CHAPTER – I

INTRODUCTION

“Adolescence is like a ship sailing on the deep sea of exposure waiting to be safely navigated across the treacherous waters, so that it does not end up being another "TITANIC". ¹

Adolescence is a term derived from a Latin word ‘adolescence’ which means “growing into maturity.” It is a fascinating period of life that makes the transition from being a dependent child to becoming an independently functioning adult. This is a period when aims are high and plans are plenty. It is the time of dilemma regarding yes or no. The thoughts are bundle of contradictions. The mind has wings and often leaps beyond emotions. Generally unhappy with parents, rules and curds they often get on each other nerves. They are looking for an oasis due to impending identity. Adolescent- defined by WHO is a period from 15 to 24 years. One in every five person is an adolescent.

Women, the 'weaker sex' has been victim of numerous social evils like dowry, domestic violence, prejudiced social system, easy prey for unsafe sex and sex violence etc. Despite all these handicaps, woman power is fast emerging as a power to reckon with, women are gaining access to the latest technologies higher education, social support, legal issues related to their sex, thus empowering themselves to take the cudgel to protect themselves from disadvantageous situations in life and demand for their rights.

AIDS the acquired immunodeficiency syndrome is caused by a virus known as Human Immunodeficiency virus. Since the time the first case
was detected in U.S.A. in 1981, the **HIV/AIDS** epidemic continues its expansion across the globe. Over 27 million people have died since first AIDS case was identified. 33.3 million People around the world are living with HIV/AIDS in 2009. The first HIV case in India was reported in May 1986 from Chennai and first HIV case reported from Mumbai in 1987. It is about two decade old in India. Within this period it has emerged as one of the most serious Public Health Problem in our country. The prevalence rate of HIV has a wide variation in India and about 1.8 million people died of AIDS related causes in 2009. The estimated number of HIV infection as is about 2.27 million in India in 2009 (report of NACO 2008-09) It has spread into general population in the states of Tamil Nadu, Nagaland, Manipur, Maharashtra, Andhra Pradesh and Karnataka. The prevalence rate of HIV among pregnant women in these state is recorded to be one percentage and over. Though the spread of infection is still low in other state there is high-risk population group. Most HIV infection in India (86%) are due to unprotected heterosexual transmission (UNAIDS report on global AIDS epidemic 2010).^2^

**HIV/AIDS** got a focus ahead of the world AIDS Day which falls on 1\(^{st}\) December. There should be sensitive and human approach for the AIDS patient in the society and people should understand the scientific aspects of disease and preventive ways. The advices being given by doctors regarding the deadly HIV/AIDS should be seriously taken by people in the society. In Chhattisgarh, HIV test has been so far done on 3,12,471 persons out of which 7,782 individuals are found positive and 1,759 persons are given Anti-Retroviral therapy. The information regarding the awareness of prevention and treatment against HIV/AIDS is being spread through 34 NGOs in the state of Chhattisgarh.
Information centers have been established in three railway stations in state for sake of people who either in or out are migrating from Chhattisgarh. These centers are at Raipur, Bilaspur and Champa. HIV infected persons in different parts of state- Raipur 3870, Durg 940, Rajnandgaon 495, Bastar 360, Mahasamund 263, Kawardha 175, Sarguja-150, Raigarh-127 and less than 100 in all other districts.\(^3\)

HIV damages cells of the immune system to the point that the body has difficulty in fighting of certain bacteria, viruses, fungi, parasites and other microbes. Persons with HIV are considered to have HIV infection and are termed HIV positive. Many HIV positive people do not get sick for year, but they can spread the virus. Being HIV – positive is not the same having AIDS. AIDS or “Acquired Immunodeficiency Syndrome” applies to the most advanced stage of HIV infection where a person is affected by “Opportunistic Infections” that do not affect healthy people.

The National AIDS Control Programme was launched in 1987 with the assistance of WHO and World Bank based on the surveillance data. Under this project it is estimated that as on mid 2000, the total number of HIV infection in the country was 3.86 million. During 2004 over 5.1 million cases of HIV have been detected. The cumulative number of AIDS cases has risen to 86,028 in August 2004. The year showed more than 3 million deaths globally from AIDS, despite the availability of HIV Anti-retroviral therapy. As per the report of NACO on 31st July 2005 it has been reported that there are 1396 AIDS cases in Madhya Pradesh itself and in total 111608 in India, i.e. a rise in more than 25,000 cases within a year and more then 4750 Cases in Chhattisgarh and Bilai & Durg, twin city is considered as AIDS capital.
In 1999, NACP II came into effect with the stated aim of reducing spread of HIV through promoting behavior change. In 2007, NACP-III began with highest priority placed of reaching 80% of high risk group like sex worker, IUDs with targeted interventions by civil society or community organizations in partnership with the state AIDS Control Societies which include outreach programmes, focused on behaviour change through peer education, distribution of condoms and other risk reduction, treatment of STD linkages to health services as well as advocacy and training of local groups.

NACP- III seeks to implement the principle of a continuum of care. Accordingly, prevention will go hand in hand with access to prophylaxis, management of opportunistic infections and ART, safety measures, positive prevention and impact mitigation. It will also make efforts to address the needs of persons infected and affected by HIV, especially children. This will be done through the sectors and agencies involved in child protection and welfare, nutritional support, income generation and other welfare services.

Given the spread of HIV infection into rural areas, NACP- III will further decentralize its organizational structure to implement programmes at the district level. Accordingly, differential packages of services have been developed for each category of districts and the proposed District AIDS Prevention and Control Units (DAPCUs) will be strengthened as well. 4

Over the past several years, India has shown a true commitment to improving and investing more in health and specifically for the control of HIV/AIDS. India’s epidemic is multiple and diverse, and so the intervention strategies will have to be adapted to the diverse risk and
behavioral characteristics. Consistent and regular information about the epidemic is needed, which well represents local data and high-risk groups. It is clear from experience from other countries and the history of the Indian epidemic so far that to reach the MDG target of stopping the spread of HIV/AIDS by 2015 will require expansion of targeted interventions for high-risk populations, strengthening of the health system at large, improving partnerships with the private sector and civil society and the backing of these activities with sufficient and sustained funding.

The world AIDS Day provides us the opportunity to take action and ensure that Human Rights are protected and global targets for HIV/AIDS prevention, treatment and care are met. We are wearing the AIDS awareness international symbol “RED RIBBON” to remind our commitment. “STOP AIDS: KEEP PROMISE.”

On world AIDS Day 2007 India flagged off its target national campaign in the form of a seven coach train called Red Ribbon express. Following the success of campaign in 2009 it took off and now counseling and training services, HIV testing, treatment of STDs as well as HIV/AIDS and it reached out in our district on 31st July 2010.

Adolescent group of today are exposed to the risk of being victims of HIV/AIDS – which was quite unknown to their predecessors a few decades ago. The epidemic of HIV/AIDS is now progressing at a rapid pace among young people. Studies have reported that young people form a significant group from those attending sexually transmitted infection clinics are those infected by HIV. Programme managers and policy makers have often recommended that college can act at the centre point for disseminating information & education on HIV/AIDS. Hence School/College education has been described as a “social vaccine “. In India there is wide gap between the inputs in the HIV/AIDS curriculum
for Schools/College and the actual education that is imparted. As adolescents are a valuable resource for future nation of our country it is imperative that they should be equipped with ample amount of information so as to protect themselves and their counterparts from falling a prey this still an incurable killer disease.

