CHAPTER VI
6.0 Defining Adolescence

The word adolescence comes from a Latin word meaning to 'to grow up' or "to come to maturity". Adolescence in all cultures can be described as a time of transition in the biosocial status of the individual. It is a period of physical, psychological and social maturity from childhood to adulthood extended from the onset of puberty to the attainment of full reproductive maturity (NCERT, 1998). Adolescence can be best understood as a period of personal development during which a young person must establish a sense of individual identity and feelings of self worth which include an alteration of his or her body image, adaptation to more mature intellectual abilities, adjustments to society’s demands, behavioural maturity, internalizing a personal value system and preparing for adult roles. ‘Adolescence’ has been defined as including those between 10 and 19 years of age (WHO).

6.1 Historical Perspectives on Adolescence

Just what is Adolescence? Or, who are Adolescents? Is Adolescence a period of life marked by storm or stress? Is it a period of naive, youthful idealism? Is it a period of rebellion or, is Adolescence a little of all of the above. The answers to these questions are not simple. Adolescence has been viewed from different theoretical perspectives or angles of vision. By examining the distinctive contributions of several major perspectives a more inclusive and well-balanced understanding of adolescence development can be obtained. The modern scientific study of adolescence is attributed to psychologist Stanley Hall who held that adolescence is a critical stage of development during which the dominant biological factors are more readily modified by one’s environment than at any other time of life. Hall is credited with giving the “storm and stress” conception of adolescence. Sigmund Freud viewed adolescence development as a sequence of psychosexual stages, the personal dynamics of later stages being heavily dependent on one’s earlier development, especially childhood. According to Erik Erikson the primary crisis of adolescence is the need to establish a personal sense of identity. Theorists who
use the social cognitive perspectives emphasize the importance of learning and environment-holding that biological drive are decisively shaped by psychological and social influences. Robert Havinghurst's psychosocial theory of adolescence combines a developmental understanding of individual need with social expectation and roles. The convergence of the individual's needs and social demands gives rise to the developmental tasks of adolescence. Cognitive development theorist drawn mainly on the writings of Piaget are concerned with the shift from concrete operational thought to formal operational thought in adolescence.

6.2 Boundaries of Adolescence Development

Adolescent development can be grouped into five aspects namely physical, social, cognitive, emotional, and behavioural. Physical development can be comprehended in terms of growth spurt and hormonal intensity, which paves way for sexual maturation. Consequently adolescent's self awareness can be interpreted in terms of the heightened concern for physical appearance and body image and its effect on their self esteem and coping mechanism. The social development of adolescents takes place in context of all their relationships particularly those with peers and families. One of the greatest social change for adolescents in the concern to be accepted by their peers. This great desire to belong and be accepted by peers groups can influence some to engage in activities that they normally would not consider. By middle adolescence the intensity of involvement with peer group gives way to more intimate friendships. A dramatic shift in thinking from concrete to abstract gives adolescents a whole new set of mental tools which enables them to analyze situations logically in terms of cause and effect and appreciate hypothetical situations. Adolescence is a period of emotional turbulence marked by struggle to combat with the sudden spurge of emotions and feelings. Attainment of self revised personal identity and emotional autonomy characterizes adolescence.

All of the developmental changes that adolescents experience prepare them to experiment with new behaviours. It includes the individual's reactions to being swept into a transitional period of development and to being confronted with a new set of social demands and expectations. Under such conditions changed attitude towards self, parents, peers and life as a whole becomes inevitable. There are expectations to live up to in the
family, school, among peers and in the larger society while at the same adjusting to the hormonal changes taking place in the body.

6.3 Relevance of Adolescence Education

Adolescence in general is a complex period and often not very well understood by both adolescents themselves as well as by adults. It must be taken cognizance of the fact that today’s youth are living and growing in societies, which are fast evolving under the impact of modernization. Adolescents are growing up in a world where they have to take important decisions concerning themselves. They experiment more, make choices, take risks and thereby learn through their own experiences, which are not always favorable or adequate. Adolescents have very special and distinct needs which can no longer be overlooked. The rapidly paced growth phase brings with itself a host of problems and special needs which often the adolescents find difficult to understand and cope up with. Various studies have found the attributes of adolescence to include risk-taking, deviant behaviours, and potentially destructive behaviours with or without understanding the immediate or long-term consequences of their actions. Coping with the physical, emotional and social changes that accompany this period is identified as a major problem faced at this developmental stage. The challenges are compounded by a compendium of factors including inadequate access to appropriate information, education and services to meet their peculiar needs during this transitional period and weakening of traditional norms and support systems. Studies have shown that adolescents are vulnerable and therefore they need to be empowered with relevant knowledge that will enable them cope with various developmental problems.

