to be the acceptance of parents and teachers (belonging to different socio-economic status) about the fact of higher vulnerability among adolescents, negative influence of media, lack of any reliable source addressing pubertal/sexual concerns of adolescents and the real threat of HIV/AIDS which drive them in favour of inception of sex education.

The age group of adolescents plays an important role in sex education programme. The age group of adolescents should be taken into consideration while framing and executing the sex education programme. It was observed that there is a difference in opinion among the respondents according to age. Statistically a positive association was found between the age group of the adolescents and the time since they have noticed the pubertal transition in the present study. It was found that both male and female adolescents of lower age have noticed pubertal changes more recently in comparison to the male and female adolescents of higher age group. Statistical association was found between the age group of the adolescents and their doubts about normal pubertal transitions. It was found that both male and adolescents of lower age group were more doubtful about pubertal changes in comparison to adolescents in the higher age group. The consequences of pubertal changes are not only somatic and psychological but also sociological. Significant association was found between the age group of female adolescents and their relations with opposite sex. It was found that female adolescents of upper age group were likely to be friendlier with males in comparison to female adolescents of lower age group. Statistically significant association was
found between the age groups of the male and female adolescents and their uncertainty about the age of biological maturity of opposite sex. It was found that adolescents belonging to early adolescence were uncertain about the biological maturity of opposite sex. It was also found that both male and female adolescents of higher age group showed reserved behaviour with their fathers as compared to adolescents of lower age group.

- Results show that the sex of the adolescents influences their sex education. Results show that male adolescents show late pubertal transition as compared to female adolescents. The plausible reason could be delayed onset of puberty among males as compared to female adolescents. All the respondents opined that sex education need to be gender sensitive and able to address the varied needs of male and female adolescents. Female adolescents favoured inception of sex education at 6th-8th class but male adolescent favoured inception of sex education at 9th-10th class. The plausible reason of this difference in perception about inception of sex education between male and female adolescents could be early pubertal maturation among the girls than the boys. Thus female adolescents seek information on pubertal changes at an early age in comparison to male adolescents. Adolescents reported that sex education should be provided by same gender teacher i.e. male teacher to boys and female teachers to girls in separate tutorials. Adolescents argued that it is easy to point a query to same gender teacher than to an opposite gender teacher. Similar opinion was put forward by parents and teachers. They stated that same gender sex educator could effectively deal, guide and counsel problems of adolescents. It is pertinent to mention here that female adolescents, teachers and parents favoured of imparting significant role to mothers while designing sex education for adolescent girls.
It was observed that adolescents utilize multiple sources to receive sex education or address their sexual/pubertal concerns. Friends are the main source of information for both male and female adolescents to address their pubertal/sexual concerns. Some male and female adolescents discuss their problems of pubertal transitions with their teachers. Male adolescents admitted that they discuss about growth of beard with their male teachers. Adolescent girls shared their problems of menses with their female teachers. Adolescent girls reported that their mother also provide them information about pubertal transitions and guide them about menstrual cycle and hygiene. In some cases adolescents shared their problems with elder siblings. None of the adolescents discussed their sexual/pubertal concerns with their fathers and grand fathers. Adolescents also used media for attaining information on sexuality.

The present study indicates that parents and teachers should have a significant role in sex education programme. All respondents acknowledged the role played by mothers in assisting their adolescent daughters during the period of onset of menses. Adolescents favoured the inception of complete and comprehensive type of sex education in schools. Adolescents opined that as teachers never supply any wrong information it would help them to sort out their pubertal concerns adequately in a positive manner. Adolescents also suggested that such curriculum of sex education should be designed which involves both parents and teachers. Adolescent girls opined that mothers should play significant role along with teachers in sex education programme. The male adolescents felt that teachers should lead the sex education programme and parents should support the efforts of the teachers. Parents irrespective of gender favoured school-based abstinence-only sex education. Mothers were willing to participate and support the teachers in the sex education programme. The fathers of the male adolescents in the present study disowned the responsibility of providing sex education to adolescents. They propagated collaboration
of teachers and mothers in case of adolescent daughters. Teachers on the other hand supported the collaborative efforts of the parents, teachers and medical practitioners for sex education programme. Male teachers suggested abstinence-only sex education with little reference to contraception techniques however the female teachers favoured complete abstinence-only sex education. Male teachers suggested that teachers should take the lead role in sex education and mothers should give supportive assistance to teacher. However female teachers suggested equal role for both teachers and parents especially mothers in imparting sex education.

