

CHAPTER II

CHAPTER 2

A REVIEW OF RELATED LITERATURE

2.0 Introduction

Literature review discusses work done in a particular area of research. It helps to establish theoretical framework as well as methodological focus and bridges the gaps in the concerned area. The major purpose of reviewing the literature is to amalgamate what has already been done that relates to one's problem and gain new viewpoint. Review also helps in understanding the research methodology and procedures adopted by researches in the same area that could help to appropriately frame the context of the researches to be conducted

Adolescence Education is an area, which encompasses almost everything related to adolescents. In India research in field of Adolescence Education is of recent origin. Consequently research publications in this field are very limited. This chapter deals with dominant recent researches and identifies the most robust conclusions and ideas about adolescent development. For presenting a comprehensive picture regarding the numerous researches conducted on adolescents in context of the present study, the researcher has classified the reviewed researches under different sub headings which are linked to the scope of the present study.

2.1 Adolescence As A Thrust Area For Research

The increased influence of the need for studies on human development during the late 1980s and early 1990s drew researcher's attention towards this period of the lifespan characterized by dramatic changes thereby making adolescence a natural magnet for researchers interest. Research on adolescence has expanded at a remarkable rate during the past years. Many of the important longitudinal studies of development launched during the 1980s shifted their focus toward adolescence as the area of research and study. Adolescents' right to health, which includes reproductive health, was first internationally recognized in the Children's Rights Convention of 1990. Since then there has been a mounting concern over the limited availability of programs and services in the area of adolescent health and, specifically reproductive health. The rapid rise in social problems

like HIV/AIDS, substance abuse, reproductive health related problems, stress, depression and suicides has led to an upsurge in researches focusing on adolescents.

2.2 Researches on Reproductive Health and related issues

Numerous researches have been conducted in the area of adolescent sexual health and related influencing variables.

Reddy, D.N. (1990) conducted a pilot study on the attitudes of students, teachers and parents towards sex education. The study was undertaken with a sample population of 3720 college students, 387 parents and 162 teachers. Questionnaires were used as the method of data collection. Findings revealed that majority of the students and teachers thought that sex education was necessary whereas most parents were hesitant. When asked about the topics to be included in sex education, parents preferred values based issues and physical aspects of sexuality. The teachers also felt that importance should be given to physical aspects of sexuality whereas students opted for the topics concerned with human relationship.

Gandhi, B and Arora, P (1993) conducted a study on Sex Education in secondary school of Bombay. This study was carried out to evaluate the purpose of imparting sex education in the secondary schools and the importance given to sex education in the school curriculum. Views regarding communication between parents and adolescents, sources of information and the change of attitude after receiving sex education were also assessed. 100 boys and 94 girls participated in the study from four different schools in the age range of 13- 15 years. Questionnaires and Interview schedules were used to gather data. Recognizing the need of proper guidance to today's youth, school authorities were imparting sex education through both group and individual discussions. Majority of the programs were not age graded. The program impact was also seen to be different on boys and girls with boys reporting that they felt more comfortable towards the girls than the girls who had feeling of uneasiness and indifference felt towards boys. The adolescents saw peers as important source of sex education and stressed the need for proper sex education.

Khan, L, Sinha, and Vishwakarma (1996) studied the knowledge, attitude and sexual behaviour of school going adolescents. This study assessed adolescent's

awareness of reproductive physiology, family planning and AIDS /STD. An attempt was also made to analyze their sexual behaviour. A total of 510 students (270 boys and 240 girls) were systematically selected. A structured questionnaire was administered to collect relevant information. Findings revealed that the awareness of family planning methods was not uncommon. More than half the students were aware of safe sex. Television, books and magazines were the main source of contraceptive information. Friends were another important source. Boys indicated a more liberal attitude than girls.

Salkar, K.R (1996) conducted a study on population awareness among school students in Goa as well as teachers and parents and their reactions to the inclusion of population education in the school curriculum. The study aimed to find out whether the teachers and parents were in favour of sex education and the way in which population education could be introduced in the school curriculum. The study was a descriptive survey research. The sample consisted of 2039 student studying in standard VII to XI, their parent as well as teachers. Data were collected through a questionnaire and documentary analysis. The salient findings of the study are (a) teachers as well as parents were willing to have population education in the school curriculum. A considerable number of students, teachers and parents preferred population education to be taught as integrated with other subjects like language, Science, Social studies, and Mathematics.