AIDS is the foremost problem of youth. Nearly 50% of new HIV infections are occurring in young people between 15-24 yrs. This is partly because a large part of world population is young. Transmission of AIDS is more than 80 percentages through sexual intercourse; the other means are unsafe blood transfusion, sharing same injection needles by drug abusers and sometimes perinatal transmission.

Over the years number of famous people has come out being as HIV positive. Among these are MAGIC JOHNSON, ROCKHUDSON, EASY DIRECT JERMAN, LIBRACE & FREDY MERCURY.  

In Africa initially AIDS was called as 'SLIM Disease' because of wasting Syndrome. Malnutrition associated with HIV infection has serious and direct information for quality life. Weight loss is after event that begins a vicious circle of increase fatigue, decreased physical activity including inability to consume adequate food leading to reduced work productivity.

The National AIDS Control Programme (NACP) was developed for control and prevention with the assistance of WHO & World Bank in 1991. It was implemented as a five year HIV /AIDS control project from September 1992 to Sept. 1997. This project was later extended to March 1999. It was 100 percentage centrally sponsored project for all states and union territories. Ministry of Health and family welfare in 1992 has set National AIDS Control Organization. (NACO) to implement and monitor various activities of programme as:
a) Surveillance to determine prevalence of infection: In the year 1985 Indian Council Medical Research started the screening of high blood groups at National Institute virology at Pune and Christian college Vellore to determine if HIV was present in India. As the first case of HIV was diagnosed in 1986 at Chennai, the surveillance activity was extended by establishing 62 sero-surveillance centers and 9 HIV reference centers in the country for identification of geographical spread of HIV and determination of major modes of transmission. During 1993, a sentinel surveillance system was introduced with a predefined scientific protocol. The objective was to identify trends of seropositivity in specific high risk groups, as well as low risk groups. At present, HIV sentinel surveillance the proposed sites are 248 Sexually transmitted disease clinics, 487 antenatal clinics, 52 sites among intravenous drug users (IUDs), 40 sites for men having sex with men (MSM), 158 antenatal clinic in rural areas, 137 sites for commercial sex worker, 3 migrant group site and one site for eunuchs. After each round of surveillance, data collected, compiled and analyzed by NACO and all states are classified.

b) Clinical management of detected cases: The detected case are treated as per NACO guidelines depending upon their CD4 count and the patients are treated with anti retro viral treatment (ART) which is a new initiative of NACP. The Government has provided the ART in government hospital in free of cost which helps to reduce the ability if HIV virus to replicate and in turn this increases individual immunity to fight against this disease. The priority categories are pregnant women, children up to fifteen year of age and full blown AIDS cases. At present there are 5 anti retro viral treatment (ART) centers
functioning in Chhattisgarh (Raipur, Durg, Bilaspur, Ambikapur and Jagdalpur.)

c) Blood safety: Blood transfusion services are considered as integral part of health care system. Blood Transfusion Councils have been set up at National and state levels. Professional blood donation has been prohibited in country since 1\textsuperscript{st} January 1998. Only licensed blood banks are permitted to operate in the country and voluntary blood donation is encouraged. Zonal blood testing centers have been established to provide linkage with other blood banks affiliated to public, private and voluntary sectors. As per National Blood safety policy, testing of every unit of blood is mandatory for detecting infections like HIV, Hepatitis-B, malaria, syphilis.

In the country, 2177 blood banks have been provided which supplies blood out of which 855 government blood banks, 288 voluntary, 561 private hospitals and 473 private commercial blood banks.188 zonal blood testing centers and 9 HIV reference centers are functioning in the country. HIV test kits are supplied up to district level blood banks. In rural areas, to meet the shortage the availability of blood were there is no feasibility to operate blood bank government has to decided establish blood storage center at First Referral Units (FRUs) at district level for emergency, obstetrics and trauma care services.

d) Condom programme to control STD (Sexually Transmitted Diseases): Among probable source of HIV infection in India, heterosexual promiscuity constitutes the major route i.e.85\%. HIV infection occurs due to unprotected multi-partner sexual contacts. This type of transmission can be prevented by use good quality of condoms. The
three major areas where NACO has significant progress in relation to condom program are:

- Quality control of condom
- Social marketing of condoms
- Involvement of NGOs and private voluntary organizations.  

Social marketing has been accepted as the most effective strategy for condom promotion. This strategy not only helps to increase the acceptability but also easy access to user while improving the sustainability of condom provision. In Bhilai-Durg, condom machines are installed in petrol pumps of sector-1 and Boria gate (Bhilai Steel Plant) through NACO unit of Bhilai Steel Plant hospital. The central government has taken measures for easy accessibility to people by making availability of condoms through postman door to door by Post and Telegraph Department.

e) IEC (Information Education Counseling): The objective of IEC strategy in the NATIONAL AIDS CONTROL PROGRAMME are to raise awareness, improve knowledge and understanding among the general people about AIDS infection and STD, routes of transmission and method of prevention; to promote desirable practice such as avoiding multiple sex partner, use of condom, sterilization of needles/syringes and voluntary blood donation, to mobilize all sectors of society to integrate messages and programme on AIDS into their existing activities; to create a supportive environment for the care and rehabilitation of persons with HIV/AIDS.

In the present day, awareness campaign through multimedia has made easy efforts to reach a larger segment of people. The print media,
electronic media, press campaign, inter-personnel publicity and field publicity hold the key to success. A massive media campaign was launched by NACO in 1996 through well designed generic materials. Posters, pamphlets, booklets, newspaper advertisements, film clippings, TV spots, radio spots, wall paintings and cinema slides etc. were prepared in Hindi and in all regional languages.

The planning Commissions Steering Committee on health for the Tenth five year plan (2000-07) states that the prevalence of HIV infection in India is relatively low and some of the projection made by the National AIDS Control Organization suggests that HIV infection in India may reach the plateau by 2012. Tenth five year plan goals for HIV / AIDS programme by steering Committee are

- 80 percentage coverage of high-risk groups through targeted interventions.
- 90 percentage coverage of schools and colleges through education programme.
- Reducing transmission through blood, to less than 1%.
- 80 percentage awareness among the general population in rural areas.
- Establishing at least one voluntary testing and counseling center in every district.
- Scaling up of prevention of mother to child transmission activity up to the district level.

1.1 SOCIOLOGICAL SIGNIFICANCE OF THE STUDY

In recent days much of the information education and counseling to enhance the ability and decision making skills and counseling for peer
has been carried out two HIV positive people by HIV positive people. The prevention aspect of HIV / AIDS should be included in adolescent education as a part of regular school and college curriculum, as the educators are expected to - Strengthen our hands to fight this problem. Sex education has been a compulsory component in Secondary School Curriculum since in 1993, as approximately 2.27 million people in India is living with HIV/AIDS and is reported from all states of India and all district are classified into categories A,B,C,D, based on prevalence.