- Results show that parents and teachers in the present study acknowledged the vulnerability of the adolescents. Nearly all the parents and teachers suggested the inception of sex education in schools. Most of the parents and teachers reported that inception of sex education in schools would reduce anxiety of parents about their adolescent sexuality, construct wholesome attitude among adolescents towards sexual behaviour and would make adolescents more knowledgeable about HIV/AIDS. It is pertinent to mention that the parents and the teachers were highly skeptical about the positive outcome of information of contraception techniques and all the parents and female teachers were against including contraceptive information in sex education curriculum. There were only two cases of female teachers who categorically denied any beneficial effects of sex education and regarded it as dysfunctional by referring it would result in promiscuity among adolescents. They were of the opinion that sex education would pollute the socio-cultural and moral values of Indian society. There is an urgent need to address such doubts because research studies ascertain that sexuality education programmes do not increase sexual activity. In fact, the research has confirmed that most programmes reduce misinformation and increase correct knowledge, many of them clarify values and reinforce positive attitudes, and some increase skills for decision-making and communication.
DISCUSSION

Adolescence is the crucial stage of human life. The transition during adolescence includes physiological, psychological and social change. Adolescence is the stage in which child enters and exits as an adult. The present study mainly attempts to explore the adolescent sexuality, pubertal changes and examines the relevance of sex education programme from different vintage points. The study includes the adolescents, their parents and teachers who are primarily responsible for socialization of adolescents.

Sex education, sometimes called sexuality education or sex and relationships education, is the process of acquiring information and training 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 the right to sex education, partly because it is a means by which they are helped to protect themselves against abuse, exploitation, unintended pregnancies, STD’s transmitted diseases and HIV/AIDS. All the respondents admit that adolescents are highly vulnerable in the present era of media and communication. Adolescents and their parents admit that adolescents need correct information regarding their sexuality and pubertal transitions from a genuine source. As girls mature at an early age in comparison to boys they need the information about various facets of pubertal change at an earlier stage. It is irony of the situation that adults usually remain silent and ignore the need of information concerning sexual/pubertal transition of adolescents. Adolescents usually depend upon peers and media to get the information about sexuality. Adolescents favoured the inception of comprehensive sex education in schools and they also wanted collaborative efforts of teachers, parents and medical professionals.

Parents and teachers acknowledged the need of sex education due to vulnerability of adolescents. They admitted that there is no genuine source
which could adequately address the issues encircling pubertal transitions and adolescent sexuality. Mothers play a significant role for their adolescents' daughters during the phase of menarche. It was found that mothers were willing to get associated with sex education programme while fathers distanced themselves from sex education programme. All the parents and teachers suggested the inception of sex education at high school level. Parents and female teachers were found to be the votary of abstinence-only sex education however male teachers recommended sex education with little reference to contraception. Male teachers have displayed liberal attitude towards the enforcement of sex education. Adolescents, their parents and teachers regarded pre-marital sexual activity as a sin and against Indian cultural tradition. The socio-cultural milieu prohibits discourse on sexuality using argument of culture and tradition. The present study further indicates that in the absence of adequate information adolescents exercise decision without being able to consider all the aspects and impact of these decisions.

The present study attempts to examine the Indian sex education programme i.e AEP. The critical evaluation of AEP has revealed that most of the activities of this programme are running on paper and it has failed to deliver the broad objectives of the programme. The main emphasis of the programme was found to be controlling the pandemic of AIDS. There is need to revamp and redesign the whole programme by associating academicians and health professionals. There is a need to prepare the novel sex education programme with the help of multiple theoretical perspective.

