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Abstract
Adolescents are vital human resources. The problems of adolescents are increasing since social forces have put tremendous pressure on them. A large number of adolescents are facing problems of increased vulnerability and risk pertaining to health due to their risky behavior. A large number of adolescent girls are also being exploited both physically and sexually. The wider exposure to pornographic literature and sites has also created problems for them. The proportion of premarital sex relations among adolescents is gradually increasing while on the other hand the proportion of married adolescent is still high in India. Reproductive and sexual health status among the adolescents has been reported to be poor as their knowledge regarding it is found to be very low. The sexual and reproductive health needs of adolescents and young people are firmly on national agendas in India. The present paper attempts to examine the awareness, knowledge, attitude and perception regarding reproductive and sexual health issues among adolescent boys and girls.

Keywords: life skill, adolescents, school children, Uttar Pradesh

Introduction
Adolescence, the period between 10 and 19 years of age is a critical transition phase from childhood to adulthood. These are formative years when significant physical, psychological and behavioral changes take place. These years are also a time of preparation for undertaking greater responsibilities, and a time to ensure healthy, all-round development. Healthy development of adolescents is dependent upon several complex factors, e.g., the environment in which they live and grow and the quality of relationship with the families, community and peer group. Adolescence is a time of rapid changes and difficult challenges. They face a wide variety of psychosocial demands, viz., becoming independent, developing skills in interacting well with their parents, devising ethical principles, becoming intellectually competent, acquiring a sense of responsibility etc. The adolescents have also to cope with their sexuality by learning as to how to deal with the changing sexual feelings, deciding whether to participate in various types of sexual activity, discovering how to recognize love, and learning how to avoid unwanted pregnancy. Adolescence is characterized by change. It is a period of upheaval fraught with uncertainties, unfounded fears and internal conflict exacerbated by the difficulty of having to cope with a new body, a fresh identity and unfamiliar feelings. As adolescents become adults, they look on the issues of relationships, marriage and parenthood as a part of the maturing process. Studies also show that adolescents have limited knowledge about sexual and reproductive health and know little about the natural processes of puberty, sexual health, pregnancy or reproduction. Due to lack of sufficient knowledge and sensitization, the vulnerability of HIV/AIDS among adolescents is reported to be high. Importantly thing majority of the young women in India are sexually active by age of 18 years. This has caused high health risk among adolescents since married adolescents hardly bother about using of contraception.

Review of literature
Adolescents, estimated for the age group of 10-19 years constitute 22.8 per cent of India’s population. Adolescent means emerging or achieving identity like other stages of development. It is defined as a phase of life characterized by rapid physical growth and development, physical, social and psychological changes and maturity, sexual maturity,
experimentation, development of adult mental processes and a move from earlier childhood socio-economic dependence towards relative independence (Planning Commission, 2001) [13]. The period of adolescent is transient, characterized by typical trials and tribulations. Over the next two decades, number of adolescents as well as their share as a proportion to the total population will be large because of the high fertility rate in the 1980s and the population momentum in the 1990s. They represent the future of the country and their predicaments cannot be easily overlooked (Sinha, 2007) [23]. The term adolescent means to ‘to emerge’ or ‘achieve identity’. It is that phase of life which is marked by rapid physical and psychological changes. Different policies and programmes have defined adolescents differently. For example, ICDS defines adolescents belonging to the age group of 13-19 years, RCH programmes define between 10-19 years age group.

