CHAPTER-II
REVIEW OF LITERATURE

2.1. INTRODUCTION

Adolescence is a period of critical stage where they face risk and challenges due to lack of awareness and attitude towards reproductive health. Various studies indicate that all aspects of reproductive health knowledge is limited. The communication gap between parents and children may cause lack awareness on sexual and reproductive health issues. The existing health system does not recognize the needs of young people which is unbiased and was not support adolescent friendly services. Right based approaches are also not clear in terms of legal age for marriage, abortion, health etc. There is a need for equal based policies and programmes to promote equity to sections of people otherwise this vulnerability can impact adolescent’s health. There is lack of proper policies and poor role of government may have impact on adolescent’s health. Therefore there is a need for an effective knowledge based approach to bring awareness among people on reproductive health. The literature review describes adolescent growth and development which includes sexual and reproductive health. It provides a platform to enhance knowledge and skills to access and utilize reproductive health needs of young people (WHO, 2017).

A literature review demonstrates a researcher’s knowledge, current issues substantive findings, theoretical and methodological contribution to a particular area of discussion. It is a genuine and publishable scholarly document (lecompte et al., 2003). Literature reviews play a role in delimiting the research problem, seeking new lines of inquiry, avoiding fruitless approaches, gaining methodological insights, identifying recommendations for further research and seeking support for grounded theory (Gall, Borg, and Gall (1996). The below information is drawn from secondary sources, related to non research from journals, books, internet, books etc. The present empirical literature focuses on reproductive health of adolescents. Particularly studies and opinions of authors describe the importance to address the reproductive health issues based on western and Indian conditions. But there is a lack of literature shown on adolescent boys than girls.
2.2 INTERNATIONAL LITERATURE

Western literature describes in terms of western culture. Particularly adolescents grow according to the system prevailing in the region they live. Compared to India, youth of western countries are endowed with more independence, leisure, education, employment, and better health. These factors definitely affect their reproductive health and concern. The following literature provide information on adolescents particularly on their reproductive health knowledge, attitude, health seeking behavior, source of information etc

Garfinkel, et al., (1986); The study points out that the stressful events among young people and their experiences. It further discuss how adolescent cope up with stressors and indicates the risk factors which make them most vulnerable and having self destructive behaviors.

Zuloaga Posada L, Soto Velz C, Velez DJ (1991). This study was aimed at assessing university students of University of Antioquia on ‘Sexual behavior and health problems’. The purpose was initiated to provide appropriate recommendations based on the results of the study to the Health Division of University Welfare Office. Around 836 student’s voluntarily participated in this study. They were assessed with a self administered survey which contained 45 questions which elicit demographic and sexual behavior. Study points out that among 10.9% participants where 17.2% men and 3.3% female had contracted a variety of STD’s. 42% gonorrhea, 23% genital warts and 19% Genital herpes were among most diagnoses reproductive health diseases. 28.4% of the participants were pregnant, 49% of the pregnancies were terminated in abortions and 775 of the participants were being induced abortions. Around 51.3% of the participants reported customary use of contraceptives, those most regularly cited being condoms pills 20%, the rhythm method 18% and extra vaginal ejaculation 17% out of 32% of the users. There was a lack of sex education received by participants. The study recommended that educational institutions (university level) need to establish programs to augment student knowledge in the reproductive health.

WHO (1994). The promotion of the psycho-social competence need to play an important role to promote health in terms of physical, psycho-social well-being. There is a need for improvement of
psycho-social capability which can make significant input. Health education and promotion is necessary when behavior is largely concern as the basis of health problems.

**Agei WK, Mukiza-Gapere J, Epema EJ (1994).** This study was conducted in Mbale District of Uganda. The participants of this study were adolescents and young adults. Study showed that a majority of the participants claimed that they received information on reproductive health. Lack of knowledge was found among non-users about contraceptives, beliefs that they were not safe and their non-availability. A small proportion of the respondents could identify the safe period in women’s menstrual cycle. The study suggests that there is a need of improvement in family planning education and in accessibility of contraceptives.

**Hendren, Birell Wesen and Orely (1994).** Adolescence is considered as being a problematic age. It is because one out of five children will have behavioral or emotional problems where their future will be affected. This leads to Emotional disturbances which demonstrate their defacement in a various ways such as lacking in academic achievement, having low self esteem, failure in peer relationship and lack of faith in law and conflicted relationship with significant people especially with parents.

**Jessor and Jessor (1997).** Most of the adolescents are allied with health problems and socially affected due to failure in academic achievement, delinquent behavior, alcohol and drug abuse, unhealthy sexual relationships, pregnancy, injury, suicide etc.

**John Conger (1998).** Adolescent health programmes should be emphasized the need for family planning and sex education access to contraceptive methods and increased life options that would allow the adolescent to look to a future that encompasses self-sufficiency and success, broad community involvement and support.

**W indralal De Silva (1998).** The study examined the existing research finding on adolescents on reproductive health issues and policy implications in Asian nations. This review pointed out the poor nutritional status found to be reproductive role concern among majority of the adolescent girls. In order expand reproductive health services required systematic strategies to
overcome adult resistant and obtain support to discuss with young people. Introducing legislative measures on reproductive health rights and preventing risk behaviors. Access to reproductive health services could have significant impact on reproductive health among adolescents.

Debi and John Coleman (1999). In their study on adolescence have attempted to find out young people’s knowledge about puberty and sexual education.

NCERT (1999). In their package material on “Adolescence education in schools”, have highlighted various concepts related to adolescents such as development issues, components of adolescence education, and various strategies for combating the problems relating to adolescents.

