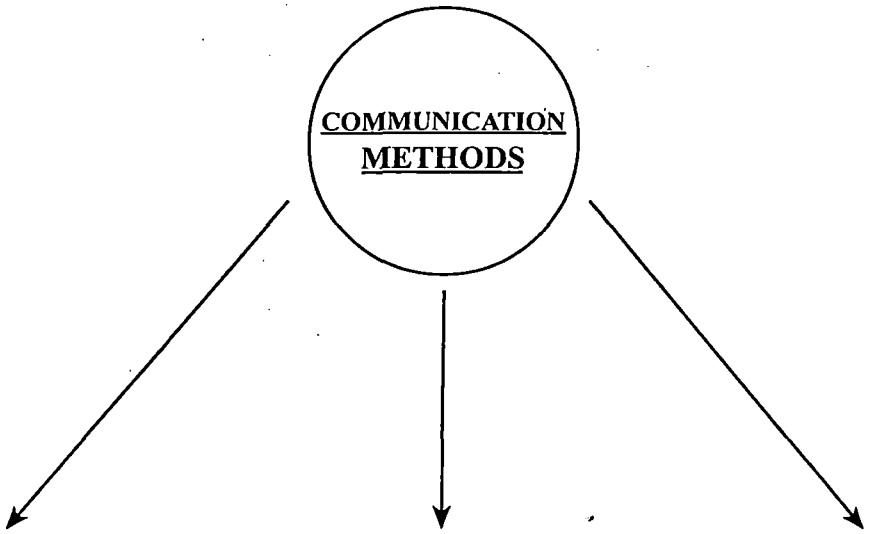
CHAPTER ONE

INTRODUCTION

In the simplest term, communication means exchange of information among people. Most educational activities involve communication of some kind or other. It implies the dissemination of information including ideas, knowledge and skills from certain sources to an audience. Communication can also be of ordinary nature involving conversation between two persons such as explaining a point, asking question or just chit chatting to pass the time. Communication is an essential part of health promotion activities. As far as health education and health promotion matters are concerned, communication has a special significance. It helps to make the people health conscious and enhances their awareness about various diseases, its prevention and treatment. When any health-related message reaches to a receiver, it gains attention. If the message is understood properly and the receiver accepts it, that automatically brings certain changes in his health behaviour.

Communication for health education and health promotion comes from the fact that the health is determined not by medical services and drugs alone but by the ordinary human actions and behaviour. If the behavioural aspect is not taken into account or it is neglected, any health education program may fail. Human actions are always influenced by cultural, social, economic and political factors which are equally important to determine health behaviour. The people can be mobilized and sensitized for health education by adopting successful communication methods. The methods involved are communication at individual and family level, communication at community and district level and communication at national level. Communication at individual and family level is one to one counselling, patient education and home visiting. Community and local level communication includes extension of community participation, group teaching, self help groups at

work places, primary health care, exhibitions, demonstrations. Communication at national level is carried out through mass media and other social mobilization methods.



Individual and Family Level	Community and District Level	National Level
One to one counselling, patient education, home visiting.	Extension Community participation, group teaching self-help groups, schools, work place, primary health care exhibitions, demonstrations.	Mass media, Social mobilization.

Health and its Cultural construction

Since the investigation is related to health of human beings, it is contextual to study the subject with exact knowledge of health and its socio cultural construction.

Health itself is a concept determined by culture and society and we may each have our own ideas about what it means to be healthy. Health is so important to basic functions of survival that it is not very surprising that most societies in the world have well established ideas about health.

Traditional ideas of health in Indian culture have a wider holistic view. Health can be considered as (a) a feeling of well being (b) the opportunity of achieving, fulfilling activities (c) a balance of

physical and mental states (d) achievements of ones potential or (e) the ability to cope with life's demands.