Adolescents account for one fifth of the world’s population and in India they account for nearly 22 per cent of the population. Despite the importance of this period the adolescents are still grappling with the problems associated with growing up. Education has to now assume the responsibility of providing scientific knowledge to adolescents about various aspects of the process of growing up, in particular reference to the reproductive health needs, and thus enable them to cope with the problems during this transitional phase. Adolescence Education is a new educational area emerging in response to the pressing demand to address to the needs of this phase. It is an educational
endeavour to provide learners with an appropriate and adequate framework which fosters the adolescents to develop in a holistic manner keeping in view the physical, physiological, social, intellectual and moral dimensions. The term 'Adolescence Education' was used for the first time by UNESCO, Principal regional Office for Asia and Pacific (PROAP), Bangkok as the title of a package on sex education (UNESCO, 1991). Later National Council of Educational, Research and Training (NCERT) used the same term 'Adolescence Education' in a seminar in 1993 for discussing the implication of introducing sex education in school curriculum. It was recommended to introduce suitable components of Adolescence Education in the curriculum at various stages of schooling. The demand of Adolescence Education has gained momentum in view of the compendium of issues looming over the adolescents like HIV/AIDS, sexual abuse, drug abuse and other risky behaviours.

The main components of Adolescence Education are

1. Process of growing up: The physical aspects which include the anatomy and physiology of human reproduction and physical, emotional and psychological changes during puberty

2. HIV/AIDS: It includes content related to causes and consequences of HIV/AIDS, preventive measure and individual and social responsibilities towards persons having HIV/AIDS.

3. Drug abuse: This component deals with potential hazards of substance abuse and its prevention.

4. Life Skills: WHO has defined skills as "the abilities for adaptive and positive behaviour that enable individuals to deal effectively with the demands and challenges of every day life (WHO, 1997). The different life skills are Self Awareness / Self Esteem, Decision Making, Problem solving, Negotiating Skills, Creative Thinking, Critical Thinking, Effective Communication, Interpersonal Skills and Empathy.

Implementation of Adolescence Education as a separate subject requires serious deliberations owing to the already overburdened school curriculum which leaves little room for addition of Adolescence Education as a separate subject. Implementation
strategies could thus be in terms of integrating it in the academic subjects and more importantly through co-curricular activities. Efforts are needed to merge the Adolescence Education components with the linkages in the secondary school curriculum.

6.4 Rationale of the Study

Adolescents have very special and distinct needs, which can no longer be overlooked. The current generation of adolescents makes up the 'largest cohort in history'. In India adolescents account for 21.4 percent of the population but an investigation into the programmes meant exclusively for them or the researches conducted on them reveal that their needs and concerns are largely ignored and neglected. Not much is known about knowledge, attitude, reproductive health related behaviour and social support needs of adolescents in the Indian context. It is increasingly recognized that young people are often very ignorant of how their bodies function and frequently express a strong desire for the opportunity to discuss such issues with an informed, non-judgmental adult. Education must prepare students to face the challenges of life. For this it needs to be intimately linked with different life skills, the abilities that develop in them generic skills related to wide variety of areas. Adolescents need clear information about sexual development, reproductive health, and STD's and HIV/AIDS. They need skills to learn to handle social and peer pressures, practice assertiveness, be apt at problem solving, communicate effectively, deal with stress related to growing up and learn about reproductive protection. They need assistance in developing skill for responsible behaviour, the ability to anticipate, analyze, plan, take decisions, learn how to develop interpersonal relations with others and to share.

It is considered appropriate for the school to bridge this gap. An educational intervention for adolescents is strongly felt as the need of hour particularly in India because the school curriculum does not include the crucial elements associated with growing up. Biological input of the curriculum alone does not suffice for addressing the critical concerns of growing and fostering healthy development. There is need to focus on the physiological, emotional, socio-cultural, intellectual and moral dimensions along side. It is in this context that Adolescence Education has been conceptualized as means to cater to adolescents exclusively. Adolescence Education is not simply concerned with
the transfer of information and values, but aims in assisting the young in developing the ability to understand themselves and the society in which they live, develop a rational attitude and responsible behaviour towards issues and problems of adolescence—bringing about a marked influence on their attitude, behaviour and value orientation and to use information effectively in making responsible decisions about their lives. It will enable them to assert themselves and say no when faced with negative pressures without any loss of identity and self-esteem.