Today’s adolescents are adults of tomorrow. Their health and resourcefulness will be major factor in determine the health of the coming generation. Adolescent a period of marked physical, social, emotional and cognitive changes, in addition to basic need the sex need is very important and prominent during this period. “Sexuality is natural healthy part of leaving and all the persons are sexually active sexuality includes ethical, spiritual, physical and emotional dimensions. Every person has dignity and self-worth, and individual express their self worth in varied ways (Flash 1995). A study coordinated by MAHENDRA VATSA shows that the Indian teens are facing Dilemma because of disparities between traditional norms and westerns patterns of expression. As lifestyle is changing, there are greater opportunities for youth to experiment and participate in unsafe sex practices resulting in STDs at ages varying 16-19 years. It is difficult to find a place for HIV / AIDS education in an already over crowded curriculum. Parents also worry that in schools if sex education is given it may encourage sexual experimentation. ¹⁰

Adolescence is a period when lot of changes takes place in the body and mind. Hormonal changes result in unusual swings in emotions. Sex drive is an impulse related to sex need. The rapid changes in body and new
sensations attribute to sex that causes confusion and anxiety in adolescence. It is a biological instinct. Due to lack of access to correct information many have misconception on the issue related to sex and sexuality. 

1.2 NEED OF THE STUDY

In society every individual should be aware of the international symbol of AIDS awareness “The Red Ribbon” symbolizes.
- Report for those who have child of AIDS
- Concern for those living with it
- Reminder to us, all of us the constant need to keep up fight against AIDS.

Today’s generation of young people is the largest known in the history. Half of the world’s population (almost 3 billion) is under the age of 25. The youth of a country crucial to its development, and their impressionable minds can be moulded easily. Today young people tend to marry later because of longer year of schooling and of unemployment they are exposed to different kind of relationship, social norms change and sexual behavior that was frowned upon in girls. Adolescents need to learn how to handle and take decision about sexuality.

AIDS education should start at about 7 or 8 years of age, when working with every young people the type of education does not necessarily need to involve about sexual activities or drug abuse. There is no set of prescribed form as to how AIDS education should be taken but when considering an education campaign the following points are prevalent as age, target group, culture, literacy, language, sexual awareness, specific risk group etc. The other need is that this AIDS awareness programme
helps to reduce incidence as people in low and middle income group do not have drugs of AIDS which could save their life.

During 2004 around 5 million adults and children became infected with HIV virus, which causes AIDS. The year showed more than 3 million deaths from AIDS despite the availability of HIV anti-retroviral therapy that reduced the number of deaths in high-income group countries. Due to nation wide increase in the number of HIV / AIDS cases we expect that adolescents can strength our hands to fight this problem. They are the most vulnerable part of society. They are forced to change. Adolescents have greater biological susceptibility to certain reproductive diseases. So, education to adolescent is very essential in order to lead them to good reproductive health. The energies of the youth have to be properly channeled and they should be encouraged to realize their full potential. Sex education, counseling services for young people can provide the knowledge and skills they need to promote responsible relationships and protect themselves and others from unsafe sexual practices.

The Adolescents are the future wealth of nations and so there is due need to educate them because they are the adults of new generation adult so they need to know how to protect themselves from infection. Peer education is often effective when targeted specifically at a particular group, as people seem more willingly to listen to someone who understands the social background. The facts essential in this study are as:

1. To provide appropriate knowledge about HIV / AIDS and how to put and use this information and how to use and act practically how to get and use condoms, for safe sex, and how to prevent infection in medical environment and getting injection for drug therapy etc.
(2) The need for the study is to prevent the misconceptions' to bring about awareness by giving Planned Teaching Programme to remove confusion about disease progress and treatment.

(3) To bring about modification of behavior and reduce stigma and discrimination in peer groups and society.

(4) To help the Peer girls understand that health is most valuable community asset and help them to achieve health by their own activities and efforts.

1.3 REVIEW OF LITERATURE
The chapter deals with a review of related literature on the topic, review of literature is a standard and essential activity of any scientific literature. This helps to gain insight into the various aspects of the problem selected for the study. An intensive review of literature has been done from published and unpublished articles, books, documents, reports and also through MEDLAR and INTERNET search. The review has been organized under five headings.

1. Literature related to school health education.

2. Literature related to adolescents.

3. Literature related to epidemiology of HIV/AIDS.

4. Literature related to knowledge regarding transmission prevention and awareness of HIV/AIDS.

5. Literature related to study conducted on HIV/AIDS.

1. LITERATURE RELATED TO SCHOOL HEALTH EDUCATION
K.K Gulani, Textbook of Community Health Nursing, 2005 in his book stated that children spent most of their time during the day in the school. They are exposed to varied environmental factors within the School. Each
child interacts differently to these factors depending upon his /her biological factors, socio- cultural and economic background and develop some health problem which may impede health and learning activities. Health Education is very important for school children. It creates awareness makes them knowledgeable regarding health matter, develops motivation and promotes change in health behavior and health attitudes in them. Health education content areas include personal hygiene, environmental health, nutrition, prevention and control of communicable and non -communicable diseases, first aid and emergency care, home nursing, family life and reproductive health, prevention and control of Sexually Transmitted Diseases and HIV/AIDS etc.  

K. PARK, Textbook of Preventive and Social Medicine 2005, states that school health service is an important branch of community health. According to modern concepts school health is an economical and powerful means of raising community health, and more important for future generation. Health education is a most important element in school health program. The goal of school health education is to bring desirable changes in health knowledge, in attitudes and practice and not merely to teach the children and set a rule of hygiene.

Health education in schools should cover the areas as personal hygiene, health environment, family life. Family life education being increasingly recognized as a priority in both developed and developing countries. The school health is concerned not only with development of healthy lives but also with healthy attitudes towards human reproduction and prevention from STD, HIV/AIDS.  

B.T BASAVANTHAPPA, Community Health Nursing 2003, School health is integral part of community health. It is that Phase of community
health and family health service that promotes the well-being of child and his education for healthful living. School health programs can have powerful influence for shaping health behavior. There is unique of opportunity to promote and maintain and well-being, since teachers teach most people early in life, were attitudes and values are most readily developed. Health education in school should ensure that the student during his/her years of school attendance will acquire knowledge of scientific health facts, develop positive attitudes towards health strengthen good health habits he has learned at home, and practice new health behavior to maintain and improve his own and his community health. Health science instructions should be based on Childs need and living pattern. The content of health science curriculum includes a general orientation to anatomy and physiological process of body growth and development, physical and emotional needs relationship between man an his environment, nature of health problem and to prevent health problem individually or communally as emotional health, nutrition dental carries, sleep exercise, and recreation and prevention of communicable disease like STD, HIV/AIDS, degenerative diseases and condition, family health , alcohol abuse and narcotics.  

SUNDER RAO KASTURI, (1989) Text book of Community Health Nursing recommended to nurses that school health programmes can bring substantial change in the health of school girls & hence it should be an on going activity with more emphasis on sex & sex related issues through sex education.  

S.KAMALAM Stated in -Essentials in Community Health Nursing Practice that health education is often a new school subject & therefore it tends itself to be more flexible. He also suggested that it will be useful to identify a few health topics that could be incorporated into the school
curriculum without capsulation into the rigid time–table. Another suggestion given by him is that suitable methods can also be devised for evaluating the effect of health education in the school itself and also in the community & family.  