Health in physiological terms, is combination of mind, body and soul. The external and internal anatomical coordinated living functionalism is concern of health. When the body is without life, the question of health does not exist. The biomedical phenomena grew with the birth of human race and the fundamental structure remains unchanged. For evasion against, there are series if diseases which the health has to confront and exist without its permanent decay. Health is the physical and mental state of a body. The cultural construct of health relates to the logistic need of the health and if the logistical front is well managed, one remains fit and healthy. Food is an essential component and inevitable part of such logistic support the health may need. The system to maintain health, some one says that it needs non vegetarian food, there may be a contradictory thought in the southern part of India where Brahmins thought it is the vegetarian food that keep them healthy. The cultural construction of health constitutes different views how to keep one healthy without falling prey to diseases. As some one is born and he grows in a society, the cultural construction of health governs his mind. For example, there are some tribal communities in India who would like to drink country liquor as a matter of keeping good health, where as the rest of the people of the same state may declare it unhealthy, some may not like to drink at all.

Health and its cultural construction tells us how to maintain a good health. For maintenance of good health a rich cultural approach is essential. The culture of health in a vast country like India will also differ in its manifestation and standards.

While proceeding with the study of communication for health education of a select group of personnel of the army, it is essential to understand what exactly is the prescribed cultural construction of such population. The army population of Indian army, comprises of people from all the states and union territories of India. While they represent their respective states with physical participation in a national organization like the army, they grow a common cultural forum around which their daily life moves. They focus their respective state culture most distinctly at the initial

stage which gets culturally blended with each other passing through a common way of life. In Indian army or for that matter in any army of the world, one can not afford to be but healthy. It means not the physical fitness of health alone but it needs people with healthy mind also. Mental health means that one ought to think logically and accept challenges of different situations boldly with strong mental fitness as it may be required from time to time. The cultural construction of health for them means that one should be physically fit, and mentally robust without any diseases to be able to confront any unforeseen test of time. Culturally every army personnel are subjected to follow certain daily routine activities which maintain their physical fitness and mental strength simultaneously. Food is an important ingredient out of these which is cooked and distributed centrally under strict supervision and care. An exclusive standard of hygiene and sanitation in cook houses and dining halls is maintained by military units. The other part of this culture is to indulge them to undergo daily physical exercises including participation in various outdoor games and indoor activities which ensures physical fitness. Through a meticulous training methodology one develops adequate endurance and guts in him. Health culture also comprises of immunization programs which protect them against attacks of all infective diseases. In the context of discussion on communication for health education it is essential to describe epidemiology of diseases of infective status with all its preventive measures. Thus individually or as a group the organization feeds to its mental health as per required inputs. This is also a part of cultural construction of health of such people. Each individual state or community in the country has respective folk lore, folk dances, feasts and fares round the year which keep them entertained socially. Statutory health related messages can be communicated through such cultural activities, as a part of health education. It will be easy to adopt such health guide lines concerned with such community, if method of dissemination is simple and systematic. *(Khwaja Arif Hasan : 1967)*

So communication continues to be one of the most important tools in combating against HIV/ AIDS. When this has no cure, adopting timely prevention is the most viable option to control HIV/ AIDS. In India as the majority of the population is still unaffected, it is therefore imperative to continue intensive communication efforts which will not only raise awareness levels about AIDS/ HIV but also will bring out behavioural changes among the population.

Information, Education and Communication (IEC) is a process that informs, motivates and helps people to adopt and maintain healthy practices and life skills. It aims at empowering individuals and enabling them to make correct decisions about safe behaviour practices. IEC also attempts to create an environment, which is conducive to behavioural change which supports access to treatment and services for those already infected.