From the reviewed studies it can be deduced that adolescents have limited knowledge about sexual and reproductive health, as well as about the natural processes of puberty. This lack of knowledge about reproductive health—including the emerging threat of HIV/AIDS—may have grave consequences for the country. A clear-cut need is emerging to equip the adolescents with information ranging from physical maturation, formation of partnerships, sources of information, counseling and services, their rights in accessing services and exercising choice, Sex Education, HIV/AIDS etc.

In view of this it is thought to be extremely crucial to introduce Adolescence Education in schools and make it an integral part of the school curriculum. Plug in points in various subjects can prove to effective linkage between the different curricular content and components of Adolescence Education. The present study was conceptualized so as to attempt to design an Adolescence Education programme for Indian adolescents. The study explores the possibilities of converting the school curricular content into meaningful activities that would result in skill building among adolescents and smoothen the journey towards adulthood.

6.5 Research Questions

1. What are the most basic needs and problems of the Indian adolescents?
2. What sort of Intervention programme is needed to cater to the Adolescents?
3. To what extent is it possible to design and implement an Adolescence Education programme?
4. Are the secondary school teachers aware of the concept of Adolescence Education?
5. To what extent do the secondary school teachers impart adolescence education through various curricular and co-curricular activities?

6. How successfully can the elements of Adolescence Education be integrated with the subject matters within the secondary school curriculum?

7. Which are the plug in points in different subject content of the secondary school curriculum for imparting Adolescence Education?

8. What will be the effectiveness of such Adolescence education programme with respect to long term gains in the lives of the adolescents?

6.6 Statement Of The Problem

"Development of a Training Programme on Adolescence Education for Secondary School Teachers and Students and Studying its Effectiveness."

6.7 Objectives Of The Study

1. To find out the awareness level of the secondary school teachers regarding adolescents and Adolescence Education.

2. To find out the awareness level of the students of IX th Std regarding adolescents and Adolescence Education.

3. To identify the plug in points from each subject of the secondary school curriculum which can take a center stage in Adolescence Education.

4. To develop training programme for imparting Adolescence Education

5. To implement the training programme on Adolescence Education

6. To study the effectiveness of the training programme in terms of the impact on the students, teachers and overall school environment.

6.8 Explanation Of The Terms

In order to bring about further clarification regarding the present study an explanation of the important terms in context of the study are presented below:

Training programme: A Module based programme focusing on Adolescents designed to meet the primary goals of Adolescent Education to be imparted to the secondary school teachers as well as the secondary school students.
Adolescence Education: It may be defined as an educational endeavour to provide learners with an appropriate and adequate framework which fosters the adolescence to develop in a holistic manner keeping in view the physical, psychological, social, intellectual and moral dimensions.

Secondary School Teachers: Those teachers teaching Std VIII to Std X.

Secondary School students: The students studying in Classes VIII to X are referred to as secondary school students

Effectiveness: It refers to gauging the extent of successful learning and practicing of the contents of the training programme in Adolescents. It is interpreted in terms of the modifications in behavioural terms alongside with attitudinal changes.

6.9 Delimitations Of The Study

The study was delimited to English medium co educational secondary school following the syllabus prescribed by Gujarat Secondary Board of Education. The target population of the study was middle adolescence hence the sample of student and teachers selected were those studying and teaching in IX th Std respectively.

6.10 Methodology of the Study

6.10.1 Tools of the study

The tools used for the research were administered to the selected sample of teachers and students to collect the data relevant to the context of the study. The tools used in the study were as follows:

1. Teachers Questionnaire

This Questionnaire consisted of both open as well as closed ended items and was developed by the investigator. The purpose of the questionnaire was to gather data regarding the perception of the teachers regarding adolescence and issues related to them,
their views, and knowledge as well as attitude towards Adolescence Education. The face validity of the questionnaire was established by giving it to experts.