Adolescent Reproductive Health, Geneva Conference (2000). The conference pointed out that there were 1.4 billion adolescents living around the world especially the adolescent population is increasing in developing countries (MOHFW Country Paper, 1998).

Brown (2002). Adolescence is a period of prolonged preparation for adulthood characterized by institutional segregation from the world of adults; adolescence is largely a phenomenon of the 20th century and of industrialized societies. Adolescents are admitted for their spontaneity, their vigor, and their iconoclastic pursuit of fun, but they also provoke concern and sometimes fear among adults.

Arik et al (2003). This study addressed the reproductive health needs of males. It stresses that life precedence and traditional masculine beliefs should not be considered by health professionals which can be a negative impact on or block to care for their health. Further study suggests that the implementing adolescent health services should be adolescent male perspective.

Shifeaw K, Getahun F, Asres G (2004). The objectives of this study aimed to assess the discussion between adolescent and parents on sexual and reproductive health issues. This study was done in Debremarkos town with multistage sampling and self administered questionnaire was used. Around 254(36.9%) proportion of the adolescent had discussed with their parents. The proportion of the adolescents had that discussion with parents was 254 (36.9%). This study revealed that the discussion between parents and adolescent on sexual and reproductive health was poor. Education
programmes can be initiated for parents and adolescents on reproductive health issues, comprehensive family life etc.

**Kagan (1998), Campbell (2003), Breinbauer and Mattaleno (2005).** As per their views during pubertal changes among adolescents the reproductive and sexual maturation mainly bodily changes are associated with a series of emotional, cognitive and behavioral transformations. This process is occurring during the early period of adolescence.

**Mohammad Reza Mahammadi (2006).** This study assessed 1385 male aged 15-18 using self administered questionnaires. The information collected from participants on their beliefs and knowledge regarding reproductive health. The attitude among participants towards premarital sex was permissive. Lack of knowledge regarding STI’s and contraceptives may have significant threat to the sexual and reproductive health of adolescent males. Study suggests that programmes are required for adolescent males to provide right information and skills to take safe sexual decision.

**Ayalew Tegegn, Meseret Yazachew, Yeshigeta Glew (2008).** This study assessed Reproductive health knowledge, attitude and provider preference among adolescent age 15 to 19 years. It was a community based cross sectional study which was conducted in Jimma Town, Southwest Ethiopia. A majority of the adolescents knew major health services for reproductive health. The major sources of information for reproductive health were radio, television and school teachers. Attitude towards reproductive health was moderately favorable. Study found that role of health professionals and family as a source of information was low. Therefore the study suggests an integrated approach to health services to provide adequate knowledge and information.

**Baryamutuma R et al (2011).** This review assessed in keeping point of reproductive and sexual health needs and rights with potentially acquired HIV among adolescents in Uganda. It examined the gaps in policy needs of adolescents with HIV. Based on this view the present article reviewed on existing literature about adolescent’s reproductive health and sexual needs. These reviews describe that young people with HIV positive were sexually active and engaging in risky sexual behaviors. Yet the policies, programmes and services were inadequate and fail to respond their needs.
This review suggests that youth friendly health services are need to be integrated with sexual reproductive and sexual health of young people.

Omoluwa O, Asekun-Olarinmoye E.O. and Olajide F. O (2012). This study explored the health seeking behavior and knowledge of available reproductive health services as well as existing barriers to accesses it. The study was descriptive in nature. 392 school going adolescents were selected with multistage sampling and assessed them with semi-structured questionnaire. Study found that mass media, television were main sources of information. Menstrual problems, unwanted pregnancies, HIV/AIDS and lack of sexuality education were the main reproductive health perceived by Adolescents. Government hospitals were most preferred health seeking services and with little and no accesses to youth friendly services. There is a need of revamping health services to develop adolescent friendly health services.

Dilee Prasad Paudel & Laxmi Paudel Nepal (2012). The study was implemented to examine the prevailing level of awareness on reproductive and sexual health adolescents. This study was descriptive cross sectional where 385 subjects were selected. The study showed that 73.2% had high level knowledge and 70.9% had good practice of sexual and reproductive health, 83.9% of them had positive attitude. 98.63% were using radio/TB/commuters as major means of communication and 94.52% of them by books and news papers. 83.9% of them knew proper meaning of reproductive health and 96.1% of them had correct knowledge about most useful contraceptive condom for preventing HIV/AIDS and STD’s. 92.2% of them had proper age of marriage and child birth and 22.9% of them involved on pre-marital sexual contact and 100% of the adolescents were used condom during sexual contact. 42.2% of them discussed about Reproductive health issues with family members where as majority 90.4% of them had discussion with their friends and peer groups. This study predicts that reproductive health education and awareness is very much essential so that adolescent can acquire positive health and well-being.

K Oppong Asante, M Oti-Boadi (2013). This study was a cross sectional which initiated to assess undergraduate student’s knowledge on HIV/AIDS at Ganha. There were 324 students selected and they were employed with structured questionnaire. Participants could identify the modes of transmission and preventive measures. Further the study shows that there were less knowledgeable
about the causative agent of HIV/AIDS. The majority of the participants were able to get information through print or electronic media. Study recommends that students required HIV/AIDS related health education and its prevention in educational settings.

Abajobir AA, Seme A (2014). It was a community cross sectional study conducted to assess rural adolescents on the level of knowledge on reproductive health and utilization of health services in Ethiopia. Data was assessed for 415 participants from eligible households with questionnaires and in-depth interview guides. The collected data were entered in EPI info and analyzed by SPSS software windows and uni-variate, bi-variate and multivariate analysis were used. The result showed that 67% of the adolescents were aware about reproductive health. 21.55% of them were ever used reproductive health services. Adolescents were deterred in using health services because of parents’ disapproval, lack of basic information and pressure from peer groups. Study showed that reproductive health knowledge and utilization of health services were low. Peer education parent-adolescent communication should address sexual and reproductive health and related issues.