Sharma, A and Sharma, V. (1996) studied the sexual knowledge and practices of college girls in rural Gujarat. The study aimed to determine the knowledge of human sexuality, physiology of reproduction and contraception among adolescent girls. Data was collected with pre-tested questionnaire assessing the variables. ANOVA and multiple regression analysis revealed that the overall knowledge about human sexuality, reproduction and contraception was poor among college girls. Knowledge scores were significantly higher among girls who had educated parents and had learnt about sexuality from their elders (elder sibling, teachers etc). Girl's residing in hostels had a higher level of awareness. The study emphasized the need for incorporating family life education in school curricula and crucial role that teachers can play in bringing about desirable and socially acceptable changes about sexuality and related topics.

Mohanty , M and Mohanty ,S (1997) studied the sex problems among adolescents and need for sex education. The purpose of the study was to identify the specific sex

problems of the adolescents and to develop appropriate strategy for solving them. Data was collected by using a questionnaire prepared for teachers of secondary schools as well as a questionnaire administered to students of the secondary sections. Data was analyzed in terms of percentages. The study revealed that teachers noticed behaviour and sex problems in the students. As suggested by the teachers, sex education methods and skills should be introduced in teacher training curricula. The study recommended that sex education should be introduced in the school curriculum in form of Adolescence Education.

Abraham, L (2001) conducted a study on understanding youth sexuality. The study focused on the students of four co- educational colleges of Mumbai offering higher secondary as well as undergraduate courses in Arts, Sciences and Commerce stream and catering mainly to lower socio –economic strata. Two of these colleges were selected for obtaining qualitative data, which included observation, focus group discussion, and in depth interviews. A survey was conducted in the other two colleges. The findings revealed that boys reported to be more sexually active than girls. The general level of knowledge of anatomy, physiology, contraception and STD among the students was very low. There was an association between knowledge level and sexual behaviour. Boys had a more liberal attitude towards premarital male sexual behaviour than girls. Though AIDS awareness was widespread and boys were aware of contraception, they indulged in risky activities. The main source of information on sex were peers, blue films, mass media campaigns and advertisements.

Yadav, S (2003) conducted a study of awareness and attitude of students towards adolescent reproductive health. The study provides broad trends regarding the level of awareness and attitude of students related to various adolescent reproductive health issues in different cultural settings. The study also aimed at knowing the needs and requirements of adolescents. Students studying in class XI formed the sampling unit of the study. A total number of 1054 students were selected by adopting systematic random sampling technique. The tool used for measuring the awareness and attitude consisted of three parts: background information, awareness test consisting of three parts related to process of growing up, AIDS as well as drug abuse and finally the third part was an attitude scale. Descriptive statistic was used to test the awareness and attitudes of students towards

adolescent reproductive health. Analysis of variance was used to find out the equivalence of the groups and also the impact of the socio- economic variables on the awareness and attitudes. The study highlighted that students have low awareness about various aspects of physiological and psychological development. A large number of students either wrongly reported or were not aware about issues related to growing up aspect, health, pregnancy, inter personal relationships, HIV/ AIDS/STDs and drug abuse. Particularly the level of awareness was low among girls. There seemed to be a lack of education in these aspects as revealed by the inconsistency in the responses. A large majority of the students from all three cultural settings i.e. rural, urban and tribal desired that education in adolescent reproductive health should be given in schools. Though their responses varied regarding how and who should do it, whether parents or school or both or through co-curricular activities or a combination of all, majority desired that school and parents should help them clarify adolescent reproductive health related issues.

Kotecha, P.V. (2003) conducted health awareness and needs assessment study on school going adolescents of Vadodara city. The main objectives of the study were 1. To know the perceptions and identifications of the issues which the adolescents feel important, 2. Identify the common health and behavioural problems. 3. Assess their awareness about the physical and psychosocial changes associated with adolescence, 4. Prioritize issues and areas of concerns by adolescents themselves in terms of their relative importance and 5. To assess their readiness to avail services such as adolescent friendly clinic. The sample consisted of 1440 adolescents (748 girls and 692 boys) from classes 6 to 12. A self-administered questionnaire was used to collect quantitative data on health, physical growth and development, nutrition and reproductive health and development aspects. Qualitative data was collected by use of semi-structured interview with open-ended questions, which looked into the psychosocial and behavioural aspects. Focus group discussions were also used as a means to collect qualitative data. Data was analyzed by both qualitative as well as quantitative methods using frequency as well as content analysis. As per the findings of the study majority of adolescents had a lack of assertiveness and were susceptible to peer pressures. Friendships between different sexes were not favoured due to social disapproval and fear of misconstruction. The awareness regarding the reproductive health topics was very low. The sources of information on

reproductive health for them were schoolbooks, television, teachers, friends as well as parents in that order. The schools did not teach about the reproductive health. As far as the problems were concerned sexual development and stress was a common problem. Most adolescents turned to their friends to deal with problems and the main concerns and fears of adolescents were regarding academic performance, career and living up to parent's expectations.