Findings of NATIONAL AIDS CONTROL ORGANISATION, MINISTRY OF HEALTH AND FAMILY WELFARE GOVT. OF INDIA, 2005 reveal that over 35% of all reported AIDS cases in India occur among those in the age group of 15-24 yrs indicating that young people are not only at high risk of contracting HIV infection but already constitute a significant percentage of people living with HIV/AIDS. An epidemiological study by NATIONAL INSTITUTE OF MENTAL HEALTH AND NEURO SCIENCES (2001) in Bangalore city reported that suicides have been increasing at the rate of 5-10% every year across the country.  

NAKAJIMA HEROSHI, DIRECTOR GENERAL WHO In his statement towards a preface of a book (1990) has mentioned that school is one of the vital settings of health education where the children spent their most of time impressionable year. He also ascertains that every effort must be make to include school health education as a means of implementing primary health care policy.  

GOYAL, HARINDERJEET (1993) conducted an evaluative study to determine the eye health needs in the middle school girl’s student of selected school in Delhi with view to involve mother and children for promotion of eye health. The finding indicates that teaching programme is useful in bringing about the desired change in knowledge of mothers and children. She also suggested that there is a great need for developing the system to approach for school health education. Planned Teaching
Programme in school and community could bring about a significant change in the knowledge and health behavior of children and community.

**COLWEL, B et al (1995)** surveyed the parents of elementary school children in rural east central Texas about their attitudes towards and knowledge of comprehensive school health education. Data analysis indicates widespread support for health education compared to other subject areas. Parents also felt that sex education can be one of the most important topics of health education that can be covered in school.  

**SOBOZY W. (1995)**, places their view in the development and progress of an innovative comprehensive school health project in the Jefferson country school district and it is known as the “Health Promotion School Of Excellency” This project was directed to working relationship of pubic and public entitled to seek a common goal that is “A Healthier Community” The school has been used as a preventive setup and result of project are following . The first and second year of its initiation had shown that there was encouraging improvement in levels of health knowledge and attitudes in elementary children as well as school faculty and staff.  

**WHO** Booklet (1997) Promoting Health through School-The concept of health promotion in school is particularly important to content choice since it was through the effective operation of such school that skills are developed and attitudes promoted. Findings indicate that there was still insufficient real understanding and commitment towards achieving the goal of comprehensive school health. The study has three components

1. School Health Education  
2. School Health Environment  
3. Evaluation and success of school health
A Study in UGANDA, ZAMBIYA & India with UNICEF support (1999) an innovative guideline use on “Life Skills For Young” with considerable success in training course run by the team having created in it. In UGANDA & ZAMBIYA emphasis was on psychological life skills and in India “Joyful learning”. This study indicated there has been some positive action to raise the profile of teaching health content and making it more skill based i.e. health action is of the most effective means of health education and needs to plan with its education value in mind. The identification of opportunities to create interesting and challenging health content and more attain tension of their idea and observation together with an attempt to revive the additional culture which encourages children to be produce of the quality and quantity of the work they have to produce in the class.23

In South Africa life skill training is mandated in all school by 2005 “Life Skills Training Curriculum & Teaching Methods Vary” Says MAGANI it is faulty done in some school s but not done well in others. A multi dimensional approach mass media involvement, advocacy and community involvement are some of the strategies adopted to ensure that community compliments the teachings in school.

KESHAR SWARNAKAR (2005) Stated Govt. of India has given an important place to school health services in five-year plan and 20 point programme. The school children have the ability to quickly adopt and acquire new knowledge. So effective health education helps in providing information motivation and help to maintain and adopt healthy habits and life styles. So school health education should be based with prime objectives of giving information which will remove misbelieves, doubts and ignorance and bring about recognition of (Health is Wealth) the focus
of awareness must be improvement in quality of life by bringing the positive behavior.\textsuperscript{24}

Health Education in Schools should be given after preparing a package with teachers by utilizing health activities like health checkup, health education of nutrition, personal hygiene, prevention of infection, STDs, HIV, and AIDS. Scope of health education in schools covers area like human biology, nutrition, hygiene, family planning, prevention of accidents, mental health, sex education and specially educating adolescent about HIV/ AIDS and other sexually transmitted diseases and their prevention are chief areas of health education.

2. LITERATURE RELATED TO ADOLESCENTS BEHAVIOUR REGARDING SEXUALITY

\textbf{KAPIL V et al (1993)} in their study on dietary intake amongst well to do adolescent boys and girls in Delhi, found that the major reason for inadequate intake was due to ignorance about the daily requirements of nutrients. The skipping of the meal amongst female adolescent girls to maintain their body figure was another important reason for low dietary intake.\textsuperscript{25}

\textbf{AWASTHI S. PANDE V K (1998)} conducted a study on sexual behavior pattern and knowledge of Sexually Transmitted Diseases (STD) in adolescent boys in urban slum of Lucknow. A cross sectional survey was conducted in to asses the sexual behavior patterns and knowledge of Sexually Transmitted Diseases (STD) among 15-21 years old boys with a goal of developing a community based reproductive educational programmed in India. About 221 boys were interviewed. Findings revealed that premarital sex was practiced by 79\% & 76\% of boys aged 18 or younger and over 18 respectively living in the urban slum areas of
Lucknow, North India The boys were engaged in high risk sexual behavior and had a poor knowledge of STD symptoms and prevention. Further more substance abuse has been associated with no use of condom. Finding revealed that there is an urgent need for initiating reproductive health counseling programmes targeted at these high-risk adolescents.  

**NATIONAL INSTITUTE OF HEALTH & FAMILY WELFARE (2000)** found that the adolescence period is very crucial since these are the formative years in the life of an individual when major physical, psychological and behavioral changes take place. This is an impressionable period of life, Future of a society depends on adolescents and they form great human resources for the society. Health problems of adolescents are very different from those of younger children and elder adults. Due to lack of accurate information adolescent are prone to various behavioral and reproductive health problems. Health care worker can play a vital role in preventing these problems. 

**BAJPAI. A (2001)** conducted a study to find out anemia among adolescent children aged 14 to 18 years in selected schools at Delhi. She found in her study that about 48% of adolescents were suffering form anemia. Out of these 62.50% had mild anemia, 31.25% moderate anemia while 6.25% of them were having severe anemia. Study revealed that one fourth of the anemic children were suffering from worm infestation. In the study investigator found out more number of girls (60%) were anemic. Study revealed that the adolescent had deficit knowledge regarding prevention and control of anemia which was evident in the pretest. Health education plays an effective role in enhancing knowledge of adolescents regarding prevention and control of anemia studied by the investigator.
3. LITERATURE RELATED TO EPIDEMIOLOGY OF HIV/AIDS

Since AIDS is a worldwide problem of the present era, plenty of literature is available which included WHO reports, NACO reports, newspapers, and journals.

UNAIDS/WHO AIDS Epidemic update report 2002, the HIV/AIDS is pandemic and claimed the lives of more than 3 million people worldwide. Another 5 million people were newly injected with the human Immune-deficiency virus (HIV) that causes AIDS. As a result, in the latest figures there are now 42 million people in the world with HIV infections. In ASIA and Pacific Region alone, there are almost 1 million new infections in 2002; a 10% increase since 2001. Further 490,000 individuals are estimated to have died of AIDS in the past year approximately and 2.1 million young people (15-24 years) are presently having with HIV/AIDS in Asia. 29

Three countries in South East Asia i.e. Thailand, Cambodia and Myanmar and Several states in India now have serious HIV/AIDS epidemics.