Melaku YA, berhane Y, Kinsman J, Reda HL (2014). It was cross sectional study conducted to assess 807 female students in six secondary schools in Ethiopia. The structured and self administered questionnaire was used to collect data with using info version 3.3.2 software and analyzed with SSPS version 20. Bi-variate and multivariate logistic regressions were used in this study. 15.8% of the participants were ever having had sex, 43.5% with parents and 61.1% with peers discussed about reproductive health matters and 88% students were aware of different methods of contraception. Study suggests that strategies should be developed to improve parents-child communication and appropriate peer-to-peer communication in schools and reproductive health should be established and strengthened.

Shiferaw K, Getahun F, Asres G (2014). The study aimed to examine adolescent’s communication patterns with parents on reproductive health issues and associate factors. The participants were selected from secondary and preparatory school students from Debremarkos town in Ethiopia. Multistage sampling and questionnaire methods were employed to assess students. 39.9% of the participants had discussion with parents on reproductive health issues. The study predicts that
communication between adolescents and parents was low therefore parents required to be equipped and educated on reproductive health to guide adolescents for better access to health care services.

Mulatuva Aylew et al (2014). This study conducted to examine the adolescent parent communication patterns on sexual reproductive health issues. It was a cross sectional study where 695 of the students (9-12 grade) were selected with simple random sampling. A majority of the students were favor of peers than parents to discuss reproductive health topics those who discussed with parents were only 39%. School based education is essential to improve parent’s adolescent communication.

Mendes N, Palma F, Serrano F (2014). This article explicates the review data on knowledge, and attitudes about sexual and reproductive health. A systematic review was conducted to refer information from peer-reviewed 33 articles addressing reproductive health issues among adolescents aged 13 to 19 years of Portuguese. The review showed that only one third of the participants were visited to seek counseling concerning contraception or STI’s. Further below fifty percent of the participants were never attended classes on reproductive health. There should be a systematic pattern of health services available to access it.

Humayun Kabir et. al (2014). The purpose of the study was to explore the reproductive health needs of unmarried adolescents particularly treatment seeking behavior in Bangladesh. It was a community based project and cross sectional survey was conducted selecting 800 adolescent female students aged 12-19 years by simple random sampling from rural and urban areas. Structured questionnaires and trained interviews were administered. 50% of the adolescents reported experiencing menstrual problems and 40% of them sought treatment. Utilization of health care facilities and care providers for reported problems significantly varied by rural and urban areas. There were a high proportion of the adolescents in the urban setting (15%) as compared to the rural settings (9%). The findings of the study emphasized the need for treatment and relevant information from qualified health professionals and introducing confidential friendly reproductive health care and access to reproductive health services.

Precilla Santos Gondim (2015). The study was assessed public school going 16-19 years adolescents. It aimed at to identify information among them on reproductive health and sexuality. The
study showed that those who able to get educational programmes on reproductive health were having high accessibility. In this study friends were most important source of information and secondly family members. The study suggests that school can considered as most important source of information.

**Nenaly D Abioda and Carolyn L Yoro (2015).** The study was examined on high school adolescents knowledge and attitude and their relationship to their health seeking behavior. The descriptive relational study with one short survey design used to select randomly 332 students of 4th year in private and public high schools. Results showed that a majority of the participants belonging to younger age group were females, had average level of reproductive health knowledge, neutral attitude and good health seeking behavior. The study proposes the importance of health care providers to promote friendly adolescent health services.

**Jessica L Morris (2015).** According author’s view, historically adolescents were neglected in spite lot many issues and risk behaviors. Especially their reproductive health needs and concern are not yet discussed or assessed such as pregnancy, parenthood, accessing contraception and safe abortion and high rates of HIV and STI’s. There are various political and socio-economic factors confines in accessing reproductive and sexual health services. There is no proper, accurate, non-judgmental and confidential approach or adolescent friendly services provided by health professionals.

**Tork HM & Al Hosis KF (2015).** The article described the reproductive health related knowledge of female adolescents aged between 14-19. A 59 structured questionnaire was employed. The awareness among adolescents was just 27% during pre-intervention. The study suggests that the reproductive health education programmes are required to enhance the knowledge of adolescents.

**Wombeogo Michel et al. (2015).** This study aimed to elicit adolescent responses on their reproductive health choice. A quantitative cross sectional survey was employed by using multistage sampling technique to select 376 adolescents between the ages of 15-24 years. Responses were assessed with structured questionnaires. Results showed that 94.8% of them received information from parents, 92.4% from peers and, 64% of the respondents indicated that service providers were friendly but no detailed explanation or information was given to clients. 72% of them agreed that adolescents engaged in unprotected sexual practices. Overall result shows that knowledge on reproductive health
choice was average and many adolescents acquire from parents and peers. The study suggests that adolescents require reproductive health knowledge through school education. Parents need to provide age specific reproductive health information and adolescents should not to rely on peer group. Adolescent friendly behavioral communication strategies through community drama could increase health education on reproductive health and consequences of unhealthy choices.