Ojo, O.D and Fasubaa, O.B. (2004) conducted a study on adolescent sexuality and family life education in South Western Nigeria. This study reports the results of a primary qualitative investigation of teaching family life education in schools as a panacea to the ever-lingering adolescent sexuality problems. The study was based on interviews and focus group discussion with parents, teachers, school guidance counselors and students who are stake holders in education.. The survey confines the extent of sexuality awareness of adolescents and the fact that reproductive health problems are in every nook and corner of the society be it rural or urban. The qualitative investigation suggests that the samples are of opinion that teaching of family life education in schools will be a vital solution to adolescent's sexuality problems.

2.3 Research Studies on HIV/AIDS

Aplasca, M.R., Siegel, D., et al (1995) conducted a study on results of a model AIDS prevention program for high school students in the Philippines. 30 teachers attended a two day workshop on AIDS education and a core group of participating teachers were involved in the design of a school-based educational curriculum. The curriculum covered five areas: human sexuality and STDs, AIDS, the immune system, development of self-esteem, decision-making skills and refusal skills. The educational programme consisted of 12 lessons taught as two 40-minute lessons per week over six weeks. As well as traditional lectures, sessions included role-playing, games, dialogues, group discussions and exercises. Support materials included a teacher's manual, flip charts and audiotapes. Evaluation Method was pre-test post-test in two intervention schools (n=420) and two control schools (n=384). The intervention and control schools were randomly assigned from a pool of 10 schools. One class in each year in both schools was randomly selected for the measurement. Pupils were given self-administered

questionnaires to assess knowledge, attitudes, beliefs and behaviour patterns. The impact revealed that Achieved Intervention group had higher levels of HIV-related knowledge and scored higher positive and were more likely to show compassion to persons with AIDS. Possible reasons identified for lack of impact on attitudes include: the need to provide more training to teachers beyond the initial 2 day programme, the need to allow more time for exploring peer pressure and practicing resistance and refusal skills and the need to incorporate more intensive student participation.

Singh, K.P. and Vermund, S.H (1996) studied the impact of school-based HIV and AIDS education for adolescents in Bombay. An education program was instituted for one half-school day at ten secondary schools selected out of a total of 45 schools in the district. The content consisted of a presentation on AIDS (causes, distribution, transmission, treatment and prevention) followed by a video and street play. The pre-test self-administered questionnaire in English and Marathi regarding modes of transmission and prevention of HIV/AIDS was administered to a convenience sample of all pupils from 8,9 and 10th grade attending that day from 10 schools. The total sample was 2,919 students. The post-test was administered to students one month after the presentation. There was an increase in the following areas of knowledge: that HIV/AIDS is transmitted sexually; there is no treatment; HIV is not transmitted by mosquitoes; condoms can prevent AIDS; Vaccines are not available and voluntary blood donors are better than professional donors

Visser, M. (1996) conducted a study on Evaluation of the First AIDS Kit, the AIDS and lifestyle education programme for teenagers. The programme was based around the Theory of Reasoned Action, The Health Belief Model and the self-efficacy approach. The kit consists of 5 modules covering: 1) adolescence; 2) AIDS and STDs; 3) relationships; 4) life skills; and 5) safe sex skills. The kit included a video, quiz to teach facts and exercises in assertiveness, decision-making, negotiation skills, choosing low risk behaviours. Teachers were encouraged to select parts of the kit that they considered appropriate to the students' needs. The program was evaluated using a self-completed questionnaire before and one week after the program by 187 pupils in standards 6-9 in 11 schools, as well as by focus group discussions with students and interviews with the teachers. The questionnaire was adapted from one issued by WHO and consisted of

questions to measure knowledge, attitudes towards people with AIDS, behavioural intention to engage in high-risk behaviour. There was improvement on all the knowledge scales except susceptibility and the attitude towards people with AIDS. Students gave favorable evaluations of the program and offered suggestions on how to improve it with regard to the content, presenter, educational techniques, the role of parents, and how to address moral issues. AIDS education should form part of long-term life skills and sex education, with a focus upon behavioral change.