According to the World Health Organization (WHO), UNICEF, UNFPA adolescents are individuals aged 10-19, while the broader term “youth” refers to the 15-24 age groups. Constitution of India and Labor Laws of the country consider people up to the age of 14 years as children. Girls up to the age of 19 comprise about one-quarter of India’s population. Adolescence is often the time when “the world expands for boys and contracts for girls. Boys enjoy privileges like autonomy of mobility, opportunity and power. Various studies have exhibited that enrolment in school of adolescent girls often declines sharply due to the need for their help in the home and the costs of education. Girls endure new restriction as parents often restrict their movements out of fears for their reputation and safety. About 1/5th of India’s population is in the adolescent age group of 10-19 years. It is estimated that there are about 200 million adolescents in India in the age group of 15-24 years. It is expected that this age group will continue to grow reaching over 214 million by 2020. Despite adolescents being a huge segment of the population, policies and programmes in India have focused very little effort on the adolescent group. Over the past 50 years, population has grown at a rapid pace and so, too, has the adolescent population. There is a growing understanding that adolescence is a bridge between childhood and adulthood. Unfortunately, the special needs of adolescents are rarely addressed by the educational, health and family welfare programmes in India. Adolescence is a transition phase which a child becomes an adult. It is the period during which rapid physical growth, psychological and physiological changes, the development of secondary sexual characteristics and reproductive maturation occur. During adolescence an intense sexual drive develops and adolescence typically starts exploring relationships with the opposite sex. Adolescents start defining social relationship outside of the family. Their behaviour is guided by an intense desire for independence and identity. In this process, adolescents undergo intense psychological stress and personality change (Rao, 1995) [18]. A study conducted by the State Education Resource Centre (SERC) in Uttar Pradesh established that gender equality was unknown and adolescent girls felt that they were a burden on their families and had poorer self-image while their counterparts felt superior.15 A recent study revealed that 14 percent of boys and 8 per cent of girls had trouble with sexual thoughts, and nearly 9 percent of the boys and girls perceived premarital stress (Kaila, 2001) [12]. This is particularly true for girls given that the majority of them have no knowledge of menstruation. In most cases, their mothers are the only source of information. Most girls perceive menstruation as disgusting and as a curse (Gupta, 1998) [4]. Adolescent girls are also at higher risk of psychosocial stress because of gender discrimination. There is a lack of knowledge and awareness among adolescents about health issues and problems. An Indian Council of Medical Research (ICMR) study showed that knowledge and awareness about puberty, menstruation, physical changes in the body, reproduction, contraception, pregnancy, childbearing, reproductive tract infections, sexually transmitted infections (STIs), and HIV was low among boys and girls, especially in younger adolescents (ages 10–14). Among the younger adolescents, 40 percent had little knowledge about the sex organs and most girls had not been informed about menarche prior to its onset. About one-half of the adolescents were not aware of condoms and were confused about the various modes of HIV/AIDS transmission. The study reported, however, that older adolescents (ages 15–19) had better knowledge. About 80 percent had knowledge of STIs, including HIV. Older adolescent girls were more aware than younger adolescent girls of the physical and physiological changes that take place in the body. Only one-half of the adolescents were aware of various family planning methods, and young people’s knowledge about spacing methods, such as through the use of intrauterine devices (IUDs) or oral contraceptive pills, was very low (Gupta, 1988) [3].