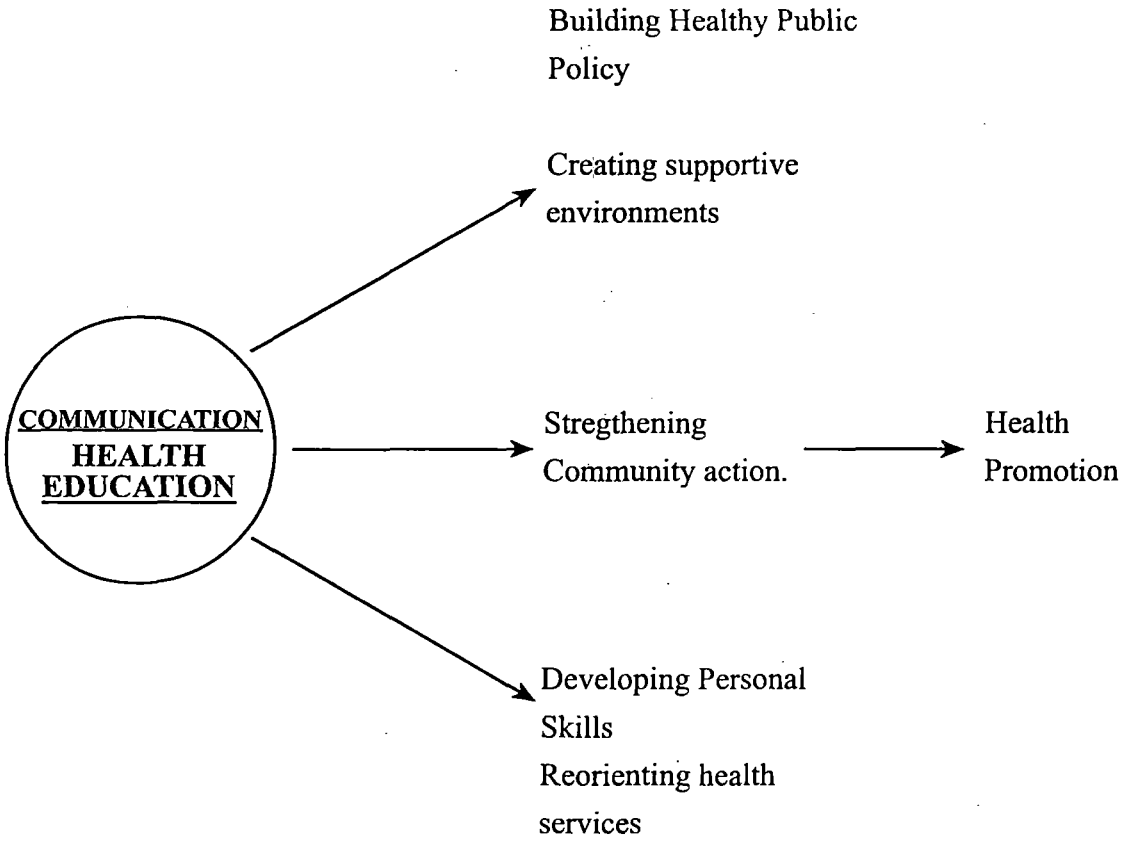
If communication has to be effective, it must be in an understandable language, keeping in mind the social norms, cultural beliefs and sensitivities of the community. Above all, communication programs must give cultural sanction for interaction, clarifying doubts, addressing misgivings on the issues of sex and sexuality, which are not discussed openly in a traditionally conservative society. For selecting the medium of communication the language in the case of army personnel should be in 'Hindustani' which is the common and official language in the Indian army.

In India, therefore development of appropriate and effective IEC strategies for HIV/AIDS is one of the biggest challenges not only in the health but also in the development sector. The organizations like NACPU, NACO are according highest priority to bring about changes in behaviour introducing sustained strategy to prevent further infection. For launching an effective IEC campaign, a full range of activities and approaches – from mass media campaigns for public education, to the use of targeted interventions to further help individuals to negotiate safer practices – are being used. IEC programs, have also been integrated to various components of the AIDS prevention program such as STD services, condom promotion and blood safety.

Features of effective health communication

Effective health communication builds on ideas, concepts and practices that people already have repeated and reinforced over time by using different methods. This type of communication is adaptable, and it uses existing channels of communication including folk media like songs, drama and story telling. It is entertaining and it attracts community's attention, uses clear and simple languages with local expressions and emphasizes short-term benefits of action. It provides

opportunities for dialogue and discussion to allow learner participation and feed back on understanding and implementation. It uses demonstrations to show the benefits of adopting practices *(Hubley : 1993).*



To know and understand the features of effective health communication, it is imperative to know, understand and perceive the epidemiology of the body and sexuality. This will enable the investigation to be fulfilling once the above are analyzed clearly in exact perspective of health. *Pat Caplan* in his book *"The Cultural Construction Of Sex and sexuality" (1986)* quotes *Song* to mention his sexual identity "I am what I am my own special creation". Body signifies an individual (male or female) an identity to facilitate social functioning. There is gross difference of this statement in true interpretation between the countries in the East and West. Body is otherwise a living biological construction which is the agent to be affected with any infection. It consists of sex and sexuality, the body itself, body fluids and many other elements.