Watsa, (1996) conducted a study to assess the knowledge, beliefs attitude, practices among urban educated Indian youth about human reproduction, sexuality, STD, HIV/AIDS, family planning and to identify differences among male and female youths in the four zones of the country. The responses of respondents between ages of 13 to 28 years were analyzed and the analysis revealed that the respondents received information about sex for the first time at the age of 13 years. However the old age group received information at an average age of 15 years. This was irrespective of gender and zone. The study also revealed that there is a lack of sources of getting information about youth on factors that disturb them; it has shown that youth feel a lack of confidence and trust. There is a need not only for introducing sex education in schools but also for parents who can induce a sense of confidence among youth. Only one third of the respondents could ask their teachers to clear their doubts on sex and sexuality and reproduction although less than 5 % stated that they were shy to ask. It also indicated that teachers are also ill equipped to explain these matters.

Panda, A (1997) conducted a sociological study of Delhi teacher's attitude awareness and commitments, awareness and comments towards AIDS and STDs. The objectives of the study were 1. To study the school teachers knowledge of causes of transmission of AIDS and STD infection, 2. To measure the attitude of school teachers towards AIDS and STDs education, 3. To know the various methods of teaching about AIDS used by teachers in school and 4. To know the difficulties, short comings and problems of teachers in emerging area of AIDS and STD education. Initially 500 school teachers were contacted who were teaching science (biology) social studies and languages but only few teachers agreed and gave their views to come before the interview by the researcher. A total of 98 school teachers teaching in class IX-XII in the secondary

and senior secondary schools of Delhi and 144 secondary and senior secondary school students (from class IX to XII) were constituted in the study sample. The teachers included in this study were randomly selected. The study was conducted by social survey method in form of interview and the following aspects of data have been collected from the teachers as well as the students: (i) Source of information on AIDS /STDs/HIV, (ii) Since when learnt about these diseases. (iii) Understanding how AIDS/ STDs are contracted, (iv) the cure and preventive measure available for HIV / AIDS/STDs, (v) Teachers attitude towards sex, sex education and AIDS/STDs/HIV education in open classroom teaching. (vi) How much do they teach about it and facilities/teaching aids/encouragement available in their respective schools as well as difficulties and problems faced by them. This study revealed that the Indian school teachers although were much aware of AIDS but there exist a tremendous form of misconceptions regarding Sexual Transmitted Diseases, transmission and prevention of AIDS/STDs/HIV. The adolescent students especially studying in rural or semi urban schools have a limited awareness, and knowledge of transmission and prevention about AIDS/HIV or other STDs. A negative commitment of secondary and senior secondary school teachers in class-room teaching learning program within the prescribed syllabus in their respective curriculum, especially at secondary (class IX to X) school level resulted in the poor reproductive knowledge among the adolescent student. Partially/poor teaching of male and female reproductive system in the biology/science subject in open class room system has directly cast a stigma on the sex morality with rigid cultural heritage among the secondary and senior secondary school teachers of present Indian society leading various misconceptions on reproductive health knowledge and care among the adolescent school students in their personal and future married life. The attitude of the school students for the better knowledge on STDs/ AIDS/HIV is a better indication towards the prevalent of STDs/ AIDS/HIV which probably need students-teachers interactions in a open classroom set up with free and frank mind.

Aggarwal A. K. and Kumar, R. (1997) studied the awareness of AIDS among school children in Harayana. This study evaluated the existing level of knowledge and awareness about AIDS in IX th and X th class students from rural and urban area. The sample was selected from six high schools. Two of the schools were exclusively for girls

and remaining four were co-educational. A total of 336 students (58 from IX th and 278 from X th class) participated in the study. A close-ended questionnaire based on WHO recommendations was administered. Results indicated a high level of knowledge about HIV/AIDS considering the short time span of campaign against AIDS in India but misconceptions about transmission; prognosis and prevention were also present. Rural girls had fairly significantly more knowledge as well as misconceptions regarding AIDS than urban girls.