High fertility rates, high rates of teenage pregnancy, high risk of STI/HIV, and poor nutritional status are the main health problems among the adolescent population in India. High fertility is related to early marriage. The age-specific fertility rate (ASFR) among 15–19 year-old female adolescents is as high as 0.107. That means one of every 10 women would have a child. There are wide urban and rural differentials in the ASFR. The rural ASFR, 0.121, is twice that of urban areas (IIPS, 2000) [8]. The NFHS-2 showed that over one-third of married adolescents (ages 15–19) had given birth to their first child and another one-tenth to their second child. The average age of women at the birth of their first child was 19.2 years. Births to teens in states such as Rajasthan, Madhya Pradesh, Uttar Pradesh, Bihar, Maharashtra, Karnataka, and Andhra Pradesh are more common than in other states in India, with many women younger at first birth less than the national average (Sabu, et.al. 1999) [10]. Teenage pregnancy, almost all of which takes place within marriage, is the major cause of poor reproductive health and health outcomes among adolescents. About 15 percent of pregnancies are among teenage girls under age 18 who have a two to five times higher risk of maternal death. Adolescent pregnant mothers, who are often already poorly nourished before becoming pregnant, run a high obstetric risk for premature delivery, giving birth to a low birth weight baby, prolonged and obstructed labor, and severe intra-partum and postpartum hemorrhage (Jejeebhoy, 2000; Verma & Das, 1997) [9, 28]. Early pregnancy has shown an association with high neonatal mortality, and infant and child mortality. The NFHS-2 results show that mothers who are younger than 20 years old at the time of first birth were associated with a 1.7 times higher neonatal mortality rate and a 1.6 times greater infant mortality rate than were mothers giving birth between ages 20–29 (IIPS, 2000) [8]. Induced abortions are yet another important reason for the poor reproductive health of women in general and adolescents specifically. An estimated six million induced abortions are performed in India, and anecdotal evidence suggests that a fairly large proportion of them are performed for adolescent mothers and unmarried teenage girls. While no realistic or accurate data are available, the enormity of the
problem may be judged by the fact that 8–10 percent of those who seek medical terminations of pregnancy are teenage mothers and unmarried girls. The real percentage may be far larger. While induced abortion was legalized in India under the Medical Termination of Pregnancy (MTP) Act, a major proportion (approximately 80 percent) of all induced abortions is still performed illegally by private and untrained persons in unhygienic conditions (Chhabra & Nuna, 1997) [3].

Induced abortions account for more than 11 percent of maternal deaths and significantly influence women’s reproductive health (Jejeebhoy, 2000) [10]. A large proportion of adolescent girls suffer from various gynecological problems, particularly menstrual irregularities such as hyper menorrhhea, hypo menorrhhea, menorrhagia, and dysmenorrhreal (Chakravarty, 1989). About 45 per cent of adolescent girls reported menstrual problems. These are mainly due to psychosocial stress and emotional changes (Chakravarty, 1989). Vesico-vaginal fistula and urinary incontinence are not uncommon. A study conducted in Madras city revealed that 42 percent of the college and 34 percent of the school-going students reported problems during menstruation. The problems included headache, stomach pain, excessive bleeding, and other vague or non-specific symptoms like lethargy and loss of appetite. Nearly two-thirds of those who had problems sought medical treatment. Although most of these are normal symptoms of menstruation among adolescents, these need to be mentioned particularly in the Indian context because most of the girls are not aware of this natural phenomenon. There are several gynecological problems among female adolescents. These problems arise primarily as a result of changing hormone patterns (due to changes in endocrine activity during the transition from pre puberty to puberty) and emotional, psychological, and physical changes associated with adolescence (although puberty is a normal physiological process, menstrual irregularities and dysmenorrheal may frighten young adolescents). The age of menarche among Indian girls, which is reported to be declining, ranges from 11.5–14.5 years, with the current average age being 13.5 years (Bhatia, 1993) [11]. This has resulted in earlier onset of puberty and secondary sex characteristics, and increased reproductive exposure. This has special significance in the Indian cultural context because early marriage and indeed, child marriage, is commonly practiced in many of the states’ rural areas. Reproductive tract infections (RTIs) and STIs are not uncommon. In India, STIs rank third among the major communicable diseases. Of concern, however, is that approximately 12–25 percent of all STI cases are among teenage boys. STIs often go undetected or untreated among young women, who, embarrassed or stigmatized by the presence of an STI, are reluctant to seek help. Yet STI agents, such as chlamydia and human papilloma virus, can have dire consequences, such as infertility or cervical cancer. STIs also facilitate the transmission of HIV. There is very little information on the female sex partners of unmarried male students (Nag, 1995) [13]. Increased sero-positivity has been reported in Mumbai, rising from 2 percent to 30 percent in two years among commercial sex workers (CSWs), the primary makeup of who are adolescents. Nutrition is another important indicator for overall well being and development of adolescents. Adolescent nutrition has not been given the attention it deserves accepted for a limited nutrition programme for adolescent girls under the integrated Child Development Services Scheme run by Department of Women and Child Development. In under nourished children, rapid growth during adolescence may increase the severity of under nutrition. Pre-pregnancy anemic status of adolescent girls is crucial and has long term inter-generational consequences. Anemic adolescent mothers are at a higher risk of miscarriages, maternal mortality and giving birth to still born, and low birth weight babies. Early marriage and pregnancy perpetuate both maternal and child under nutrition. Under nutrition in adolescents also leads to poor academic performance in schools and low productivity in the workforce latter in life. Survey studies so that many boys and girls are engaged in sexual acts of varying degrees of physical intimacy, with a marked gender difference. The sexual networks of boys depend on opportunities to meet different partners, peer influence, personal income, erotic exposure and leisure time available. Contraception use among the unmarried adolescents is also found to be very low since sexual relationship is mainly based on given opportunities. Condom use and risk perception varies depending on type of the partner, type of sex and the circumstances of the sexual experience. Most of the boys do not use condoms with their regular partners. Most of the students who are engaged in sex do not perceive any risk of contracting STIs including HIV. In recent years, reproductive and sexual health of adolescents has drawn increasing attention. Rates of sexually transmitted infections are soaring among young people. This situation persist in a policy climate that continues to deny adolescents information and services that they need to make informed choices about their sexual and reproductive health. We need to ensure access to information and services for providing health care to adolescents. The community based approaches must be planned for providing reproductive and sexual education to adolescents in order to provide them safe and protected environment for their overall development and well being.