Other than the biological factors it also contains human mind to analyze various aspects of life, such as to perceive correctly about the epidemiology of disease like AIDS/HIV in this context. The cultural perception of communication for health has direct connotation towards 'sex and sexuality' of the people under study. Unless there is distinct perception about sex and sexuality under the influence of culture of the society, health communication may remain incomplete. It is to be perceived by the society that health of an individual of any segment of the society has direct reflection on the social health of any country and sex can not be discarded out of its purview. 'sexuality' is as natural as human being is. It is instinctual and innate as said by *Shitow, Stannsell.*

Cultural Perception of Epidemiology, the Body, Sexuality

The cultural perception of AIDS/HIV infection is that it is a sexually transmitted disease, may be caused through blood, blood products and other body fluids. Within the age group of 15-44 the disease is highly infectious, though there are evidences of few cases among higher age group people also getting infected. So there is an essential need to analyze and know what is the sole cause of infection of this disease. It kills the body immune system which fails thereafter to fight the evil germs. When the capacity of the white blood cells vanish away from the human body it invites opportunistic diseases. As found out meaning of the term 'sex and sexuality' are known to few restricted, who are highly literate or who are specialized on this discipline of education. Such subject is never communicated to those who are less educated, less exposed and are with least of knowledge, and if they are educated it may help the society in building overall awareness about health. A large section of the society is not aware of these terms AIDS/HIV which is typically significant in the context of study of this disease. In Indian culture 'sex and sexuality' has not yet occupied the front seat as a subject of study. As *Herbert Spencer* said 'Civilization is depended on control of sexuality', but in Indian culture sexuality has been identified as aminality, a savage state of mind and behaviour. Human body has been considered as a medium constituted with flesh and blood to feel the existence of soul and spiritual part of life. The body is a materialistic formation, a structure which needs life in it to be active. The Soul exists metaphysically. When body is alive it has to face the pressure of sexual desire the instinctual demon which needs frequent outlet. The

material feeling of human body has deeper relations with metaphysical concepts. The population selected for this study are culturally Indians. The concerned disease of this study is directly related to sex. So for the members of this population having grown up under the influence of Indian culture which has different analysis of 'sex and sexuality' in comparison with other countries of the world, their cultural perception of these terms will also differ. But to prevent infection from AIDS/ HIV it is essential that the meaning of 'sex and sexuality' and its benefits and evils are known to all. If the cultural perception about this disease is grown among such population, the disease will not be caused easily thereafter. A clear analysis about the terms 'sex and sexuality' related to both genders are the sole areas to be focussed. In this context the significant facts are that the Indian army consists of people represented by personnel from all states and Union territories of India. It is a miniature replica drawn out of the society with their individual cultural profile and that of the country as a whole. The representation of number of personnel is proportionate to the demographic profile of each state. It is the only organization of the country where its population is a true representation of all its states and it has been studied that any cross section of service population of the Indian army is the true representation of its overall population. So a study on any such cross section will bring out a good deal of meaningful conclusion about the population of the country. Health communication is aimed at promotion of health of any particular community. Therefore, at the outset it is essential to know how health education is propagated for promotion of health culture.

Health Education

National conference on Preventive Medicine held in USA defines "Health Education" as a process that informs, motivates and helps people to adopt and maintain health practices and life style, advocates environmental changes as needed to facilitate this goal and conducts professional training and search to the same end *(Park and Park : 1989)*.

The following are the objectives of Health Education :

Informing People : Exposure to knowledge should melt away the barriers of ignorance, prejudice and misconception that people may have about health and the disease. In case of HIV and AIDS, this is of primary importance.

Motivating People : People must be motivated to change their habits and ways of life. Especially in case of AIDS and HIV, the emphasis on motivating people to make their own choice and decisions about health matters is important *(ibid)*. It is also important to motivate the army personnel to adopt correct practices, to maintain good health.