Francis, P.T., Gill, J.S and Chowdhury, S. (1997) conducted a study on the Knowledge, beliefs and attitudes regarding AIDS, STDs and human sexuality among senior secondary students in Delhi. This study was planned to determine the level of knowledge and attitudes of senior school children and to find out the source of their knowledge. The investigation was conducted among 716(303 females, 413 males class XII th students from 6 schools of Delhi with both science and arts streams equally represented in age range of 15-19 years. An anonymous, self-administered closed ended questionnaire adopted and modified from WHO guidelines was used for data collection. It covered the following areas: knowledge of AIDS, attitude about AIDS, knowledge of STD's and sexuality. Focus group discussions were also held to collect more qualitative data. The general knowledge of the subjects was not poor but there were a number of misconceptions. A matter of serious concern was that the students had no reliable means of obtaining correct information. Schools were inadequately equipped to meet challenge.

Pratinidhi, A.K., Gokhale R.M and Karad, S.R. (2001) conducted a study on evaluation of sex education and AIDS prevention project in secondary schools of Pune city. The Research questions were 1. What is the change in the knowledge, attitude and decision making skills of the students after training in relation to sex and AIDS? 2. What is the perception of Nodal Teachers, Headmasters and Peer Educators about sex and AIDS education programme ?. The objectives of the study were: To determine the change after training in relation to (i) Sex knowledge, (ii) AIDS knowledge, (iii) Attitude towards HIV infected person, (iv) decision making skills promoting healthy sexual behaviour. The respondents were secondary school children (IX and XI students), Nodal teachers and other teachers, Peer educators, Headmasters. The Study variables were standard of the students, medium of instructions, and sex of the student. Statistical

analysis used was 'Z' test for mean and 't' test. Significant improvement was seen in the areas of sex knowledge and AIDS knowledge during post training phase. The findings of the study indicated that the educational intervention strategy is useful for improving the knowledge of the students in relation to sex and AIDS

Kinsman, J., Nakiyingi, J.K.A., Carpenter, L.Q.M.P.R. and Whitworth, J. (2001) conducted a study on the Evaluation of a comprehensive school –based AIDS education programme in rural Masaka. The programme was an adapted version of WHO/UNESCO (1994) School health Education to prevent AIDS and STD - A resource Package for Curriculum Planners. Two teachers from each participating school attended a series of three training and evaluation workshops of total length 5 days over 12 months. The teachers were expected to introduce the programme in classroom and out-of-school activities over the month period. The programme and subsequent evaluation was influenced by the behavioural Change for Interventions (BCI) Model, which is closely related to the Theory of Reasoned Action and identifies the following 5 elements and important for behaviour change: knowledge acquisition, skills development, attitude development and motivational support. 1274 students from 20 intervention schools and 803 students from 11 control schools completed questionnaires in English at baseline and their classes were followed up. The self-completed questionnaires measured the four elements of the BCI model. Students in the intervention schools completed questionnaire directly before the programme began (round 1), immediately after it ended (round 2, 10-12 months later) and again 6 months after that (round 3). Students in the top 2 years of the primary schools and the lower 2 years of the secondary schools were asked to complete questionnaires at baseline and these classes were then followed up in subsequent rounds. In addition 93 students from 5 of the intervention schools participated in 12 focus group. Analysis of the questionnaires suggest that the programmes overall effect was minimal and not statistically significant. The main reasons for this were a shortage of classroom time as well as teachers' fear of controversy and the unfamiliar. The findings highlighted the problems of locating AIDS education within a science curriculum and suggested that AIDS needs to be more fully incorporated into the national curriculum and located within the life skills curriculum with teachers receiving more training in participatory methods.

Rengarajan, V and Sasikala, R. (2002) studied the effects of an AIDS prevention education programme in schools. They investigated the differential effects of AIDS prevention programme(APEP) on boys and girls of government and private schools in urban and rural areas. The sample comprised of 725 high, higher secondary school students (310 boys, 415 girls) selected from 13 schools where the APEP was introduced. There were government and private schools and 6 urban and 7 rural schools. Achievement test constructed by DIET, Chennai was administered. The test covered 5 dimensions a) knowledge about HIV/AIDS, b) blood donation, c) sexually transmitted diseases (STD, d) value and e) health. Though boys and girls were benefited through the APEP, acquisition of knowledge about HIV/AIDS, blood donation and value was higher among rural girls. In urban areas, girl's acquisition was higher in blood donation while boys had superior knowledge about HIV/AIDS, STD and value. The government schools boy's attainment was higher in HIV/AIDS, STD and value whereas in private schools there was an equal impact of APEP on boys and girls