Mitswat abebbe Gebremichael, Eshetu Ejeta Chaka (2015). The aim of study was to assess the level of knowledge, attitudes and practice towards reproductive health among students of Ambo University. Institutional based descriptive cross sectional study design was used to study through supplemented by qualitative in-depth interview. Multistage sampling was implemented to assess 605 samples. The data was collected with structured and pretested questionnaires and they entered in EPI info 3.5.1 then exported for analysis with help of SPSS Version 16. Adolescents were expressed opinion on different methods to prevent reproductive health problems. Among them 111(18.5%) mentioned condom, 44 (7.9%) abstain method and others 322 (53.7%) of them were not aware. 81.2% have shown interest to use reproductive health services in the future. 84.7% of the respondents wanted to introduce reproductive services in the university campus. 42% of respondents were involved in sex before 18 years of age. The study showed that majority of the respondents were not aware about reproductive health components, problems and not able to mention prevention methods. Friendly reproductive health services are required to introduce in educational sectors.

Kennedy Otwombe et al (2015). The study explicated the demographic characteristics and health seeking behavior among adolescents of Soweto, South Africa. In order to assess 830 adolescents between 14-19 years of age the Bosta Adolescent health study with interviewer-administered cross sectional survey was used. The study defined health seeking behavior as accessing medical services or being hospitalized 6 months prior to the survey. The results of the survey showed that 57% of them were female and 50% were aged 17-19 years and 85% were enrolled in school. 27% (n=224) reported seeking health care and only 8% (n=65) being hospitalized and there was significant differences found among gender. Followed by concern about HIV is just 10%. In this study the high proportion of female desired for general health care services than males, with regard to this result the health services desired by females 85% and males 78%, on counselling females 82% and males 70%,
and reproductive health services by females 64% and males 56%. The study brought a gap between the availability and need for general, counseling and reproductive health services. Integrated adolescent friendly and school based health services are essential.

**Kekkonen VK et al (2015).** The aim of this study was to investigate psycho-social problems among adolescents. 793 participants aged 13-18 years were selected using questionnaire which included Youth self report (YSR) and questions on psycho-social background of the adolescents. Data was gathered based on frequent use of medical services with the help of medical records of the local public health services. Among total participants, 288 were frequent users of the health services with 141 health care visits and among them majority were females. The study found that there was a high level of alcohol consumption and mental illness symptoms among girls and increased somatic complaints among boys as per YSR who were mostly used primary health care services. Further it showed that upper secondary school going students were less frequent visitors in primary health care use. Socio-economic background of adolescents in assessment of psycho-social problems as well as the use of health care services for better treatment is necessary.

**Poscia A et al (2015).** The study assessed University students in determining how they cope with preconception health in relation to sexual transmitted infections (STI’s). 325 of the students were used ineffective methods against STI’s. 63.7% males and 30.9% females were never had urologic and gynecological examination. The study suggests that adolescents at school level required in sensitizing reproductive health and care services.

**Jonathan Mensah et.al (2016).** The study assessed on knowledge, attitudes and practices and their utilization of reproductive and sexual health among young people between 10-24 years of age. The study was descriptive with cross sectional where 170 youth were selected among them 150 were surveyed and 20 were Interviewed using stratified sampling. To find association and significance chi-square test was used. The results showed that 45.2%, 77 out of 170 youth had sexual experience during their life time. The study showed that sexual health services were significantly associated with reproductive health utilization. This study suggests that government and religious bodies would be helpful in promoting knowledge and sexual health in order to be sexually healthy and responsible.
Prakash Khanal (2016). It was a purposive and qualitative research study to examine the knowledge of adolescent on sexual and sexual health services in Nepal. In-Depth interviews were conducted by using semi structured format to assess 20 participants who were equally selected from each district out of which half of them were female respondents. The results of the study showed that some of the common Sexual and Reproductive health problems like early marriage, teenage pregnancy, gender inequality, HIV/AIDS, Syphilis and Gonorrhea were aware by adolescents from both the selected districts. Adolescents were able to get information from mass media, peers etc. There was poor opinion among participants except girls in communicating about SRH problems. Girls were able to discuss with their mothers about some of the issues connected to menstruation. A lack of awareness was found among almost all participants with regard to availability and utilizing reproductive health services. The study was able to identify the gap in the implementation of government ARSH programmes. The Study noted that social stigma, lack of information, service quality, confidentiality and service provider’s behavior were some of the reasons for not utilizing the health services. Overall the study found that adolescents had moderate level of knowledge and awareness on sexual and reproductive health and its services. The study stressed the need of promotional activities at the community level, mostly involving peer groups and youth members.

Muhammed S.A. Masood and Nabila A.A. Alsonini (2017). This Study was conducted to determine reproductive health and family planning knowledge and attitude among adults between the ages of 15 to 25 and above. A majority of them had heard of reproductive and health and family planning methods whereas knowledge about health services in these areas were low to moderate. Information on reproductive health and family planning should be provided to adolescents through school curriculum.

2.3. INDIAN LITERATURE

As per study concern in India, 35% of the population is in the 10-24 age group (B. N.Joshi, 2002). The health needs of the adolescents are not adequately addressed. Reproductive health needs are understood in terms of beliefs, taboos and other practices and mostly they are unrecognized or underestimated. Comprehensive development of young people requires effective knowledge, positive attitude and unbiased policy and programmes on reproductive and sexual health. Sources of
information are very much required to give adolescents right information which enables them not to get into risky behaviors. Indian research studies can provide input to understand adolescents and their issues. The literature that is described here is based on reproductive and sexual health and related aspects among adolescents in India. They are presented in terms of views, research studies of various aspects like knowledge, attitude, health seeking behavior, source of information etc on reproductive health.

Prabu (1979) has pointed out, that the primary function of the educational system is to transmit knowledge, and skills and society regards and values are set with global changes and advancement

Heyneman and Loxely (1982). This research study shows that in India, school factors are the predominant influence on student achievement.