Guiding into action : It is important to guide those, who are not infected, teaching them about possible routes of infection and for those already infected, teaching proper preventive methods is essential *(ibid)*. There are enough evidences of substantial changes in sexual behaviour and reduction of infection such as gonorrhea among homosexual men, following particular health education. Profound changes in sex habits are taking place in western counties and people are becoming more cautious *(Johnson and Alder, 1987)* due to exact information and proper health Education.

In addition to the common people AIDS related health education requires to be targeted at the 'high risk' groups also such as professional sex workers, those attending clinics, blood donors and recipients, haemo philiacs, foreigners, soldiers and intravenous drug users. All mass media channels may be utilized for propagation of health education pertaining to AIDS/HIV infection and its prevention.

Role of Mass Media in Educating People about AIDS

Information and education through mass media occupies an important place in national AIDS prevention program. While mass media programs can educate the public about AIDS, it is not clear how far they are going to help changing 'high-risk' behaviour.

Many early AIDS related mass media programs began in a hurry. Therefore, those often skipped preliminary research, careful planning and evaluation. Thus in an evaluative study on reaction to media campaigns in particular, TV advertisements were found to be abstract and not meaningful because such advertisements neither specified the problem nor referred to actual practices. It is often suggested that to make the communication more meaningful, campaigns need to be more

direct in describing modes of HIV transmission and the ways of prevening infection from AIDS. The problem should be kept in the public eye by furnishing up to date figures of infected persons and its rate of increase/decrease. Campaigns could be personalized and practically shown to those infected with AIDS and with whom others would inter act *(Boyle et al : 1989)*. Moreover, in selecting communication channels, information is required about the preference of the target audience. That could be gathered directly from the audience with prior implementation of the health education program *(Guide to planning health promotion of AIDS prevention and control, 1989 : WHO : AIDS series 5)*.

Considering the enormous power of mass media to influence public attitude towards HIV/ AIDS, it is expected that program planners should work closely with all types of media personnel. This would help to formulate a transparent communication system, which shall neither be interfered nor abused at any stage. Otherwise, that may restrict mass media's aim of tackling such socially sensitive issues despite the fact that it is the better means to provide accurate and exact information about HIV/AIDS. Knowledge that is more specific about AIDS may help ensuring preventive practices and their possible adoption. The ongoing AIDS related educational programs have the following goals : (a) To provide essential information, (b) to encourage people to recognize and change the behaviour, which may spread infection, (c) to maintain healthy behaviour, (d) to quite groundless anxiety about transmission via casual contacts, (e) To prevent dissemination against those infected with HIV, (f) To mobilize public support for AIDS *(AIDS Population Reports Series : 1989)*.

However, there are certain difficulties in achieving the above mentioned goals. These are (a) Developing messages for diverse audience, (b) Developing messages acceptable in the face of political, social or religious opposition.

India is a highly diverse country in terms of educational, economic, linguistic, ethnic and social background of her population. Thus the people of India differ in terms of risk of AIDS infection at different levels. The diverse rates of AIDS cases as found in India is because there is a large variation

in the fields of literacy, sexual behaviour, geographical location and awareness about the diseases. The people living in the hills of Sikkim and Meghalaya differ in their sexual behaviour with the people of coastal regions like Kerala, Tamilnadu, Andhra Pradesh. The manifestation of sexual urge is also significantly different among various states of the country because of their varied eductional back ground, food habits and related social status. The number of AIDS cases in different states will substantiate this statement.

The next factor which significantly influence the varied rates of infection is the cultural construction of 'sex and sexuality' in various states. The coastal states are historically more exposed to visits of foreigners. As such there is an influence of inflow of foreign money, directly affecting common peoples life. The scope of adopting professional sex work by marginalized group of people is more – which reflects its localized sex culture. The ethical bindings encouraging people to practise abstinence, are almost non existent in such states. So there is a distinct difference of social culture among coastal states and states in plains and in hills. When the difference is viewed with overall comparison of all states in India, it is very conclusive fact. In Indian army, though there is a common culture among its men, the manifestation of sexual culture between a person from coastal area, or from any other parts will also be significantly different. As such the rate of contraction of veneral diseases (VD) by army personnel are statistically dissimilar from state to state, though a standard health related messages are disseminated to them. AIDS/HIV being a disease related to blood, semen and body fluids, is considered to be one of the Sexually Transmitted Disease (STD).