Bhalwar, R and Jayaram, J (2003) undertook a community based, cross-sectional, analytical study of AIDS awareness and attitudes among School and College-going teenagers from rural background. The sample consisted of children aged 13 to 19 years, who were studying in high school, intermediate or graduate classes, in a rural area of Maharashtra. A sample of 151 girls and 162 boys formed the sample for this study. Data was collected by well-qualified, centrally trained interviewers, using a pre-tested instrument, administered by personal interview technique. The study indicated that the general awareness about AIDS was very high, with more than 90% of the respondents having heard of AIDS and also identifying it as an important health problem in our country. However, less than 50% knew correctly about the etiology of AIDS, or the difference between HIV and AIDS. Similarly, a very high proportion of the subjects knew about the modes of transmission, though a much lesser proportion had the knowledge about the role of improperly sterilized syringes and needles. Similarly, a general lack of awareness about other sexually transmitted diseases was noticed. A very large majority of the subjects had a very positive and healthy attitude about sex, and did not accept pre or extra marital sex. They were desirous of obtaining AIDS education as a part of school / college curriculum.

Mahajan, P and Sharma, N. (2004) conducted a study on the awareness level of adolescent girls regarding HIV/AIDS. The objective of the study was to determine the knowledge level of the adolescent towards HIV/AIDS. The sample of the study consisted of 400 adolescent girls in the age group of 10 – 19 years belonging to both rural and urban areas of Jammu city. Random sampling technique was used to select the sample. Questionnaire was used to collect the data for the study. The data was coded systematically, tabulated and percentages were calculated along with use of Chi Square. The analysis revealed that there is a significant difference in the knowledge level of adolescent girls of urban and rural areas with the urban adolescent girls having comparatively better knowledge regarding these issues than the rural counterparts. Adolescents need to be taught about these body functions since ignorance perpetuates myths and misbelieves. Schoolteachers play a key role in bringing about this desirable change and socially acceptable approaches to sex education such as letterbox approach may be used to provide scientific knowledge about sex and related issues

2.4 Researches On Interventions For Adolescents Regarding Components Of Adolescence Education

Mohanty, M (1985) conducted an experimental study on development of a curriculum of family life education for higher secondary students and a studying its effectiveness. The attempt of the study was to cater to all dimensions (biological, psychological, social and sexual) of adolescence and prepare the adolescent for responsible parenthood. The objectives of the study were: 1. to develop and validate curriculum of family life education phase wise for XII std science students, 2. to study relationship between family adjustment and self-attitude of students, 3. to study relationship between achievement and attitude of students on curriculum of family life education. The experimental group and control group consisted of 26 students (16 boys and 10 girls). Tools used were 1. Questionnaire measuring pupil's needs and interests, 2. Socio-Economic status scale by Kuppuswamy, 3. Family life inventory, 4. Criterion test and comprehensive test. Data was analyzed qualitatively as well as quantitatively using mean, SD, percentile and Students 't' . The major findings indicated that the curriculum was found effective on student's attitude towards their self, opposite sex members, sexual

matters, marriage and family. The curriculum was found to be feasible when seen in terms of its reproducibility and cost management by schools. Reactions obtained towards the content and learning experiences used in curriculum as whole were found to be highly positive establishing validity of the curriculum

Russel-Browne, P., Rice, J.C., Hector, O. and Bertrand, J.T. (1992) conducted a study on the effect of sex education on teenagers. A syllabus covering human reproduction, growth and development, emotional development and issues and values in adolescent sexuality was developed for 12-15 age group. The syllabus was to be delivered through two 40-minute sessions for 26 weeks in St Kitts and Nevis. The 12 participating teachers received a four-week training course in sex education. Evaluation was carried out using a before and after self-administered questionnaire of 2,202 children in experimental (six schools) and 1,321 children in control schools. Follow-up questionnaires were given after 10 months. The evaluation focused on four areas of knowledge: changes at puberty, reproductive anatomy and physiology, intercourse and pregnancy and contraception. Despite some non-equivalence of the experimental and control group for age and a drop-out from the original sample in the follow-up questionnaire, the programme is claimed to have an impact of knowledge in the four domains. There was no increase in sexual activity among the intervention group. No significant gender differences were found on the impact of the intervention on knowledge.