Khan and Singh (1987). The basic objective of the study was to assess the knowledge, attitudes and behavior among college and university students on HIV infection. Around 88% of the students were aware of AIDS but with several misconceptions. Study points out those adolescents require counseling as an essential component of management of HIV infection.

Realities of Adolescents in India Today

- Singh (1997). Adolescence is a new term in contemporary India. In all levels of policy formulation and programming youth has been used rather than adolescence.

- Brown and Larson (2002). A majority of young people who are unreported, who have non-consensual sexual experiences (eve teasing, abduction). In this context adolescents needs are needed to be discussed in terms of cultural and historical point of view.

- UNODC(2004). In India 25% of the adolescents aged 15-19 years are in rural areas and 10% are in urban areas. There are 3 million drug abusers which is largest population and there are 0.6 million drug dependents in the age group 16 -35.

- WHO (2007). Around 30% of the population is in the age group of 10-24 years (327 million individuals)
• **NACO, (2007).** 31% of the youth are living with HIV/AIDS burden in the country and they are susceptible to STI’s and HIV

• **MW&CD (2007).** In a survey on child abuse in across 13 states 50 % among 12,447 children reported sexual abuse, 53% victims were boys.

• **Population Council (2011).** Evidence in India suggests that sexual and reproductive health situation of young people continues to have a wide array of unmet needs.

**Drakshavani Devi K, Venkata Ramaiah (1994).** In this study a majority of the adolescent girls were having appropriate knowledge about menstruation. Those who have a lack of knowledge may transfer the same to their offspring. The study suggests that girls require being educated about the facts of menstruation and its physiological implication.

**Ahuja and Tewari (1995).** A study was conducted on awareness among adolescent girls on pubertal changes. This study assessed the awareness on changes that occur during puberty, beliefs, practices relating to menstruation, sources of information on issues related to pubertal changes and sex education among 12-16 years of age from 50 school going and 50 non school going adolescent girls. The data was collected with the help of questionnaires and personal interviews. The result showed that the girls were aware of pubertal changes and the onset of the menstrual cycle where three fourth of the adolescents were not aware of the physical complications of menstruation and psychological issues during their periods.

**Sharma and Sharma (1995).** This study was conducted in Kheda District of Gujarat to study sexual behavior among adolescent boys and girls. Letter box approach was initiated to impart sex education in order to assure anonymity among students. A very few teachers were volunteered due to the unwillingness and misconception among them led not to participate in the study. After installing letter box students were encourage to drop their problems in letter box related to masturbation, sexual organs, menstruation, body hair and size of the breast. The study recognized need of use of group/team approach which able build confidence among teachers impart knowledge as well as students to impart knowledge on sexuality.
Khan et al., (1996). This research study was conducted to assess adolescents in private English medium schools, and government public schools in Uttar Pradesh on awareness of reproductive health related aspects. An effort was also made to examine their sexual behavior. A total of 510 students among them 270 boys and 240 girls were selected with through systematic random sampling. Study found significant differences between boys and girls on demographic and socio-economic analysis. There was a general lack of awareness on reproductive physiology. Government schools require effective programmes to promote reproductive health education.

Rahate et al., (1997). The study was conducted to assess awareness on AIDS and its risk factors among adolescents from rural areas of Saonar District, Nagpur. The study sample selected were 261 students who ranged between 20 years of age group. They were assessed with questionnaire various aspects of AIDS. Results showed that there was poor knowledge regarding etiology of AIDS. About 70-80 percent of the students were aware of high risk groups and modes of transmission.

Tikoo et al., (1997). This study conducted to find out the level of knowledge among adolescent boys and girls regarding sexuality and AIDS in India. Questionnaire was consisting of demographic, knowledge scale. The study showed that adolescent had limited knowledge of human sexuality and AIDS where males had more knowledge than females.

Awsathi and Pande, Bahulekar and Garg Aggarwal, Mamadani (1997-99). The view of sexuality and reproductive health among adolescents was associated with gender bias, myths and misconception. Because of this reason parents and schools were reluctant to educate young people on sex and related issues.

Abraham (1998). This study attempted to assess on the knowledge and perception towards reproductive physiology, STD’s and contraception. As per study boys were sexually active where as girls reported low rates of sexual activity. There were myths and misconception found among adolescents on physiology, STD’s and contraceptives.

MOHFW, Country paper, (1998). The view of adolescents in Indian scenario is stratified which based on gender, caste, class, geographical location and region. Adolescents are generally homogeneous group and it categorized into different segments like school going, non-school going,
institutionalized, drop outs, mental ill, differently able, sexually exploited children, living with HIV/AIDS, married, unmarried, working paid, non-paid etc.

**Crum R M (1998).** School can be the source of information to assess issues which are connected to school problems. School performance can be predicted by health compromising behaviors and physical, mental and emotional problems.

**UNFPA, (1998); Gantara, (2000).** Sex considered as a taboo especially outside marriage. But studies showed that adolescents were vulnerable where they easily get into risk behaviors like marital sex, raising the risk of unwanted pregnancy and illegal abortion.

**Awasthi and Pande (1998).** In their views friends, television, magazines, sibling’s and books are the primary source of knowledge about sex. They recommend reproductive health counseling programmes are needed to be initiated.

**The national population Policy & MOHFW (2000).** This review recognizes that adolescents have special needs and they require special attention. In this regard organizing effective programmes need to be recommended to ensure to access sexual and reproductive health information and counseling services. These services are need to be affordable and accessible and primary care centers and sub centers can provide these services.