2. Students Questionnaire:

This questionnaire developed by the investigator was subjected to the selected sample of students. The questionnaire consisted of two parts. The first part of the questionnaire part was common for both boys and girls and related to finding out the perception of the students regarding their selves, their choices, personal issues, attitude towards school, teachers, and education in general, their knowledge and attitude towards reproductive health matters, relationships, etc. The second part of the questionnaire was different for both boys and girls. For girls there were items related to physical changes they encounter, menstruation, relationships with peers, views and attitude towards sex education, reproductive health concerns HIV/AIDS sexual abuse etc. For the boys the questions focused on sex education, relationship issues, drug abuse etc.

3. Observation Schedule (unstructured)

The investigator used participant observation in order to assess the progress of the training programme and implementation of the modules. Field notes were prepared on the basis of the unstructured observations of the classroom climate, the interactions within the classroom and school, the pedagogical practices adopted for module implementation, the reaction of the student's informal interactions, the day to day happening as well as the overall proceeding of the programme.

4. HIV/AIDS test (pre test- post test):

This questionnaire was prepared by the investigator by taking in the help of experts and literature information. It was used as a pretest as well as a posttest administered before and after subjecting the student sample to HIV/AIDS session. The questionnaire had items related to finding out the perception of students towards reproductive health issues, awareness of HIV/AIDS, causes, prevention, precautions, myths and attitude towards it.
5. Semi structured interview for Teachers

The purpose of this interview schedule was to ascertain the overall observations of the teachers constituting the sample towards the programme. The items related their role in Adolescent education, opinion about the programme, changes they observed in students as a result of the programme, training requirements, further continuation with the programme, useful and feasible aspects, problems encountered, overall effectiveness and suggestions for further improvement.

6. Overall Effectiveness test

The overall effectiveness of the Adolescence Education programme implemented on the students sample was judged by using a questionnaire on effectiveness for the students as well as a rating scale, both of which were developed by the investigator and validated by experts.

Questionnaire on Effectiveness

This questionnaire had items focusing on finding the students perception regarding the programme conducted in terms of how they rate the programme, the aspects that were useful and not useful, the feasibility, attitude towards the various activities, their views on the modules used, overall way the programme was conducted, extent of learning and use in daily life situations and comments and suggestions for improvement.

Rating scale for Effectiveness

The rating scale was administered to assess the impact of the content of the modules and the overall programme. It consisted of 36 items on a 3-point scale.

6.10.2 Design of the study

The Adolescence Education programme was modular in nature. The study was designed so as to develop and implement an Adolescence education programme on a selected sample of adolescents and evaluate the changes in the sample as a result of the training programme.
6.10.3 Sample of the study

The implementation strategies and duration of the study required constant support from the school authorities. Consequently permission was sought from the school authorities for conducting the programme. Through purposive sampling one co-educational English medium School in Baroda was selected. The school is affiliated to Gujarat Secondary Board of Education.

The sample of the study consisted of teachers of secondary section as well as students of IXth std. All the 10 secondary schoolteachers teaching in the school were taken as a part of the sample. These teachers were teaching subjects like languages, social science, science, mathematics, computers as well as physical education. The total students sample was 65 out of which 40 were boys and 25 were girls.

6.10.4 Data collection

Data was collected phase wise.

Phase 1: Pre Adolescence Education Programme Implementation Phase

Data was collected regarding the attitude, perception and knowledge of the teachers and adolescent students comprising the sample towards issues significant to adolescence and falling in the domain of the designated training programme. The teacher’s questionnaire and students’ questionnaire were used respectively. Documentary analysis was of IXth std textbooks prescribed by Gujarat Board of Education was done. All the topics of the 9th std books of Languages science, math and social sciences were listed and plug in points were identified. With the help of these plug in points the modules were designed.

Phase 2: Programme Implementation Phase

Unstructured observation of the classroom climate, interaction between teacher and students, student participation in activities was carried out by the investigator and field notes prepared. Monthly record indicators were used to the data regarding the modules implemented. Questionnaire on HIV/AIDS was used as pre test and post test to collect data regarding knowledge and awareness about HIV/AIDS etc.
Phase 3: Post Programme Implementation Phase

Semi structured interview of the teachers and effectiveness questionnaire given to students were used to assess the effectiveness of the programme.

6.10.5 Procedure of the study

The Adolescence Education programme was planned in 4 stages:

Stage 1: Analysis of the curriculum of IX std prescribed by Gujarat secondary board of Education
Stage 2: Designing of modules for imparting Adolescence Education
Stage 3: Implementation of Adolescence Education programme
Stage 4: Evaluation of the Adolescence Education programme

6.10.6 Data analysis

Data was analyzed qualitatively as well as quantitatively. The Questionnaires administered were analyzed qualitatively using content analysis as well as quantitatively using frequency and percentage. The field notes were analyzed by reading and re-reading and arriving at the pattern that emerged.