To shorten a wide gap of statistical variation in number of AIDS infection among states, a comprehensive health education program is required to be strategized to achieve better result of growing awareness equally among such varied population of geographical regions. Thus in the adopted campaign strategy any message on AIDS,needs to be attractive to many, understood by all, and personally relevant and persuasive to different categories of people of all such states in the country.

Government sponsored information programs are highly pragmatic and target oriented for a larger audience. However, in some areas, fears of objections have prevented holding any post

broadcasting/telecasting, open discussion on sexual practices, use of explicit language and particularly 'condom promotion'.

Reaching most of the public with an educational program campaign especially meant for AIDS, may appear somewhat more expensive than the costs involved in other health campaigns. Even if TV is not used, the cost of printing large quantities of literature and developing radio programs often may go beyond the resources available for promotion of public health. However, it is strongly believed that mass media communication programs can disseminate AIDS related information very effectively. For instance, in Mexico, many people have confessed that their rate of being infected from AIDS was quite high before introduction of national Mass Media programs *(Bond : 1989)*. It is also successful and productive in India.

Communication strategy to make the people aware about AIDS and HIV infection

Mass media and national campaign can motivate people to seek more information from other sources. In some developed countries mass media campaigns have publicized hot line telephone numbers and calls to these lines have doubled or tripled after introduction of such campaigns. In countries that have had national campaigns, the change in 'high-risk' behaviour has varied among different class of population. In Brazil, for example, 7 to 20 percent of surveyed adults reported some change in sexual behaviour, like choosing fewer sex partners, avoiding sex workers, increasing condom use or abstinence *(ibid)*. Increase in comdom sales and decrease in rates of sexually transmitted diseases suggest a follow up of behavioural change in such countries.

To make the people aware about AIDS and HIV, particularly in the communication strategy, the pre-testing of educational material is crucially important. That involves getting reactions from members of intended audience in the natural setting against the proposed messages and materials. For instance, when in Africa health education campaign was evaluated, it was found that most people believed that AIDS is a disease of the affluent classes and those who were always on the

move. So it evidences that such pre testing is essential to remove the inaccurate impression of any message on health education.

With reference to TV advertisements on AIDS, it is observed that messages on AIDS, though attract attention, it also arouse extreme fear and thus can not change 'high-risk' behaviour easily. Very controversial message often arouses so much anxiety that the real meaning of such message gets lost. For instance, in Australia and in UK, advertisements evoked fear as a fall out of increased requests for HIV testing among heterosexuals. Requests for required information were actually declined among homosexuals who were much more likely to be infected *(AIDS Population : 1986).* It shows that the mass media program is to be pre tested before administration and to be executed as per requirement of particular population and should not be applied as a uniform campaign.

Empirical data on knowledge about AIDS of various countries show that compared to men, women know less about the disease. They learn about it quite late and hear less about AIDS from mass media due to their limited exposure to information media. According to a survey in Uganda, women often hear about AIDS from other people, whereas men get information that is more direct, from radio and newspapers *(Forster and Furley : 1989).* Women in Indian context also represent low percentage of media exposure like many other developing countries in the world. More over the rate of literacy between men and women is dissimilar in each state and among states there is again a gross variation. The AIDS/HIV infection related education strategy is required to be implemented without any gender discrimination which the investigator intends to bring out in his study. Since the women population is more illiterate, the health education program should be designed in a way that the messages conveyed about such disease are understood easily by them. The education program should be based on certain fundamental clarification of the society to make the patriarchal society realize the AIDS and its metaphors.

Statistically observed that domination of male population in any society is prominent and significantly large where the rate of female literacy is low. Conversely where women are literate, the male domination on any aspect and its degree can be argued logically and vehemently. The

disease characteristies dictate that, adoption of 'safer sex' ensure better prevention and in that the 'condom promotion' appears to be most important. In soliciting sexual intercourse male folk can easily utilize the benefits of 'condom' promotion thereby helping the partner with adequate prevention against any STD. Hence if the same is not respected with a view of mutual benefit the infection easily can grow. Such casual act on the part of male folk in any country can turn to be disastrous if the sense of literacy does not prevail at such situation. The narrowing down of gap of literacy rate among male and female will reduce the variation of social identity of male and female in any country of the world.