**Dalvit Singh(2000).** In this study, more than 50% of the adolescents were aware of moustache and beard being common signs of secondary sexual characters for boys. Knowledge of males regarding nightfall and pubic hair (male) was16.8% and 12.9 % respectively. Approximately 25% of males were aware of menstruation and breast development as pubertal changes in females and only 12% knew of pubic hair (female) as a secondary sexual character among females. On the contrary, less than 10% of females were aware of nightfall and pubic hair (male) as pubertal changes among males. Regarding female pubertal changes, more than 60% of females knew menstruation as a sign of puberty but their awareness about breast development decreased to 40 per cent and pubic hair (female) further decreased to merely 13% as signs of puberty. The study clearly shows that adolescents profoundly lacked appropriate and adequate knowledge of sexuality related matters and required effective educational programmes to enhance their knowledge.
**Bhatia and Swami (2000).** This study conducted in Chandigarh to find out the level of awareness regarding fertility control measures. In this study rural girls had much lower levels of awareness than urban girls. Awareness in rural areas is very much required and school education can adopt reproductive health awareness programmes.

**Juszczak L & Cooper K (2002).** His view speaks about male health. As per his view adolescents have multifaceted health care needs. Due to traditional care males are less likely than and other groups to seek medical attention. There is a chance of receiving brief and problem oriented care because of inadequate youth oriented services.

**Sandana R (2002).** Reproductive health is a part of adolescence and it covers all aspects of health such as abortion, child health sexuality, contraception and maternal mortality. There are other factors like biological, social, cultural and behavioral factors which also play an important role in determining reproductive health.

**Lal and Paul (2003).** Programmes related to adolescent concern like Educational attainment, skill acquisition, gender role attitudes, age at marriage and their impact have been systematically evaluated but the outcome has not been assessed.

**Yadav (2003).** A study was conducted among rural, urban and tribal adolescent students of IX class in Madhya Pradesh on knowledge and attitude towards reproductive health issues. The questionnaire consists of awareness with 16 types and attitude scale with 60 statements. The highlighted that participants had low awareness on various aspects of physiological an pathological development.

**Dash (2004).** Study assessed unmarried adolescent girls on the level of reproductive health problems. Systematic random start method was used select 100 girls were selected out of 363 girls from 10 villages. To collect data from participants a interview schedule was used. A majority of the adolescent girls were maintained reproductive health hygiene especially during their periods. But the causes and consequences of reproductive health problem were low among adolescent girls.
Sahoo (2004). This study selected 100 adolescents of whom 55 were males and 45 were females with simple random sampling. Interview schedule with enclosed questions related to socio-economic status, knowledge on sexual and reproductive health was administered. The study pointed out that parents and guardians were main impediment to gaining knowledge reproductive and sexual health.

Sahoo (2004). The study was conducted among unmarried adolescents on the level of knowledge on sexual health education. It showed that the knowledge on consequences of early pregnancy was poor among the participants.

NACO, MOHFW, and GOI (2005). The study showed that 30% of the adolescents aged 15-19 years were affected with AIDS in India. The study predicted that young people living with HIV/AIDS in India affected twice that of young adult.

Balsubramanian (2005). In India adolescent girls consists of about 1/5 of total female population in the world. During adolescence especially life cycle of adolescent girls requires specific and special attention.

Prasad (2006). The study was reviewed adolescent from Hindu (200) and Muslim (200) rural adolescent boys. The awareness regarding perception on sexual matters were assessed. A pre-designed questionnaire was administered. The study reported that a significant proportion of adolescent boys were not answered on masturbation, bed-wetting or erection. The study suggests that misconception regarding reproductive health related matters should clear up with right education programmes.

Krishnan K Yadav (2006). This project report entitled “Adolescence Problems-A remedial Approach” has analyzed various adolescence problems and has suggested their remedies by practicing of life skills. The author has focused that stress is the main cause of many problems and management of stress can eliminate a majority of those right from the root.

Government of Madhya Pradesh (2006). There is ambiguity prevailing in service delivery despite the government’s commitment to address sexual and reproductive health. There should be a proper method in providing adolescents reproductive health services which tends to be limited.
Government of Andra Pradesh (2006). The adolescent programmes have reached and have been implemented in only few districts of each state.

B. N Joshi et. al (2006). The study used Self administered questionnaire to examine reproductive health problems and health seeking behavior among 300 urban school going students of 11-14 years age. Among them 72% girls and 56% boys reported health problems, 43% of the girls and 35% of the boys were voluntarily reporting clinics for help seeking. Study stressed that adolescent friendly center for counseling, referral and follow up and screaming of health professional with reproductive health knowledge is effective.

Bhubon Mohan and Das Subha Ray (2007). This study described the resemblances and dissimilarities in reproductive health awareness and behavior among rural and pre-urban adolescent males from West Bengal. Questionnaire was used to collect data from111 participants between the age of 15 and 18. Pre-urban students had better awareness than rural. The study pointed out that reproductive health awareness especially reproductive biology, legal provisions related reproductive health, removing certain misconceptions and reproductive behavior among males are necessary.

Sarita Agrawal, alfia Fatma, C M Singh (2007). The study assessed adolescent girls on awareness about reproductive health, related problems and felt needs for reproductive health and sex education. This study was cross sectional where 33 questions ware employed on various aspects of reproductive health. 75% of the participants were aware, 88.8% were aware of needs of healthy life. A majority, 80% of them had idea about various aspects of sex education where as 80.4% of girls had sex education. 90.4% of the girls wanted sex education to be included in the curriculum. 32.8% of them thought doctors to be the best person to discuss reproductive health issues. 65.25 were aware about at least one contraceptive. 51.2% were aware legal age marriage for girls. 48.4% of them were aware of menstrual problems prevalent were irregular cycle. 84% of them Dysmenorrhoa and only 10% were aware of aware pathological vaginal discharge. The study suggests that adolescent girls required widespread and supportive education program to improve their awareness.