Objectives and methods of study
The paper attempts to examine the awareness, knowledge, attitude and perception regarding reproductive and sexual health issues among adolescent boys and girls; their problems of regarding reproductive and sexual health and suggesting models for healthy human relationship, effective communication and responsible decision making behavior. The study was conducted in selected schools viz. Ram Bharose Maikulal Inter College, Teli Bagh; Government Jubilee (boys) Inter College, City Station; Government Jubilee (Girls) Inter College, Vikas Nagar; and Ganga Sharan Inter College, Vikas Nagar, Lucknow. The school going adolescent boys and girls from urban and rural areas was included for the study. The school adolescents in the age group of 13-17 years formed the target group for the survey. The 9th and 11th standards students were selected for survey. The survey was conducted with the help of structured interview schedule. Overall, 890 students were surveyed under the ICJR supported project by Pt. G. B. Pant Institute of Studies in Rural Development, Lucknow in which first author of the paper was engaged.

Discussion of Results
Adolescent’s needs and practices
- Most of the boys need to know about recreation, play exercises, nutrition. They might also need to know on issues such as outing, friends/peers, hygiene, and career.
- Most girls need to know our recreation, outing, play/exercise, friends/peers, hygiene, nutrition, career and
Adolescents seek guidance mostly
- Adolescents seek guidance mostly from teachers and parents for studies; parents and doctors regarding general health; parents for nutrition; doctors and parents for reproductive and sexual health; and friends and parents for friendship.
- They actually consult these sources of guidance and information on issues pertaining to reproductive and sexual health. On these issues, most of them consult parents, peers/friends. Boys consulting doctors are four times more than the girls. Boys consulting teachers are three times more than the girls. Girls largely consult parents and peers/friends.