Another report by WHO at the end of December 2003, around the world 40 million people are living with HIV/AIDS. The Sub-Saharan region accounts for 26.6 million infected people (more than two thirds of global total) An estimated that globally, 5 million people became newly infected in 2003, more than 1 million of them in ASIA pacific region. New information shows that HIV prevalence in rural areas is lower and that the difference between prevalence rates in rural and urban areas is greater than previously assumed. 30

“Herald of Health” A Family Magazine Nov. 99 – States that unless an effective use is found most of them together with 33 million and others
already are living with virus will be in a decade. 1000 infants were born with HIV in 1998 in the Industrialized world compared with one half a million in developing countries most of them in Africa.

In other parts of the world infections rates are much lower. However in several parts of ASIA including countries with huge populations such as China and India, infectious rates have kept recently high among people engaged in drug abuse and sex workers.

Although information about virus is scarce in ASIA, it is estimated that there is more people having with HIV in India than in any other country.

The countries of Eastern Europe and central ASIA are relative new countries in the rank of HIV infections. 31

THE JOURNAL AIDS RESEARCH AND REVIEW RESEARCH INSTITUTE OCT-DEC. 1998 edition describes about world AIDS day 1998. World wide five young people are infected with HIV every minute making AIDS & HIV a very real part of every day life for young people. Today 30 million people are infected with HIV / AIDS. 9 out of 10 do not know that they are infected 7000 young people aged 10-24 are infected with HIV every day. 7,00,000 young people are infected with HIV every year in ASIA and pacific countries by the end of 1997, a million children under the age of 15 are expected to be having with HIV over 90% of them in developing countries. AIDS may increase infant’s mortality by as much as 75% and mortality in children under five by more than 100% will be affected by the disease. By the year 2000, there were 40 million orphans under the age of 15 in 23 countries highly affected with HIV/AIDS. Most of these children lost their parents due to HIV/ AIDS. 32
PC JOSHI AND JVR PRASAD RAO in changing epidemiology of HIV/ AIDS in India published in AIDS research review (Jan –March 99 edition) states that the HIV virus continues to spread causing nearly 16000 new infections a day in world. Dump states that in 1997 alone 5 million HIV infected were globally found and now a decade old. It has emerged as one of the most serious health problems in the country. HIV/AIDS therefore must be seen as a National calamity and can be fought tired by co-ordination and convergence in respect of HIV/AIDS prevention strategies between society, voluntary and government sectors.33

SHANTA LALL MOLMI & MAHESH SHARMA in the journal of health for the millions February – May 2003, published by Voluntary Health Association of India stated that HIV/AIDS is becoming a fast growing epidemic in Nepal with Nepal’s HIV prevalence (0.5% adult 15-49 yrs old) ranking next to India. In South Asia according to WHO – UNAIDS 2002 latest estimates some says 58,000 Nepalese were having with HIV/AIDS by the end of 2001. Among the reported cases 60% are under the age of 30 who are female’s sex workers and intravenous drug users respectively so if runs spread is not controlled, Nepal will surely experience an explosive risk in the next decade.34

The latest statistics on the world epidemic of AIDS and HIV were published by UNAIDS/WHO in December 2004. The report gives the latest AIDS and HIV statistics for the whole world. During 2004 around five million adults and children became infected with HIV virus that causes AIDS. By the end of the year, an estimated of 39.4 million people worldwide were having with HIV/AIDS. The year also saw more than 3 million deaths from AIDS, despite the availability of HIV antiretroviral therapy which reduced the number of deaths in high income countries.
MEENAKSHI DUTTA GHOSH, Project Director NACO, in the journal health for the million February-May 2003, HIV/AIDS in South Asia published a report on the HIV/AIDS status in South East Asia, with special focus on India presenting the country scenario. She spoke about the rise and spread of HIV prevalence since 1981 that has brought the number close to 4 million HIV infected persons and six high priority states in the country, expressed special concern for the vital issue of blood safely. Her presentations enumerated some of the high priorities of NACO, the future challenges and direction and greatly emphasized on multi social coordination. Gupta highlighted the need of an integrated approach and described a framework for collaboration and also stated that at present there are close to 4 million HIV infected persons in India with presently six high priority states in country. 35

UTON NUCHANTAR RAFEI Regional Director stated in the recent report published by WHO to fight stigma and discrimination on World AIDS Day 2005 stated that the number of people living with HIV/AIDS globally has now reached 40 million 95% of them in developing countries. Although antiretroviral (ARV) treatment can automatically improved the survival and quality of life of millions of HIV infected people, only 5% of the 6 million persons in developing countries who used treatment have access to it, making this a major human right issue. 36

4. LITERATURE RELATED TO KNOWLEDGE REGARDING PREVENTION AND AWARENESS OF HIV/AIDS

AIDS (Acquired Immune Deficiency Syndrome) is caused by a virus, which attacks the immune system of the body. This virus is known as HIV (Human Immune Deficiency Virus. In 1981, American Physicians found pneumocystitis carinii pneumonia & Kaposi’s sarcoma in
apparently healthy young men who were homosexuals, intravenous drug injectors and hemophiliacs. During 1982 and 1983 Doctors in Africa came across patients who had streptococcal meningitis and severe weight loss and died. This condition was known as “slim disease”.37

Luc Montagneres (1983) from Pasteur Institute at France isolated a virus from blood of AIDS patients called lymphadenopathy virus or LAV. In 1984 Robert Gallo and his co-workers from USA isolated Human T-cells lymphotrophic virus or HTLV. These two viruses were shown to be the same and in 1986 an international committee agreed to rename both the virus same as HIV. Further work revealed that one more virus was capable of producing sign and symptoms of AIDS. The original virus was called HIV-1 and the second one HIV-2 HIV/AIDS is recognized as one of the most serious global health Public health problems of present time. It has spread like wild fire as pandemic since 1981. In 1987, a global AIDS strategy was approved and adopted by the fortieth world health assembly.

In South and South East Asia there were about 2.5 million HIV infected patients in the mid year 1994. WHO estimates that for every case of AIDS there may be 50-100 infected persons and with low level of reporting in countries such as India the ratio may be even higher found by Hubley et al 1995. In India there has been a consistent increase in the prevalence of HIV starting from 1986 to 1996. HIV infection prevalence rate varies widely from state to state. Heterosexual transmission is responsible for majority of these infections except in the north eastern states where intravenous drug use is the primary causative factor. Total of 27,43,913, persons were screened form 1985 to 1995, out of which 21,131, were sero-positive and 2095 had AIDS (Gupta 1996).38
If the current pace persists, it is estimated that by the year 2000 India will have about 5 million HIV infected cases and more than one million AIDS Cases (NACP India)

1. Precautions in relation to injections and skin piercing.
2. Precautions in relation to laboratory specimens.
3. Precautions in relation to invasive procedures.
4. Precautions in handling soiled linen.
5. Precautions in handling spills of blood and other body fluids.
7. Disposal of infected wastes.
8. Guidelines for the safety of nurses.