Rusakaniko, S., Mbizvo, M.T., Kasule, J., Gupta, V. et al (1997) conducted a study on trends in reproductive health knowledge following a health education intervention among adolescents in Zimbabwe. An educational programme on male and female reproductive function, female anatomy, STDs, AIDS, human sexuality and responsible behaviour was developed. Lectures supported by videos, leaflets, pamphlets and posters were given on reproductive biology, STD/HIV/AIDS, unwanted pregnancy and contraception, human sexuality and responsible behaviour. A randomized controlled study on reproductive health knowledge and behaviour was undertaken among adolescent pupils drawn from a multi-stage random cluster sample. A self-administered questionnaire was used to assess aspects of reproductive health knowledge and behaviour at baseline and five and nine months after the health education intervention. Results are

based on 1689 responses made up of 1159 intervention and 530 control respondents mean age 14.6+/- 3.1yrs. There was a significant increase in correct knowledge about aspects of menstruation in intervention as compared with control schools. Understanding of family planning increased in intervention schools. Knowledge of specific family methods increased.

Rao, S.V. and D'Souza (2000) conducted a need assessment study in Adolescence Education. The objective of the study was to test the awareness and attitude of students towards Adolescence Education issues. The sample comprised of 3689 adolescent. The tools used were Scheffe's Post hoc test and F test was used for analysis. The study revealed that the general awareness and knowledge level among the students was inadequate and their attitudes towards various issues of Adolescence Education was also unfavorable. Regarding the awareness level it was found that male students had significantly lesser awareness compared to female students but the interaction effect between gender and locality was found to be non significant. As far as the attitude of students towards Adolescence Education was concerned, it was found that students from towns had a less favourable attitude compared to students hailing from cities. Male students had significantly less favourable attitude compared to female students. The interaction effect between locality and gender was found to be significant indicating that boys from town had a more favourable attitude than the girls. A comparative value of male and female students against the maximum possible score indicated the gap between the expected levels of awareness to the actual level, which clearly indicates the need for Adolescence Education.

Bilquis (2002) conducted a study on effect of intervention on knowledge levels of rural adolescent girls on selected components of family life education. The study was undertaken to test the feasibility of developing educational package on the knowledge content of rural adolescent girls in area of family life. Objectives were to study (1) the existing Knowledge levels of rural adolescent girls attending Xth Std of government schools about family life education (in areas of marriage, parenthood, sexuality, population health and family welfare) (2) to educate the exposed group on family life using the developed package for a period of two weeks (3) to study the feasibility of using the developed educational package in improving levels of rural adolescent girls.

Sample consisted of 120 rural adolescent girls studying in Xth std out of which 60 girls formed experimental group and 60 controlled group. Tools used were Knowledge test as a pretest to measure the knowledge level of adolescent girls. (2) An educational package developed and used for educating the experimental group respondents. Data was analyzed by two-sample z test and percentage. Findings revealed that majority of respondents of both control and experimental group showed lack of knowledge regarding health issues. Posttest scores revealed that respondents could comprehend well about the majority of aspects covered during intervention and had a significant impact on their posttest scores. Majority (Pretest) had no knowledge regarding human sexual organs and physical physiological changes during puberty. This may be due to sex being a taboo in our society and parents not allowing their child talk about sex and physical changes that occur during maturity of reproductive organs in both male and female. The developed educational package on selected components of family life education was found to be effective in improving the knowledge levels of adolescent girls.

Gir. S., Singhvi, R. and Jain, P. (2002) conducted a study on sex education intervention for urban Adolescents. The objectives of the study were: (1) to develop a learning package for sex education for adolescent girls focusing on indicators for the emergence of gender identity, the growing body-physical changes and their consequences, sexual and emotional challenges associated with sexuality and wholesome hetero sexual relationships (2) to assess the effectiveness of the package. A sample of 60 girls was selected from Udaipur. Sample was divided into experimental and control group of 30 subjects each. Each group had 10 subjects of 13-15 years and 20 subjects of 16-18 year out of which 10 were from Arts group while 10 were from science group. Both groups were pre tested with questionnaire. The experimental group was exposed to the educational intervention and then both groups were post tested. Simple percentage and 't' test were applied to analyze the data. The major findings revealed that majority of the adolescent girls of experimental group and control group had moderated knowledge in aspects related to the indicators for the emergence of gender identity, physical and psychological consequences of the growing body and socio emotional challenges associated with sexuality. For the aspect of developing wholesome heterosexual relationships, most of them had low knowledge. High level of knowledge was found in

the aspects of indicators for the emergence of gender identity and socio emotional challenges associated with sexuality by all the adolescent girl students of experimental group. A substantial percentage also showed high level of knowledge in physical and psychological consequences of the growing body and developing wholesome heterosexual relationships. After transmitting the sex education package, the level of knowledge of the experimental group increased significantly.