Adolescent’s knowledge and practices
- Almost all students lack knowledge about nutrients present in the food items they take in regular meals.
- Most adolescents take pulses, cereals, green vegetables, fruits, butter/ghee/oil, milk/milk produce in the items to be included in balanced diet.
- Most of the boys observe rapid gain in weight, growth of hair in genital area, change of voice during the adolescence period. Most of the girls observe rapid gain in weight, growth of hair in genital area, development of breasts and onset of menstruation during the adolescence. Most of the boys and girls evade questions relating to physiological changes taking place. They feel shy talking about them.
- About one third adolescents feel embarrassed, worried and happy about the changes taking place. They talk about the changes with friends and mothers mostly, and some discuss with siblings, doctor and father.
- Most adolescents appear hygiene conscious. They wash hands before and after meals, and after going to toilet. Majority do get hair cut at no fixed schedule or once a month. Most of them use soap/ Shampoo. They wash/ clean genital/ sexual parts of body. Almost all use undergarments and change them daily.
- Most adolescents evade questions (and feel shy) on identifying male and female reproductive parts in chart. However, most boys correctly identify testis and penis in male body, and uterus and vagina in female body.
- More than half of the girls either do not know or evade the question on how a woman gets pregnant. Boys are slightly more knowledgeable as far as this is concerned. Most of the adolescents know that both mother and father are responsible for deciding gender of the child. However, most of the remaining either don’t know or evade the question on this.
- About 80 percent adolescents discuss issues like boy/girl friend, marriage, adult movies, etc., either with friends or with classmates. Only about 30 percent read any literature on romance, love, sex, or see any pornographic album/blue movie or visit such internet sites. About half read such magazines and about one fourth watch blue movie. Only about one fifth adolescents read educational material on reproductive/sexual health, most of which related to body. To most adolescents, “Sex” means different thing to different boys and girls, but slightly less than half don’t know what it is.
- Most of the adolescents (largely boys) consult doctors on sexual / reproductive health problems, about one fifth consult mothers (almost all girls) and friends on these matters. Most adolescents feel that 19 to 25 years is the right age group for a girl to have first baby. Most adolescents know that pregnancy can be avoided by use of family planning method and abstinence. Most are aware that they can get information/guidance about the menses to avoid pregnancy at government or private clinics or rural health centres. They are aware of the reproductive health services offered there.
- Most adolescents (boys and girls both) evade questions on what are the various family welfare methods available to male/female, and offer no response. Most of the boys and girls are aware of at least condom for male and oral pills for female. Most of the adolescents desire to know more about family planning methods. For getting additional information they prefer the following sources. Doctors, television, booklets, parents, radio, besides others.
- Most adolescents are not aware of what is ‘abortion’. On the whole, they know that abortion is performed by qualified doctor/nurses. Most don’t know as to when abortion is safe. They largely know that an unsafe abortion can cause either death or other serious damage.
- Most girls know what ‘menstruation’ is. They can explain about it. Most don’t know if a woman can become pregnant if she has intercourse during menstruation. Most see onset of first bleeding (menses) at the age of 13 or 14 years. Most are told that they would bleed. Almost all get information about menses either from mother, sister or school teacher. Three fourth menstruating girls seek advice, mostly from mother or sister. Most use napkins/ sanitary pads (but rest use cloth) which is thrown out after first use. Cloth/napkin/pad is changed at least twice a day or whenever girl feels like.
- Most girls face problems while menstruating – mostly pain in legs, tiredness/weakness, stomach ache/ cramp. Gynecological problems girls face are – thick curdy discharge, excessive bleeding with pain, and discharge with foul smell. Psychological problems girls mostly face are – weakness, anxiety, embarrassment, besides fear, bad mood. Very few girls rub sex organs for pleasurable sensation. They feel it’s very natural, although shameful. At the same time they can’t understand as to why does this happen.
- Most of the boys perceive seminal discharge/ masturbation to be: a cause of weakness, containing sperms in it, a natural process. Boys largely think that masturbation is a dirty/ messy act, it weakens body, and it is a sin that only some boys do which reduces fertility / vitality. Boys think largely that wet dreams is natural, it is unhealthy that causes semen loss, and a pleasurable dream for some. Only one fourth boys admit to having nocturnal emission / wet dreams. Most boys feel disturbed about it. Only one fourth of all boys discuss about it, largely with friends/ peers, and few with doctors and parents.

Sexuality
- Adolescents have tender desires/wishes, for instance having friendship with opposite sex, hug, kiss, have fun, etc. But most of them evade questions when asked about it, and will offer no response. Most of the other boys what to be friendly with, meet, hug, kiss them and have fun. Most of the remaining girls also admit to being wanted to be friendly with boys, and wish to have fun with them.
- Most boys want their life partners to be qualified, intelligent, caring, friendly, and submissive, and to be
coming form good status family. Most girls want their life partners to be qualified, intelligent, caring, friendly and submissive. Very few boys and girls favor looks and appearance. Most of them would do nothing. Others would like to hold hands to gather, maintain healthy relations, introduce her/him to parents, convince their parents, and wait for time to marry.