The usage of social learning theory, social cognitive theory and social ecological model are found to be helpful in designing the sex education programme. The social learning theory states that learning occurs in a social context. In this study, adolescents mentioned various sources from which they received sexuality education. However, these sources sometimes differed based on their contexts ranging from receiving information from mothers, teachers, peers and media. Based on the responses of the
respondents, the school has emerged as the most reliable source for providing sex education in the study. This implies that school provides a context for learning. Parents were also considered by respondents an important source. According to the respondents, mothers were more concerned about sexuality but did not talk directly, whereas fathers were concerned about security. Mothers mostly talked to girls while fathers didn’t talk to adolescents. The focus of any sex education programme should be on providing genuine information to adolescents from trusted source so that they could cultivate the power of discretion in reference to their sexuality. It was also found in the study that avoiding or ignoring the problem associated with adolescents would only enhance vulnerability among adolescents. Thus there should be firm footed decision regarding adolescent health in holistic manner. In relation to the social learning theory, this reveals a reciprocal relationship between the personal and environmental factors. However, this relationship also indicates that adolescents are active agents. If they are passive, they would just keep quiet and not ask any questions. The implication of this is that we as adults have to give adolescents detailed and accurate information and also inquire whether they would like to know anything else, instead of assuming that we know all they need to know. Such a reciprocal relationship is important as also noted in the social learning theory.

The main aim of sexuality education is to encourage wellness and healthy lifestyles among adolescents. According to Bandura (1997), the ability by adolescents to forsake risky activities or become chronically enmeshed in them is determined in large part by the interplay of personal competencies, self regulatory capabilities and the nature of the prevailing social influences in their lives. Parents and teachers through proper sex education can help young people guard against risky activities. They do this through reinforcing self efficacy because according to Bandura, management of risky activities rest partly on a firm sense of self efficacy. It is the teachers, parents and other professionals’ determination to work towards achieving their organisations’ goals. From the responses, they use their capabilities with intentions to
heighten young people's personal competencies. Adolescents who are insecure in their efficacy are said to be less able to curtail involvement in for instance, unprotected sexual activity than are those who have a strong sense of self regulatory efficacy (Bandura, 1997). Therefore, schools and families can aim at enforcing and empowering youth to have strong self efficacy.

When examining the issue of sexual health, the use of a socio ecological model becomes of particular importance. This is due to the fact that sexuality cannot be defined by one particular aspect. It is neither solely a behaviour, nor a physical state, nor a social construction. Sexuality is also a process between people, rather than an end-state within one person, meaning that all levels of interaction, from the micro to the macro, will have an impact on perception of wellness in sexuality. Sexuality education can also be seen as a quality of life issue that occurs in all societies, both in developed and developing nations. It is in itself broad and all-encompassing, so to attempt to examine it devoid of context would create a partial impression that robs it of its awe-inspiring complexity. Individual-level factors primarily act at the level of the person themselves. They can include demographic, biological, psychological, behavioural and life-course factors. At individual level, gender emerged as an important factor. Girls mature earlier than boys they want sex education at an early stage. Further mothers are ready to get involved in sex education programme.

Interpersonal-level factors are those that impact an individual's most personal and close relationships, such as the ones that they may have with their family, partners, and close friends. Interpersonal-level factors are dynamic in that they require both individuals in the relationship to be seen as influential. Parent-child communication has been demonstrated to affect healthy sexual behaviours in adolescents. There are a multitude of social support factors that affect sexual health. For instance, the perceived connectedness—an aspect of social support—to one's family, peer group,
school, community and culture has been shown to improve reproductive and sexual health in adolescents.

Community-level factors primarily operate at levels greater than those seen surrounding the individual and an individual's close relationships. Communities can often include schools and different aspects of schools can either be on the community or organizational level. The general attitudes towards sexual health of those attending (both students themselves and their families of origin) a school can have an impact on the community level; however, the formal policies that a school has on educating and monitoring its students' sexual health and sexuality would be considered an organizational-level factor. With regard to sexual health, most community-level factors focus on pervasive attitudes and norms throughout a community, however, the physical aspect of access and availability of sexual health services in a community has also been shown to be extremely important for sexual health.

Organizational factors can be seen as shaping sexual health and sexual behaviour more than is usually thought. Organizational factors include aspects of policies and procedures in organizations that impact upon the issue in question. It includes those factors that are pervasive throughout society in India, both past and present that shape current sexual health care practices and beliefs around sexuality. This Framework contends that adolescents have the right to be informed about sexuality so that they can safeguard themselves.