Sharma (2008). Adolescent period is a transition phase which makes them vulnerable to a number of problems. Psycho-social problems, general and reproductive health problems and sexuality related problems are some of the problems encountered by adolescents.
WHO (2008). According to New Delhi office of the Population Council it is estimated that by 2015, in India the population of adolescents may increase to 240 million.

Rajesh Kumar and P.V. Lakshmi (2008). This study was conducted among adolescent boys and girls of Chandigarh. The study aimed to assess the alleged health problems, help seeking behavior and utilization pattern of health clinics. The study examined 360 school going adolescents selected with stratified random sampling. 81% of the adolescents reported having some health problems during last three months, 60% of the problems were behavioral and psychological in nature. 48% of the boys were preferred friends and 63% of the girls preferred mothers for information. The study predicted that adolescents required greater counseling needs for psychological and medical related problems.

Basu (2010) Reported that the Indian education, research and training system have been unable to match set with global changes and advancement.

Kundan Mittal and Manish Kumar Goel (2010). It was cross sectional study to examine the knowledge on various reproductive and health issues. This study assessed adolescent girls aged 15-19 years from three randomly selected educational institutes of Rohtak City. The sample size used in this study was 788 girls. Pre-tested and close ended questionnaire was administered. Prior verbal consent was taken from parents and teachers for the study. Anonymity was maintained while administering questionnaire. 80.7% of the adolescents were aware of contraception and 79.4% of them were known that the menstruation is normal physiological phenomenon. 73.9% were known about different modes of transmission on STD’s or HIV/AIDS. 39.7% were used government and private health facilities. 10.4% were heard masturbation. The study suggests that strengthening of mass media, parent to adolescent communication, peer-to peer communication are required to promote adolescent reproductive health.

Shireen J Jejeebhoy K G Santhya (2011). This review explained the various key policies, laws and programmes which existing in India. The purpose of this article was to find out how health programmes had focus or implications towards the needs on sexual and reproductive health rights of
young people. This paper pointed out that the thrust areas, mainly awareness and facilitating on access to reproductive and sexual health needs through counseling and acquiring livelihood skills. Further it stresses on policies, laws and programmes that allow people to acquire higher educational level and relevant makeable skills. The article suggested that in India beside policies and programmes there is a need of supportive environment for young people. This paper provided a basic view of existing policies and programmes in India. Assessment of adolescent appropriate programmes would suitable to plan and implement programmes.

K Malleshappa, Shivaram Krishna Nandini C (2011). The reproductive health education intervention study was conducted in Andra Pradesh. It assessed 656 adolescent girls aged 14-19 years who were randomly selected from three high schools (10th std) and intermediate (11th and 12th classes). 50 items structure questionnaire was used to test knowledge of the participants on reproductive knowledge before after the education programme. The study was tabulated and analyzed using SPSS version 11.0. Proportion, percentage and chi-square test were used to test effect of intervention. A majority of the adolescents were improved their knowledge after intervention. Educational programmes could be effective to bring awareness among rural girls.

Alquaiz AM, Almuneef MA, Minhas HR (2012). This was cross sectional study conducted to investigate the knowledge and source of information among school going female students in Saudi Arabia. A total of 417 students were selected among them 42% were reported that they discussed sexual matters friends, 15.8% with parents and 17% with domestic workers. A majority, 61% of them said that teachers were having negative attitude toward questions related to sexual issues. There were no significant differences were found in private and public schools. The study recommended adding formal sexual education in school curriculum is very much required.

P V Kotecha et al (2012). The study pointed out reproductive health issues among adolescents and willingness to avail reproductive health clinics in urban areas of Gujarat. 1440 adolescents among them 748 girls and 692 boys were selected from both English and Guajarati mediums and 5 each adolescent boys, girls and 5 teachers were selected for focused group discussion. The results predicted that higher proportion of boys and girls were able to identify visible external changes in the opposite sex. The most important sources of information were television school books,
teachers, friends and parents. Two third of the adolescents were aware of HIV/AIDS among the total participates half of them knew correctly various modes of transmission. Around two third of the adolescent boys and girls were expressed a need for more information on reproduction. A majority of the adolescents showed their willingness to use adolescent friendly clinics. The study suggested that there is a need of information on human reproductive system and related issues as well as teachers need to sensitize about reproductive health of adolescents.

P V Kotecha et al (2012). It was a quantitative survey, assessed adolescents from rural areas with aim to identify reproductive health issues and readiness to use adolescent health clinics. Self Administered structured questionnaire was used to assess 748 adolescents among them 428 boys and 340 girls from 15 schools by systematic random sampling. Results showed that 31% of the boys and 33% of the girls they had heard about contraception, more than half of the adolescents correctly knew about modes of transmission of HIV/AIDS. Most of the adolescents were able to identify most of the external changes in opposite sex. 70% of the adolescents were using adolescent friendly clinics. Adolescents were willing to discuss with teachers but they are not equipped with reproductive knowledge. Adolescents required to educate on Reproductive system especially teachers need to be sensitize on reproductive health care.