2.5 Major Findings And Research Gaps Emerging From The Review Of The Related Literature

- There is little evidence that identifies the factors that protect young people's ability to ensure safe sexual and reproductive health and their autonomy to make informed and wanted decisions. The awareness regarding the reproductive health topics amongst the adolescents was very low. There is a need to teach adolescents about sexuality with an emphasis on communication and affective education rather than exclusively on biology and harm minimization or safe sex practices. This helps them to integrate sexuality in a positive manner.
- There is a lack of sources of getting information about youth on factors that disturb them leading sources of information on sexual and reproductive matters are those that are not necessarily the most reliable. Television, peers and erotic literature are by far the most commonly cited sources of information although the information they provide is not always accurate.
- Studies suggest that adolescents have limited knowledge about sexual and reproductive health, and know little about the natural processes of puberty, sexual health, pregnancy or reproduction. This lack of knowledge about reproductive health including the emerging threat of HIV/AIDS may have grave consequences for the country. Countrywide information on adolescents' sexual behaviour is not available and in-depth knowledge of sexual health issues is sketchy
- In school settings, population, family life and sex education appears to be only remotely relevant to the concerns of young people, as they focus on biological and scientific information rather than broader issues of sexuality.

- Many health programmes view the needs of adolescents with a narrow focus on reproductive health. While reproductive health is undoubtedly important, programmes need a wider perspective that considers adolescents' broader emotional and physical needs as well. Adolescent health programmes also need to consider relatively high rates of substance abuse, violence especially sexual violence. Finally, programmes need to involve adolescents themselves and other stakeholders at every stage from conceptualization to programme design and evaluation.
- Majority of adolescents had a lack of assertiveness and were susceptible to peer pressures. Friendships between different sex was not favoured due to social disapproval and fear of misconstruction. The main concerns and fears of adolescents were regarding academic performance, career and living up to parent's expectations.
- Qualitative investigation suggests that the samples of various studies were of opinion that teaching of family life education in schools will be a vital solution to adolescent's sexuality problems.
- Majority of adolescents desired that school and parents should help them clarify adolescent reproductive health related issues and education in adolescent reproductive health should be given in schools. Adolescents need to be taught about these body functions since ignorance perpetuates myths and misbelieves. Programmes should make provision for more time for training in exploring peer pressure and practicing resistance and refusal skills and incorporate more intensive student participation.
- The studies conclude that the knowledge and awareness about HIV/AIDS is grossly inadequate. There is immense need to conduct awareness programme about AIDS / HIV at School, Colleges and Community Level. There is an urgent need for educational interventions. Correct scientific information should be disseminated to adolescents both in formal and informal settings so that they do not pick up sexual myths and misconceptions from their peers. AIDS education should form part of long-term life skills and sex education, with a focus upon behavioral change

- Intervention proved to be effective for Adolescence Education. The findings of the studies indicated that the Educational intervention strategy is useful for improving the knowledge of the students in relation to sex and AIDS.
- Studies also indicate that teachers are ill equipped to explain matters related to sexual health. A negative commitment of secondary and senior secondary school teachers in class-room teaching learning program results in the poor reproductive knowledge among the adolescent student. There is a need to provide more training to teachers regarding adolescence and issues vital to them.
- The feasibility of Adolescence Education programmes has not been explored at length in the studies that have been reviewed.

2.6 Conclusion

This review highlights the huge gaps in knowledge that remain. In many instances, the available evidence is derived from small-scale studies that may not be generalized to young people at large. Studies have not uniformly explored the context and needs of different groups of young people so the evidence is uneven — sometimes focused on girls, other times on boys; sometimes on rural, other times on urban adolescents. To make informed policy decisions and conduct relevant operations research information is required on the situation and needs of different groups of adolescents. Moreover it is important to diagnose why their sexual and reproductive health needs remain unmet, why informed choice continues to elude them and how services should be structured to cater to their requirements. Researches focusing on the role of school and teachers in imparting Adolescence Education as well restructuring the curricular provisions that can be made to better suit the adolescents still seems to be in the infancy stage. From the review of related literature a clear-cut need is evident in terms equipping 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 arises. This provides ample scope for the present research to attempt to address to these issues and their resolving.