Along with the parents and teachers, the Union and State Government machinery should be considerate in addressing all the issues pertaining to adolescence. It is also recommended on the basis of present study that without any loss of time different political parties, religious groups, media and the society at large should deliberate very seriously on the issues concerning adolescents so that some sort of consensus should be built in the context of sex education. Successful action on such a complex and multi-level issue requires a coherent approach to which key players are committed, and that a
comprehensive, integrated health promotion strategy be employed. Sexual health is a key aspect of personal health and social welfare that influences individuals across their lifespan. It is thus important that health promotion programs focus on enhancing positive sexual health outcomes and reducing negative sexual health outcomes.

LIMITATIONS OF THE STUDY

Although the study achieved its objectives but there are limitations that exist. It is imperative to inspect research findings in the milieu of its limitations.

- Major shortcoming of the present study has been that it has primarily focused on the school going adolescent, their teachers and parents. The present study misses out all those adolescents who are not the part of formal school system.

- The present research is carried out on the adolescents studying in the schools situated in the rural areas only. Thus the absence of students belonging to the schools situated in the urban areas is a limitation of the present study.

- The present study is focused only on the pubertal transitions of adolescent. The issues of adolescent sexuality encompassing their sexual desires, sexual deviance are not addressed in the present study.

- To understand the role of support systems for the adolescents the role of other family members, neighbours and media should have been included in the study in greater length.

- In the present study although adolescents showed positive attitude towards sex education but they were not encouraged to seek knowledge and talk about sex education.

- The study did not consider the effects of different cultural background on the responses of the respondents.
Despite its limitations, the study provides important preliminary information and insights on pubertal transitions of adolescents and sex education policy ranging from past to present. The findings should be viewed as a catalyst for future research in this area. The suggested areas of future research is that

**DIRECTION FOR FUTURE RESEARCH**

This study has opened the following avenues for future research:

- There is a need for more research on pubertal transitions and adolescent sexuality in Indian context as most of the studies on this topic are of foreign origin.

- The scope of this problem concentrated only in the state of Punjab. There is however a need to extend the area of scope and cover other states in India. Alternatively small-scale studies similar to the current one can be carried out in different locations. The results can be pooled together to get a holistic picture. This will provide the necessary data that can be used to improve/reframe the current programme.

- It is suggested that more research should be undertaken with large sample to generalize the results.

- The future research on the role of government, religious groups and media with respect to sex education should be undertaken in more depth.

- Misconceptions and cultural beliefs result in a disadvantaged position of adolescents girls during their menarche and onset of puberty. Therefore to improve the awareness status of adolescent girls in the society, studies highlighting the capabilities of institutions like family, education and legal etc. of the society should be undertaken.
CONCLUSION

In the modern era the issue of adolescent sexuality has got more complicated. The vulnerability of adolescents has gone higher due to transition in family structure and increased pace of life. The present study indicates that adolescents are in need of correct information on pubertal transition and sexuality from the genuine source. Adolescent showed there affinity towards the inception of comprehensive sex education. Parents and teachers acknowledge the vulnerability of adolescents. Mothers are willing to collaborate with teachers in the sex education programme. The fathers leave the whole responsibility of sex education on teachers. Female teachers and parents favour abstinence-only sex education. However the male teachers suggest the reference to contraception in sex education programme. The present study also highlighted many shortcomings in the current AEP.

Sexuality is not only about disease or pregnancy prevention, but rather it is about much broader and deeper issues essential to living whole and fulfilling lives. We can't underestimate the importance of teaching our children about sexuality to ensure their health and wellbeing. They will use the knowledge and skills throughout their lives. Therefore it's crucial to invest in their teachers' training. If attention is given to the needs of teachers and an adequate training program is developed, implementation of a sexuality education program is not only possible and rewarding, but also invaluable to our children.

Adolescents need to be given platform to express their views regarding their reproductive needs as well as evaluation of sex education sources and messages provided. Adolescents should not be seen as passive recipients but as active agents in the communication process. This will help in the implementation of adolescent friendly services. Adolescents should not be denied complete and accurate information in the name of 'cultural silence'. Denial of such information may only increase anxiety among adolescents. They keep on asking 'how?' and may decide to learn by experience. Policy
makers should incorporate good aspects of culture into sex education while discarding the bad ones that put adolescents at risk. The present study suggests the need of further detailed research on various aspects of pubertal transitions, adolescent sexuality and sex education. The study indicates the need of serious deliberation on Government plans; religious groups, media and society at large on the issue of adolescent sexuality and sex education so that some sort of consensus should be built on implementation of sex education.