6.11 Major Findings of the Study

The following are the findings of the research under various headings.

Teachers perception towards adolescence and Adolescence Education

1. The teachers had a fair understanding and a sound knowledge about the adolescence phases of life and considered it to be a stage of development of all kinds i.e. physical, mental as well emotional.

2. The typical problems faced by the teachers while dealing with adolescents were inclination to opposite sex, teasing and pairing between girls and boys, infatuations, ego hassles between boys and girls, adolescents becoming rebellious and attention seekers. According to the teachers, the adolescents felt they knew everything, were loud, misbehaved, restless, headstrong, and ill
mannered. They easily got angry when punished, give false excuses and were a very much confused.

3. Teachers were of the opinion that learning in adolescence should not to be confined within the academic boundaries and had to be much more broader and aim at developing the individual in all dimensions.

4. The teachers perceived Adolescence Education in terms of a type of education that deals with imparting of knowledge about physical changes, sexual changes, HIV/AIDS, STD's, family planning, population explosion and sex discrimination. None of them had a vision regarding what else could be the components of Adolescence Education. They did not consider the emotional, psychological as well as social dimensions and restricted themselves to narrow meaning of linking Adolescence Education with sex related matters and perceiving it to be another name for sex education.

5. Most of the teachers had a positive attitude towards Adolescence Education being a part of the curriculum. Many teachers were of the opinion that Adolescence Education can be successfully imparted by way of integration, modification in teaching learning practices as well as through co-curricular ways and trained schoolteachers could be effective in imparting adolescence education. Few teachers however believed that it was work of science teachers and counselor.

6. Majority of the teachers were in favour of integrating the contents of Adolescence Education with the different subjects and co-curricular activities. However when asked to actually integrate it they had reservations since they felt it would cause extra load on teachers. The cited reasons for this were in terms of over load of teaching work, corrections, co-curricular activities and time restraint with the anxiety for syllabus completion. Such innovations they felt would be at the cost of academics. The teachers would have to go for trainings and workshops and will
need to do a lot of research, all at the cost of their own personal time. The teachers who were willing to experiment with integration of Adolescence Education reported that for doing so they needed guidance and training.

7. Most teachers viewed Adolescence Education as another terminology for sex education therefore they felt hesitant to teach the topics. Use of terms like ‘sensitive issues’ etc reflects this. They need training if they have to teach such education otherwise they would feel uncomfortable.

8. Teachers were looking forward to special programmes for adolescence which would lead them to have a healthy lifestyle and resolve their personal queries.

9. General expectations of the teachers from the programme were systematic training on what is Adolescence Education and how to implement it, development of awareness in teachers regarding the ways to deal with teenagers and understand them. They wanted a support system and learn about how to teach adolescents with ease through integrated Adolescent Education curriculum instead of over burdening.

Characteristics, profile and perceptions of Adolescents

1. Friends were the biggest strength of the target group of adolescents. Lack of confidence was the biggest weakness of most of the students.

2. Majority of the students named their parents as their role models.

3. Most of the students showed a favourable attitude towards their school. Almost all students enjoyed coming to school because they could meet and spend time with friends. Studies and career-oriented goal for attending school were secondary reasons as far as school related interest were concerned.
4. A large majority of the students perceived the education they had been receiving as meaningless and wanted a type of education, which was a combination of academics, values, and personality development as well as education about life.

5. Regarding perception about teacher, girls overall had a more favourable perception of their teachers compared to boys.

6. Many of the students perceived their studies to be not as per their expectations and not significant. They specified that the purpose of learning should be made clear to them and lessons should be linked with everyday experiences in life and also give answers to different questions related to life.

7. Future related anxiety coupled with parental pressure to study and fear of poor academic achievements were the most prominent worries that were plaguing the adolescent students. Lack of freedom was another problem, which was being faced by the. This lack of confidence was reportedly stated more by girls in comparison to boys. Inferiority complex was found to be quite high among the girls in comparison to boys. Sexual development was again a problem area more in girls.

8. The major sources of problem solving of the adolescent students were parents followed by their own selves and friends respectively. Teachers were considered by relatively very few students as far as problem solving were concerned.