In India, the National AIDS Control Organization (NACO), Ministry of Health and Family Welfare is the key body for control and prevention of AIDS. It prepared a strategic plan for prevention and control of AIDS in India (1992-1996) which has the following components:

- Programme management for strengthening of state and national level institutions for management of AIDS programme.
- Surveillance and research, to monitor the development of HIV/AIDS epidemic and provide information for planning preventive programme.
- Information, education, and communication (IEC) and social mobilization.
- Control of sexually transmitted diseases.
- Condom promotion – improving the quality of condom and promoting use of condoms.
- Blood safety – strengthening national blood transfusion system through upgrading, improved HIV testing facilities, training and expansion of voluntary blood donation system.
A serological test to detect antibodies against HIV became available since 1985. The most frequently used method is the enzyme linked imuno absorbent assay (ELISA). The tests are simple and rapid and do not require sophisticated equipments. Positive ELISA test will require further confirmation by supplementary test such as Western Blot Test. It is also possible to detect directly the presence of HIV antigens in semen and kits are commercially available to detect disease in the window period.39

Regarding management, control and prevention, the main guidelines and principles and nursing management recommended by WHO/ICN (1988) are as follows :-

1. Health education and prevention of HIV transmission.
2. Counseling, to help people take responsibility for their own health and the health of others.
3. HIV antibody screening and testing of entire populations of groups within population to determine their infection or disease.
5. Breast feeding in HIV infected mother should be encouraged as it helps in preventing infections that could accelerate the progress of HIV-related disease in already infected infants.
6. Children and HIV infection.
7. Childhood immunization and HIV infection.
8. HIV infection control in health care setting.
9. Precautions in relation to blood and other body fluids.

Beaufoy 1988 classified HIV/AIDS cases as follows:-

Group I – Refers to acute illness associated with sero-conversion. Some individual may present with an acute flue like illness resembling acute infectious mononucleosis with fever, sore throat, skin rash and swollen glands.
Group II – refers to asymptomatic infection and includes individuals who have no signs and symptoms of HIV infection. This stage may last up to 8 years.

Group III – refers to persistent generalized lymphadenopathy which includes swollen lymph nodes 1 cm or greater, at two or more extrainguinal sites persisting for more than three months.

Group IV – has further sub classification.

IV (A) – consists of wasting syndrome which includes individuals with persistent fever, chronic diarrhea for more than one month duration and/or involuntary weight loss of more than ten percent of their baseline.

IV (B) – Refers to neurological disorder which includes dementia, myelopathy and peripheral neuropathy.

IV (C1) - Consists of the twelve opportunistic infections listed in the surveillance definition of AIDS.

IV (C2) - includes other infections that are not diagnostic of AIDS but that indicate cellular immunodeficiency.

IV (D) - includes those of cancers in the surveillance definition of AIDS.

IV (E) - includes other conditions associated with HIV infection that do not meet the criteria of the preceding groups.

HIV infection/AIDS is transmitted by contaminated blood transfusion or transfusion of blood products or various blood factors. The risk of contracting HIV infection from transfusion of a single unit of infected blood is estimated to be over 95 percent.

**HUBLEY et al 1995** in his recent study in **MANIPUR** among intravenous drug users showed 54 percent incidence of HIV infection.

There is no evidence to suggest that HIV can be transmitted by coughing, sneezing or hand shakes, insect bites, touching, hugging or using toilets, water, food or using telephones, social kissing, swimming pools, sharing
utensils and donating blood. HIV can cross the placenta from the mother to the infant before birth or when the baby travels down the birth canal. The overall risk of HIV transmission from HIV infected mother to her infant is about fifty percent

PARK 1995 in his book textbook of Preventive Medicines stated that the natural history of HIV infection is not yet fully known but current data suggest that the incubation period is uncertain from a few months to six years or more from HIV infection to the development of AIDS. However it is estimated that seventy five percent of those infected with HIV will develop AIDS by the end of ten years.

In 1986, a classification system was developed by CDC to encompass the spectrum of clinical responses to HIV.  

M.C. GUPTA 1996 in his text book of “Preventive and Social Medicine” found that in India there has been a consistent increase in the prevalence of HIV starting from 1986 to 1995. HIV infection prevalence rate varies widely from state of state. Heterosexual transmission is responsible for majority of these infections except in the Northeastern states where intravenous drug use is the primary causative factor. Total of 27,43,913 persons were screened from 1985 to 1995, out of which 21,131 were sero-positive and 2095 had AIDS. If the current pace persists, it is estimated that by the year 2000 India will have about 5 million HIV infected cases and more than one million AIDS cases (NACP India 1994). However, these cases of HIV/ AIDS represent only the ‘tip of the iceberg’. This is alarming statistical information on HIV/AIDS, which emphasizes the need for dealing with this problem right from the national level to community level.
HIV belongs to an unusual class of retrovirus. It replicates in actively dividing T-4 lymphocytes and remains in lymphoid cells in a latent state that can be activated. It can pass through blood brain barrier. It mutates rapidly. It is easily killed by heat and readily inactivated by ether, acetone, ethanol (20%) and beta-propiolactone (1: 400 dilution) but is relatively resistant to ionizing radiation and ultraviolet light.

Once a person is infected the virus remains in the body life long and can take years to manifest. A symptomatic carrier can infect other people for years. The virus is found in greatest concentration in blood, semen and CSF, lower concentrations have been detected in tears, saliva, breast milk, urine, cervical and vaginal secretion.

Most cases have occurred among sexually active persons 20-49 years which represents the most productive members of the society. In North America, Europe and Australia, about seventy percent cases are homosexual or bisexual men, while in Africa and Asia sex ratio is equal. Higher incidence is found in male homosexuals, people with multiple heterosexual partners, intravenous drug users, hemophiliacs and STD patients.

A study in Southern India (1992) showed HIV sero-positive rate in cervical cancer to be 0.5 percent. It would be useful to investigated whether the incidence of cancer cervix in women shows any increase in India due to HIV infection.

Three main mode of transmission of HIV are sexual transmission, blood contact and maternal-fetal transmission. A European study suggested that the chances of transmission of HIV infection from male to female is twice as likely as from female to male. Generally women are more vulnerable
to HIV infection because a larger surface is exposed and semen contains higher concentration of HIV than vaginal or cervical fluids. In hand book for counselors by Indian Red Cross Society (2005) “Manual for peer education” stated that there is growing recognition that many adolescents are not sufficiently prepared to deal with the demands of the modern society. So life skills education is a unified and developmental approach to help adolescents to deal with difficulties of daily life, growing up and risk situations. This life skill training helps to reduce a wide range of problems as drug abuse, violence, HIV/AIDS and a wide range of needs, including the promotion of safety, peace and human rights.

The WHO identified and published in 1998, in its International Journal Of Public Health 10 generic life skills for psychological competence and applicable in daily life and in risk situation as :

1. Self awareness
2. Empathy
3. Communication skills.
4. Coping with emotions
5. Interpersonal skills
6. Decision-making
7. Problem solving
8. Creating thinking
9. Coping with stress

If these life skills are practiced by the adolescent they will be able to take decisions regarding road safety, friendship, school work, smoking, HIV/AIDS related behavior.
AIDS NEWS LETTER 1996 by WHO initiated the global programme of AIDS in 1987 it was reviewed and endorsed in April 1992 with new strategy to reflect scientific advances and partial experience gained. In 1995 the global programme on AIDS was succeeded by UNAIDS which functions in collaboration with National AIDS Control Organization. UNAIDS emphasized the recognition of women vulnerability to HIV/AIDS and the strategies to reach women. It gave vital importance to protect human right of people with HIV infection or AIDS.  