Solanki H et al and Solanki H et al (2012). This study was a cross-sectional conducted among 68 Adolescents College going students M.N.C Ganghi and Mrs Baliga Gandhi Mahila college of Arts and Commerce College, Bhavnagar city. This study assessed menstrual pattern, disorders & hygiene practices among Adolescent girls Information was obtained through a self administered questionnaire in a local language related to menstruation after verbal consent. Once the girls had finished filling up the Perforama, open discussion & health education was given to the adolescents regarding menstruation & myths related to it. The results of the study showed that the mean age of menarche was 14.5. Most of the girls (85.3%) had correct information on menstruation which is given by parents and they further said family was the most common source of information and least common was school teacher. Dysmenorrhea was the main menstrual problem reported by them (66.2 %). 66.2 % girls used old plain cloth as menstrual absorbent. Menstrual problems particularly dysmenorrhea is common among adolescent girls. In most of the girls’ menstrual hygiene practices were found to be poor. The study pointed out that teachers, family members, health educators & media should play a
very important role in improving menstrual hygiene in adolescents. Opinions of adolescents towards significant people can give right input for further research studies.

**Nair MK et al (2013).** It was a comparative study among adolescent boys and girls between 10-24 years of age conducted in three districts of Kerala. 95% of them knew about condoms, 91% of them had knowledge about legal age for marriage, 89% of them were answered correctly on both parents are equally responsible for problem of infertility. And 60.45% were correctly said that b the gender of the infant is determined by male sperm. Above mentioned all views were significant among boys and girls and girls were more aware than boys. Further study examined that 90% of the boys and girls demanded for adolescent care and counselling services.

**S Ahmad, R K Srivatava, Prgya Verma (2013).** This study was cross sectional conducted at Varnasi District of Uttar Pradesh. Around 120 girls of higher secondary school going were assessed with pre-designed and pre-tested questionnaire. The questionnaire was based on menarche, beliefs, perception and source of information regarding menstruation. The findings of the study showed that more than half 58.3% of the girls were aware on menstruation prior to attainment of menarche. 41.6% of them said mothers were the most important source of information, a majority, 85.8% of the girls believed that menstruation is a physiological process and 82.3% of them practiced different restrictions during menstruation. Awareness programmes through Media, through trained health professionals and even parents who have knowledge can play important role to guide adolescents for correct menstrual hygiene practices. The study claims to assess the health seeking behavior which most important component to get better information for adolescents on reproductive and sexual health aspects.

**Rejoice Puthuchira Ravi and Ravi Shankar Athmulum Kulasekaran (2014).** This study was a community based cross sectional conducted in 28 villages with multistage sampling techniques to select 15-24 years of women. The study showed that the prevalence of reproductive tract infections (RTI’s) 14.5% and STI’s 8.8% were observed. The general and reproductive health symptoms and problems such as itching or irritation, vulva, thick white discharge, unpleasant odor, frequent and unpleasant urination were most common problems experienced by the participants. One fourth of the participants received treatment for sexual health problems. The perception of symptoms observed
among respondents were normal, feelings of shy, lack of female health workers, distance to access health facilities and lack of availability of treatment facilitates. These were the major barriers for not seeking treatment for RTI’s /STI’s. Overall results of the study showed that socio-economic background of the participants hindered to utilize health care services.

**Dr Shubhangi Nayak et al. (2015).** The study was aimed to assess perception among adolescents regarding pubertal changes in Jabalpur district. Around 800 adolescents were selected, 400 from rural and 400 from urban areas of Jabalpur district. The study used both qualitative and quantitative methods to assess pubertal changes and their source of information regarding these issues. The study showed that in urban areas a higher proportion of adolescents were aware of the pubertal changes than in rural areas. Among boys, acne and increment in height while among girls menarche, change in body contours and acne were the common issues of concern. Adolescents discussed their problems with their families (42.6%) and friends (40.1%). This study revealed poor level of awareness regarding pubertal changes. Adolescent are hesitant to share their problems which keeps them ill informed on such issues. Further studies required to assess the reasons for reluctant to share their problems have to discussed.

**Devoasa I & others (2016).** The aim of the research study was to assess the knowledge on STI’s, contraceptive methods and effectiveness of sexual education in secondary schools with special focus on influence peer education. Around 472 university students among them 298 women and 174 men with average age of 21 were selected. To assess these participants a synonymous and self administered questionnaire was carried out. The result of the study showed that 61.2% of the participants said the peer education held in school was reliable and authentic information, further 12.3% of them felt less reliable and 25.65% of them were given their opinion that it was irrelevant. Overall 69.3% females were more favor than 46.6% boys which significant among them at p=0.001>0.01. The study predicted that the needs of health education programmes in schools are reliable and students need to be significantly better informed. The type of health education programmes which are appropriate for adolescents are need to be assessed in future study.

**Trupi Pradhan (2016).** The study examined the level of knowledge on reproductive health issues among + 2students in Odisha. Purposive sampling was used to select 100 samples. They were
assessed with the help of self formulated questionnaire. Participants had average knowledge on reproductive health. The study suggests that reproductive health issues should be discussed among adolescents especially of girls through educational programmes.

2.4. CONCLUSION

The various studies which were presented helped the researcher to investigate adolescents to understand their awareness, attitude, sources of information they receive, psychological and emotional issues, utilization and health seeking behavior towards reproductive health. Reviews presented in this chapter directed the need of additional research in reproductive health concerning adolescents. These research studies attempted to address some of the issues that still need to be examined like identifying needs with quantitative and qualitative research methods. So that the results and finding of the research have a strong base for drawing justification and description, documentation and assessment of present programmes exclusively meant for adolescents and also addressing their reproductive health needs. Studies also required to involve of parents, teachers and health professionals to provide right information and care for adolescents and right approach to facilitate their needs through appropriate settings. Based on this input the present study explicates the need of addressing reproductive health issues of adolescents to provide awareness and to have greater utilization and health seeking behavior. These reviews helped to assess adolescents with clear cut information. The study tried to illustrate the research gaps which were discussed in these reviews and accordingly the research methodology was prepared to investigate adolescent on their awareness and attitude towards reproductive health.