9. Friends proved to be the biggest source for relieving stress and tension followed by parents. Teachers were relatively lesser source.

10. Watching movies and being with friends were the activities boys enjoyed maximum. Studying along with games and sports was other favored activities. Dating was also seen as enjoyment giving activity.
11. Peers group influence and inclination stood out very prominently. Peers were observed to be quite important for both boys as well as girls. Importance of being accepted by friends was a very important factor on their lives. Peer pressure was evident and the boys reported to face more peer pressure than girls.

12. All the students had heard about HIV/AIDS. However many could not write the full form of HIV/AIDS and STD. Regarding the knowledge about AIDS many had correct information.

13. Use of drugs was not seen among students though few admitted to have tried smoking.

14. A good number of the adolescents had received information on reproductive health issues with the girl outnumbering the boys. Friends proved to be the most major source of information on reproductive health issues followed by magazines, teachers, parents, media & Internet and newspapers. Regarding the Birth control methods most of the students were not aware of which were the methods.

15. Both boys and girls had a high degree of awareness regarding the physical changes accompanying adolescence. They reported that they felt curious and shy about the changes in body. According to most of them the knowledge about such changes should be given in schools.

16. Girls in comparison to boys felt more shy when there were talks on sexual matters.

17. Almost all the students were in favour of friendship between boys and girl however from their responses it can be observed that the boys and girls in the target classes were not friendly with each other. Students reported that their friends laughed when they talk with a member of opposite sex, however they discussed about the opposite sex within their peer groups. Dating was important for boys in comparison to girls.
The adolescent’s perception and knowledge of meaning of sexual matters in the post test in comparison to pre test became more scientific and logical.

Before exposure to the session on HIV/AIDS majority of the adolescents reportedly felt awkward and embarrassed when they were asked to attend talks on sexual matters. The preference for such kind of exposure was limited. Girls did not want to attend such programmes amidst boys. Post test the students became more comfortable with the issue. Growing up was now accepted as a natural phenomenon and the knowledge regarding the same was now considered to be critical and crucial. Most of the students showed eagerness to learn about sexual matters without any value judgments. Few students however even after being subjected to the HIV/AIDS session and modules were not in favour of learning about the issues.

Mother seemed to be the most preferred source of reproductive health education followed by friends in both pre test as well as posttest. Teachers were the least preferred sources in the pre test however the posttest responses indicated a change in the perception of teacher’s role according to the adolescents. The teachers were also now preferred as sources along with medical professionals for information concerning reproductive health.

Age to receive education on reproductive health matters in the pre test was mostly the late adolescents with quite high number of students wanting it to be after 18 years of age. Post test the age range reduced to early and middle adolescents with the adolescents now preferring to be imparted with the information from the age of 13 years onwards.

The number of students who wanted to be taught about reproductive health in school increased considerably from pre test to post test.
6. The attitude towards teachers, educational programmes and school based inputs became more favourable after the HIV/AIDS session.

7. The knowledge of students in pre test regarding HIV/AIDS was limited though the students acknowledged the importance of knowing about HIV/AIDS. The post test responses with regard to basic knowledge about HIV/AIDS were more scientific and logical.

8. The number of student who were willing to voluntarily attend programmes on HIV/AIDS increased in the post test in comparison to the pre test.

9. The pre test revealed certain lacunas in knowledge of student regarding HIV/AIDS. With the post test the knowledge showed considerable improvement. Students in the post test could identify the test used for detecting HIV/AIDS which they were unable to do in the pre test.

Effectiveness of the Adolescence Education Programme

1. In the beginning of the implementation of the Adolescence Education programme many students were not interested in the activities and sessions. They were quite open enough to show their lack of interest and found the sessions not useful. Gradually their involvement in the activities and participation increased. The interactions slowly moved from being out of focus to being more focused.

2. The amalgamation of the Adolescence Education components with the school curriculum requires more planning and time allotment.

Teachers perception regarding the effectiveness of the programme

1. The teachers after being a part of the Adolescence Education programme no longer believed that school textbooks and general school curriculum could not be used for catering to adolescents. They reported that it would definitely help if the textbooks were so designed to highlight the plug in points forming a link between school curriculum and Adolescence Education. According to the teachers the
profile of the adolescents and issues clouding them are not taken care of in designing the content of the textbooks hence it merely leaves it to the imagination and resourcefulness of the teachers to redesign it as per their adolescent groups.