NACO COUNTRY SENARIO UPDATE DEC. 1995 stated that the Govt. of India was prompt in reaching to the threat posed by the existence of HIV/AIDS infection in India. In 1987, NACO initiated a strategy plan for 1992-1997, by which they can implement various programme for the prevention and control of HIV/AIDS in India. NACO is assisted by WHO, World Bank, UNICEF for work of prevention and control of HIV/AIDS. NACO function with many governmental organizations like National Council of education and research training (NCERT), Ministry of Information and Broadcasting (I&B), Indian Council of Medical Research (ICMR) and many other non governmental organization like (NGO). NACO has also conducted pilot studies and implemented pilot integrated interventions. Some of these interventions are aimed at commercial sex workers in Kolkotta, Delhi, Mumbai & Madras. In the absence of effective vaccine and cure for HIV/AIDS infection, health education, awareness programmes and counseling are important means for reducing HIV/AIDS cases and transmission.  

5. LITERATURE RELATED TO STUDIES CONDUCTED ON HIV/AIDS

KRIEHTNER J. EBERSTEIN conducted a study regarding HIV/ AIDS knowledge & attitude variations among children by gender, race, grade,
socioeconomic status & size of community consists with prior research about beliefs of HIV transmission and willingness to interact with person infected with HIV/AIDS. Black children in rural city of South Africa held most misconception about HIV/AIDS relative to their white counterparts. Knowledge of transmissions mediated grade, sex difference and socio economic status which showed unwillingness to interact but not racial difference was found.\textsuperscript{45}

SIGELMAN C.K. GOLDEN BERG J.H. conducted a study regarding parenteral drug users and the socialization regarding HIV/AIDS knowledge attitude among children. Children aged between 6-18 whose parents were engaged in drug treatment were matched on children’s age, sex & ethnicity and on parent’s education. The study was conducted in a community. Children of drug abusing parents have more direct and indirect experience with people affected by HIV/AIDS than any other children and they demonstrated more knowledge of HIV transmission.\textsuperscript{46}

D. J. SCHONFILED & S. R. JOHNSON conducted a study regarding understanding of AIDS by elementary school children. Children understanding of causality treatment and prevention of HIV/AIDS as measured followed the same developmental sequence reported for children’s understanding of general physical illness, social-demographic variables such as race, gender and socio-economic status do not affect children’s levels of sophistications of these developmental concepts regarding prevention of HIV/AIDS. These results have implication for creation of developmentally appropriate and effective AIDS education in curriculum for primary and elementary grades.\textsuperscript{47}
The global Programme on **HIV/AIDS** reviewed and endorsed in 1992 was replaced by United Nations **AIDS** programme (**UNAIDS in 1995**) to boost the global response on prevention and control of **HIV/AIDS**.  

**WHO** through its regional offices has initiated the new challenges for global developers and responses? These includes:-

1. AIDS and human rights  
2. Women and AIDS  
3. Sex Education in School  
4. HIV infection in Person  
5. HIV vaccine development  

**WHO** supported South East Asian region for prevention of **HIV/AIDS** in 1996 and promoted the programme for prevention strategies and intervention of **HIV/AIDS** care as a part of Primary Health Care. The three major objectives are:

- To prevent life of **HIV/AIDS** person
- To reduce personnel and social impact of **HIV** infection.
- To mobilize, identify and provide national intervention efforts against **HIV/AIDS** with the health of **NACO**.  

**SUNWOOD J. BRENMA, A MULLER** conducted school based **AIDS** education for adolescence by medical students and patients affected with **HIV/ AIDS** to provide knowledge for adolescence. The result of the study was significant increase in the knowledge provided by person with **HIV/ AIDS**. The study was concluded as medical student and persons affected with **HIV/AIDS** can provide better school based sex education to early adolescents.
SCHINFRED D.J, PENIN E.L. SHOWLTER, conducted a randomized controlled trial of school based multifaceted HIV/ AIDS education programme. The elementary grades can advance children conceptual understanding and factual knowledge about prevention of HIV/AIDS and decrease misconceptions about casual contact, significant advances in conceptual understanding about HIV/AIDS that can be achieved through direct intervention.

KLEPP KI, LESHABANINAT, HANNAN P. J conducted a study in AIDS in Tanzania to test the effects of HIV/AIDS education programme designed to reduce children’s risk of HIV infection and to improve their tolerance for care of people suffering from HIV/AIDS. The conclusion of the study was that it is feasible and effective local teacher and health workers to provide HIV/AIDS education among Tanzanian primary school children.

BOSCANNO J.A. & DIELEMENTS R.J conducted a state wise survey regarding HIV/ AIDS knowledge, teaching comfort and support for HIV/ AIDS education among school teachers with development of an effective HIV vaccine, still the control of HIV infection may depend on the availability of vaccine and to educate adolescence in different communities about homosexuality and other sensitive subject matter. A state made survey of California teacher indicated that teacher generally were aware about HIV/AIDS, and felt comfortable presenting topics on HIV/ AIDS prevention information to student’s and supported HIV/ AIDS education in schools. The teacher’s input will be critical to effective programme development and implementation.

APLA SCA. M. R. SIEGAL D. MANDER JS et al conducted a programme on AIDS prevention in high school students in Philippines
and the result was that after implementation of HIV/AIDS prevention programme statistically significant effects favoring increase in knowledge among interventional group were observed in knowledge and attitude towards people with HIV/AIDS. The programme was successful in increasing HIV/AIDS related knowledge and improving attitudes of people with HIV/AIDS.

Training manual of life Skills for HIV/AIDS. Peer education by Indian Red Cross society stated that adolescent is not sufficiently prepared to deal with demands of modern society. The main reason is lack of traditional support and power of media in shaping development of youth. Adolescent face increasing risk to their health and development as HIV/AIDS as they may involve in drug abuse, stress, violence and suicide.

So training on life skill helps to cope and may decisions related to road safety, friendship, school work, smoking, HIV/AIDS relative behavior by creating self awareness, coping with emotion, decision making, problem solving, coping with stress etc.

Manual of Indian red cross-emphasized that prevention of HIV/AIDS can be obtained by safe and protected sex.

- Using a condom when having a sex.
- Only ever one sexual partner.
- Mutually faithful to each other always.
- Avoiding pre-marital and extra marital sex.
- Delaying the age of sexual activity.
- Avoid mixing alcohol, drug and sex.
- Abstinence be faithful & Condom (ABC) for sexual activity.
The NACO has also developed a training manual for adolescents to provide education on HIV/AIDS in schools through their NCERT curriculum compulsorily, as adolescents are the productive segment of Indian population. The adolescent has largely been left out in the HIV/AIDS prevention Strategies and intervention.