- Most boys think that the legal age of marriage for boys is above 21, but most of them either don’t know or evade question on legal age of marriage for girls. However, most girls think that legal age of marriage for boys and girls both is 18 to 21 years. Most adolescents think that first sexual contact should take place only after marriage. Most adolescents either have no views to offer or evade question on premarital sex.

- Most adolescents have friends. About one third have both boys and girls as friends, while the remaining one third each have either boys only or girls only. Most of them like their friends, and often think about them. But most of them don’t know it of them reciprocate feelings. Most feel shy on asking whether they ever had (or are currently having) any intimate (sexual) relations and offer no response. Almost all of the remaining has no such intimate (sexual) relations. Rests are homosexual and heterosexual both. They will evade question when asked about sexual abuse. Those that sexually abuse adolescents are friends, persons they like and own relatives. Most are sexually abused by people of opposite sex.

Interpersonal relations of adolescents
Adolescents have friendly relations with parents. They share personal feelings largely with parents, friends and siblings. Personal problems are also shared largely with parents, friends and sibling. Most adolescents want to become teachers, doctors and engineers. Parents are the role models of the most adolescents. Causes of stress in most of them are career worries, studies, loneliness, academic performance. About one fifth have no worried, and no stress.

Understanding RTIs, STDs and HIV/AIDS
- Only one third adolescents know what Sexually Transmitted Diseases (STDs) are. They access information about the disease largely from television, doctors, and newspapers. Most of them do not know the symptoms of STDs. Most of these that know –identify symptoms as – ulcer and sore, weakness/ headache, burning sensation, continuous fever, and discharge from genitals.

- Most of the adolescents have heard of HIV/AIDS. Majority of them know that it is spread through sexual contact, sharing of needles, transfusion of blood. Most know that it can be prevented by practice of safe sex, not sharing needles, taking tested / safe blood. Most know that it is not curable. Most adolescents want to know more about HIV/AIDS. Information they largely need is about treatment and methods of prevention. They don’t think that people living with HIV/AIDS face discrimination in society. Those that see discrimination find that they are not properly treated and are isolated.

Life skill development, risk taking behavior and substance abuse
- Only about 2 percent adolescents smoke, or also take narcotic drugs and alcohol. Most of them are likely to be alcohol or drug dependent, for last one to two years.

- About one fifth of all adolescents face serious crisis situations in life, mostly financial crisis, accident/ injuries, death of close family member and domestic violence. They cope up with these crisis situations largely by taking it out, through counseling, by studying some literature.

Suggestions
- Reproductive and sexual health education should be provided to school going adolescents through developing course curriculum in ninth, tenth, eleventh and twelfth standards of education in schools. However, teachers for providing such education need orientation in order to deal such issues effectively and efficiently without creating any problem and tension. Such course curriculums are to be developed carefully keeping in view of important and vital issues for education and methods of education and knowledge. If possible separate classes with the use of audio-visuals may be held by the experts and concerned teachers to adolescent boys and girls.

- Adolescent girls need specific policies to address specific sectors like education, health, family welfare, nutrition, HIV/AIDS, sports, etc. An integrated and holistic development programmes for empowerment of adolescent girls are needed. Adolescents in different circumstances like adolescent with disabilities learning disorders, adolescent sex workers, children of sex workers and street children need more visibility in policies.

- Better understanding of the causes of the sexual and reproductive health needs of married adolescents who remain unmet why informed choice continues to abide them and how services should be structured to overcome the social, cultural and economic constraints that married adolescents face has to be understood in right perspective.

References
25. UNFPA, UNFPA Framework for Action on Adolescents Youth, UNFPA, New Delhi.