2. After attending the programme most teachers felt that the teachers role was extensive considering the crucial role they can play in the adolescent phase of life.

3. According to the teachers the interactions amongst students were more positive after being subjected to the programme. They seem to confide more in teachers and seemingly interested in classroom activities. Students related more to pedagogy as they they felt that it was suitably linked with what all they had and were experiencing. Absenteeism percentage of the students reduced with the students showing keenness to come to school other than for solely meeting their peers. The students look forward to the teacher’s presence in class. The general interactions amongst the students had also increased. Earlier lot of teasing and pairing was there and there was an uncomfortable relationship between boys and girls, that seemed to have changed towards more direct and positive communication.

4. The programme according to the teachers was quite extensive considering the time frame within which was to be completed and required considerable amount of planning, dedication and commitment.

5. The teachers reported that though they took out time and tried to use the modules in their general subject classes yet the paucity of time was a deterring factor affecting the quality and effectiveness.

6. Training in Adolescence Education was a major requirement felt by all the teachers along with lot of expertise and provision flexibility in the curriculum as well more of autonomy being given to the teachers.
Proper time slot in the time table, specialized teachers, textbooks to be designed in the format; regular feedback and training sessions and more of specialized workshops plus a regular counseling center in school were few suggestion offered by teachers to bring about improvement in the program. They also felt that modules should be made more student friendly and provided individually to teachers. Self learning modules for students should also be designed. Such Adolescence Education programmes as per the teachers have to be graded and the modules should be designed to cater to not only one particular standard but proceed sequentially keeping in mind the chronological and psychological age of the adolescents.

**Student's perception regarding the effectiveness of the programme**

1. Students showed a affirmative attitude towards the programme topics though they were not a part of their regular syllabus and found the contents of the programme relevant as well as functional information required for their age group.

2. Most students reported that their self-concept heightened after undergoing the programme and now they had a more realistic opinion about their personalities. They felt more confident with their sexual identities and were more scientific in their approach of dealing with sexual matters. According to them the different life skills however required more exposure and training.

3. Many students reportedly had questions during the conduction of the sessions but were reluctant to ask as they felt awkward and embarrassed. Some students felt they needed more clarification and information while others were satisfied and reported that their queries were satisfied in the sessions as they received all information in an elaborate way and their doubts were cleared as the topics were dealt in detail. They discussed with their friends about the topics and found it now easier to communicate and share the information. Many times when they were hesitant or unable to ask in class they thought on the issues. Many reposed that they started thinking over the problems they were facing and finding solutions.
4. Majority of the students preferred a special teacher to teach them about reproductive health issues. Other than science teacher and school counselor they did not consider the other subject teachers for imparting Adolescence Education.

5. Most students were eager to receive further knowledge about reproductive health issues. Some students felt that the information provided was inadequate at times to meet all their needs.

6. Suggestions given by students regarding enhancing the effectiveness of the programme was that such programmes should be either individualized or in groups of 3 – 5. Students demanded that there should be textbooks and reading material and teachers should devote extra time to teach the components. Teachers needed to be more informative, give more exercise and provide them with written material regarding the information. Field trips and more workshops should be organized. Further they also wanted more education on diseases liked HIV/AIDS and changes in body. More information and more interaction were needed. Presentations needed improvement and more of visual aids were needed. Indiscipline was a deterring factor, which should be taken care of, and career related problems needed more focus along with time management and stress release.

7. The students found the following components of the programme useful: Knowledge about strengths and weakness and how to change them, causes of sex related diseases, types of behaviour, how to deal with awkward situations, accepting body changes more positively, how to be more independent and assertive, self management, physical and mental changes, positive attitude, handling relationships, personality development, education about harmful diseases like HIV/AIDS, STD’s, decision making, problem solving tactics, building up of self confidence, time management, negotiation, handling peer
pressure, preparation for examination, taking decisions about own body, how to deal with adolescents and stress management.

6.12 Conclusions of the Study

An attempt was made by this research to address to the components of Adolescence Education. A study of the profile, characteristics, needs and perception of adolescent students revealed that they perceived schools as uncomfortable and unattractive environments, lacking in the basic tools of learning apt to meet their needs. Adolescents however accept the value of education. Formal channels for expression of adolescent views are limited. It is to be accepted that Adolescents are eager for information about health and reproductive health and the existing channels of available information does not adequately meet the needs, interests and expectations of the adolescents. Adolescents need to be actively provided with information. It is in this context that school based educational programme has to be designed and enforced. Schools have to gear up to smoothen the breathtaking pace and path of adolescence.