C. Newman RH Daniel conducted an evaluation of school-based HIV/AIDS for young adolescents who received HIV/AIDS education, where the controlled groups reported that they have changed their behavior to avoid getting HIV/AIDS but thought that they had greater chance of acquiring as adults. Education had a significant impact on the knowledge about HIV/AIDS infection and the degree of tolerance towards students with HIV/AIDS, but the effect was not greater than those learning occurred in the other two groups, some testing among students who were pre-tested were also less worried that they had been exposed to HIV/AIDS, more worried that they would die if they acquired HIV/AIDS and less likely to think HIV/AIDS patients should be isolated.51

Handa A (1994) undertook a study to identify the learning needs of high school students on human sexuality with a view to develop and evaluate the effectiveness of sex education programme. The study revealed that high school students have deficit knowledge on human sexuality in all the learning need areas. The sex education programme was found to be effective in increasing the knowledge of these students on human sexuality.52

M.C. Asuze has conducted a study on several beliefs, attitudes, and knowledge of adolescent youth in IBADAN concerning AIDS. This is a descriptive cross-sectional study of Idaho secondary school students who
took part in an open and voluntary family life addiction programme. In 1990, 306 estimated youth attendance of at least one day of four day programme. 266 youths filled the registration form and questionnaire well enough to be used in their analysis while 177 of youths heard about AIDS only 18 could name the disease agent and 190 could identify sexual intercourse as a principle route for transmitting the infection. The Electronic media was the commonest from which knowledge, about AIDS was acquired.53

E.A.WELLS, M.J.LOPPE has conducted a study on misconceptions about HIV/ AIDS among children who can identify the major routes of HIV transmission, which presented knowledge among 1048 student (from a multi ethnic urban school, participant answered question about behavior leading to HIV transmission. Majority of children had high level of reorganization for the three primary routes of HIV/ AIDS transmission. However children who knew about these routes also had few misconception and they belonged from low social economics status.54

E.O COPNIA et al conducted a comparative study of knowledge of school children about HIV/AIDS in Russia. The study of level of knowledge on HIV infection and AIDS among school children was carried out for the prophylactic purpose and they yielded the positive result which statistically confirmed the analysis of answer to questionnaire distributors before and after implementing teaching programme.55

1.4 OPERATIONAL DEFINITIONS

1. ADOLESCENT GIRLS - Adolescent girls in this study refers to the collegiate girls of age 17-21 yrs i.e. girls studying in academic and professional colleges of Bhilai and Durg.
2. **KNOWLEDGE** - Knowledge refers to adolescent’s awareness regarding prevention of HIV/AIDS and the ability to respond to questions regarding HIV/AIDS.

3. **EFFECTIVENESS** - It refers to the knowledge achieved regarding prevention and treatment of HIV/AIDS from NACO (National Aids Control Organisation), NGO’s, Mass Media, campaigns etc.

4. **HIV** - Refers to human immune deficiency virus which causes AIDS.

5. **AIDS** - AIDS the Acquired Immune Deficiency Syndrome is a fatal disease caused by retrovirus HIV that breaks down the immune system.

6. **AWARENESS** - In this study refers to the knowledge and preventive aspects of Acquired Immune Deficiency Syndrome.

### 1.5 STATEMENT OF PROBLEM

**ADOLESCENT GIRLS KNOWLEDGE AND EFFECTIVENESS OF HIV/AIDS AWARENESS PROGRAMME**

### 1.6 OBJECTIVES

1. To assess the socio cultural background of adolescent girl of Bhilai.

2. To assess the knowledge of adolescent girls regarding awareness of **HIV /AIDS** (human immune deficiency virus / acquired immune deficiency syndrome).

3. To study the status of **HIV /AIDS** (human immune deficiency virus / acquired immune deficiency syndrome) awareness programme of adolescent girls in Bhilai city.
4. To find the factors influencing the knowledge scores on HIV/AIDS (human immune deficiency virus / acquired immune deficiency syndrome) awareness of adolescent girls.

1.7 HYPOTHESIS

The study assumes that:

1) The young adolescents are especially vulnerable to HIV / AIDS, STD'S and drug abuse. Even if they are not engaged in risk behaviors today, they may soon be exposed to situations that put them at risk. In many countries 60% of all new HIV infections are young adolescents.

2) Successful AIDS awareness programme aims at reducing specific sexual risk taking behaviors and re-enforce group norms against unprotected sex and diseases. Social pressures not to have unprotected sexual activity particularly have been shown to be successful and so they should be encouraged to participate more in awareness programmes and campaigns.

3) The school curriculum with these information will significantly reduce the number of HIV/AIDS and STD infection who have had unprotected sex activities during adolescence.

1.8 METHODOLOGY

BEST AND KHAN (1992), state, "A population is any group of individuals that have one or more characteristics in common and are of interest to the researcher". To accomplish the objectives of the study a descriptive and evaluative research approach was considered appropriate for the study. Bhilai is a city in Durg district of Chhattisgarh state with a population of 753837 (2001 census). Bhilai is considered to a city of emigrants with residence who came from various corners of India and
settled here due to the job opportunities in Bhilai steel plant and due to this; rural area surrounding the city has undergone rapid development.

“It is mark of an educated mind to be able to entertain a thought without accepting it.”

Aristotle

1.9 BRIEF HISTORY OF STUDY AREA

Chhattisgarh unlike many other states is rich in many aspects. Be it natural or mineral resources the state is abounding, it is also well of education and its allied fields.

The policies of state government have helped in promoting educational institution in both rural and urban setups. The literacy rates in the state have seen advancements in the last many years. To promote education the state government has launched many schemes particular for the girl child. The government has very positive approach in promoting the education of the girl child and developing more academic, technical and educational institution in our state promoting very concept of education.

Bhilai is a town which was literally created from a small village and Bhilai Steel Plant has created an education system for children of employees which is somewhat diversified and flourished. There are more than 20 professional colleges and 10 academic colleges having UG and PG programme in Durg city and is listed among the fastest growing city in the world in terms of population. The city is located west of the capital Raipur, on the main Howrah Mumbai Rail line and N.H-6. Bhilai is famous for Bhilai Steel Plant which is the Asia’s largest of its kind in India. This city is also known as educational hub having more than 60% of adolescent from all parts of the country encouraged the investigator to do this study.
SELECTION OF RESPONDENTS

A descriptive cum diagnostics survey design was adopted for the study as it enables the investigator to evaluate the knowledge of adolescence in terms of knowledge regarding various issues on HIV/AIDS. There are two types of variables i.e. Independent and dependent variables which were identified in this study. The independent variable in this study is the various programmes and awareness campaigns run by government or NGO (Non governmental agencies). The dependent variable is the knowledge of adolescent girls. In the present study the Universe includes indolent girls between the age group of 17 to 21 years who are undergraduates studying in academic colleges of Bhilai Mahila Mahavidyalaya, Government College Uttai and College of Nursing, Bhilai. In total 300 adolescents girls were selected for present study which comprises of 100 respondents from each of the three colleges respectively through purposive random sampling.

TOOL & TECHNIQUE

Purposive random sampling technique was adopted. A self structured interview schedule for interview and participant observation schedule was prepared for the collection of data related to socio-demographic and knowledge of causes, mode of transmission, sign and symptoms, treatment and prevention of HIV/AIDS and interview guide for Master Trainer’s who are experts in this topic and working in projects of Global Fund For Aids Tuberculosis And Malaria. An extensive review of literature was done on various aspects of adolescent health and HIV/AIDS before constructing schedule. Opinions and suggestions were taken were taken from experts and investigators own exposure to the field
helped in developing the tool. Pilot study was also conducted in order to check the feasibility and improve and to improve the design of research.

1.10 ANALYSIS AND INTERPRETATION

The final data was analyzed using both descriptive and inferential statistics,

1. Organizing data in master sheet,

2. Frequency and percentage distribution of adolescent girls to describe the sample characteristics.
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