Summarizing the entire conduction of the Adolescence Education programme it is established that it is successful. It provided the intended information and proved to bring about changes in the overall students characteristics. The effects of certain components taught to the students are long lasting and difficult to evaluate as they can only be manifested through behavioural changes yet overall it reflected that some attitudinal changes had taken place. The overall information and knowledge about HIV/AIDS and reproductive health issues had definitely increased. The students were more vocal about such issues and took them in a positive stride feeling free to raise their doubts and seek solutions and information. The embarrassment, shy feelings and awkwardness seemed to have lessened though students were still hesitant and needed more confidence and assurance to clearly express their views and clarify doubts.

Further there were many evidences, which indirectly provided the investigator substantial data regarding the overall success of the Adolescence Education programme. The teachers initially were hesitant and doubting whether such a integration is possible later felt confident to not only use the modules but also contribute in redesigning modules.
and bringing about changes and improvements in them for the next series of sessions. They also were now willing to experiment with the other classes and adopt adolescence education as a regular feature of their school curriculum. The mode of Adolescence Education fused with the regular subjects did bring about the expected transformations. This research can thus provide ample examples for educational institutions to imbibe the Adolescence Education programme.

### 6.13 Recommendations Of The Study

- Adolescence Education has to be included in the school curriculum.
- Educational police makers and planning committees at national level have to make conscious efforts to devise adolescence-centered programmes keeping in view the needs and profile of adolescents. Massive advocacy of such programmes has to be done.
- There is an urgent need to train teachers in Adolescence Education. Pre service and in service teacher training programmes have to be modified so as to incorporate Adolescence Education as a major thrust area. Teachers should be thoroughly trained in HIV/AIDS transmission, prevention and compassion, so as to enable them pass on appropriate and accurate messages to students.
- Analyzing and redesigning the syllabi and textbooks for adolescents with identified entry points for integration with Adolescence Education and devising suitable activities has to be an immediate focus.
- Mass advocacy of Adolescence Education programmes.
- Indicators need to be developed for assessing the effectiveness of Adolescence Education programmes.

### 6.14 Suggestions for Future Studies

- The present study employed only a small sized sample and hence based on the positive response obtained from this sample the success cannot be generalized for till such studies are conducted for a larger sample size selected from varying and heterogeneous populations.
The present research indicates effectiveness of the overall programme yet it is difficult to generalize the findings of this research for whole adolescent population due to differences amongst adolescents in terms of individual as well as due to culture difference, gender, cast, religion, demographic profile etc. Hence further researches should attempt to involve more variables operating in the adolescent environment that may directly or indirectly influence the adolescents.

- It would be better to conduct longitudinal studies spread over a few years with the students by proper involvement of the teachers to observe the changes in whole school community.

- Developing and implementing the Adolescence Education programme in actual school context requires that such practices must be studied from the viewpoint of the attitude of school authorities, teachers and parents towards the content included in the programme. Studies could be designed for looking at Adolescence Education from a wider perspective.

- The present research attempted to integrate the components of Adolescence Education with the school curriculum. Another potential area of research could be by treating Adolescence Education as a separate school subject and testing its feasibility and success. Research studies could also focus on comparison of adolescent education programme as integrated with school subjects and as a separate discipline. Here opinion of school authorities, teachers, parents, and adolescents in large samples should be considered so to arrive at policy decision as to making adolescence education as separate or integrated discipline.

- The findings of this study also reflect on the integration of adolescent reproductive health content in syllabi and textbooks. Studies therefore need to be conducted to analyze the syllabi and textbooks for knowing the status of adolescence education content and identifying entry points for integration.

- This study shows that the teachers have different kind of understanding and ideas regarding the usefulness and possibilities of implementing the Adolescence Education programme is school, which can be studied further.

- As adolescent are not a homogeneous group before planning any intervention there is a strong need to have a database of the needs and problems of adolescents.
in different socio cultural settings. There is need to conduct and continuously update a national level database of adolescent needs. Such assessment would help in improving the designing of nation wide Adolescence Education programmes and identifying the gaps and approaches needed for its successful implementation. Studies with the objective of obtaining valid, accurate and reliable nation wide data could be undertaken.