As presented by Dr S Tlou, such variation has been all over the world and not in any particular country like Botswana alone. It is because of gender inequalities which make it difficult for women to negotiate with their male partners to ensure safer sex practices. The cultural construction of masculinity is the prime sociological factor responsible to discourage women community to be assertive and forthcoming on the issue of 'condom' use. Women even today have often no social permission to discuss sex with her partner.

AIDS Its Causes and Consequences : A Global Concern

Comparing the historical back ground of origin of major diseases, AIDS is relatively a new phenomenon and there is a lot to know about it. One needs to acquire some basic idea about HIV, the virus that causes AIDS, how it spreads and affects the human body. Also we have to keep ourselves prepared to challenge prejudices and offer assurance against unwarranted fears and anxieties from AIDS considering it as the end stage of HIV infection. It is often characterized as life threatening infection that occurs in people with otherwise unexplained defects in immunity *(Park and Park : 1989).* The abbreviated term AIDS stands for : Acquired (not genetically inherited but one gets it from somebody) Immune (weakness or inadequacy of body's main defence mechanism, the immune system) Deficiency syndrome (not just one disease or symptom but presents as a group of diseases, symptoms). As *Susan Sontag (1990)* writes that AIDS is not the name of illness at all. It is the name of medical condition, whose consequences are a spectrum of illness. AIDS might be caused by a retrovirus, was suggested by the selective loss of CD4 helper T4 lymphocytes in

patients with disease, implicating an agent with T4 lymphocytes cell tropism reminiscent of infection with HTLV1 and HTLV2. As per evidence available through research, AIDS originated in Africa. Other human and Simian retroviruses were known to be endemic. Based on the circumstantial evidences, teams lead by *Luc Montagnier* at the Pasteur Institute in Paris and by *Gallo* at the National Institute of Health, undertook studies to isolate and identify retrovirus from patients with AIDS.

AIDS spreads basically by having 'unprotected' sex with an infected partner. The virus of AIDS i.e. HIV can be detected in all body fluids of an infected person, but the concentration of the existence of the virus has been found to be in blood, semen and vaginal fluids. It can also be traced in all body tissues and organs which include brain, spinal cord and cerebrospinal fluid. It can be found in tears, saliva and breast milk of an infected person although the last three are not considered significant routes of infection as has been mentioned in this thesis in subsequent pages also.

While analyzing the characteristics of the HIV, it appears that HIV is one of the delicate virus, which can be destroyed easily by heat or by drying up in sun light. The spread of the disease is possible only when the dose is sizeably large. In addition to this, there are few points which need to be satisfied to say someone is infected with this virus. These are (a) primarily the infector has to be HIV positive, so the HIV will be present in his body fluids i.e. semen, vaginal fluids, blood and blood products (b) there will be no infection in case the virus has been exposed out of the body and the virus is dead (c) to enter a body these virus need an easy passage i.e. through cuts, bruises and skin tissue ruptures (d) for an effective infection a large number of virus need to be transferred.

As stated earlier AIDS is caused through unprotected sexual intercourse with an infected partner. At the time of sexual intercourse if 'condom' is not used it is called 'unprotected sex'. Such intercourse can be between male and female or male to another male between the infector and the infected. In case of an anal intercourse the unprotected penis of the one can either transmit or receive the virus depending upon who is the infector in such case. Artificial insemination where infected semen from a man is inserted into a female could also be a route of infection.

A single intercourse with an infected partner can be enough cause to infect HIV. However

studies reflect that one heterosexual (between male and female) intercourse has one in the thousand chance to infect somebody.

The chance of transmission of HIV during the sexual intercourse varies due to various reasons. Though the rate of infection of any single sexual intercourse is low, the unprotected such intercourse if repeated more than once, may compound the problem and the transmission of infection will take place.

As discussed so far, there are few other factors which act as a catalyst towards transmission of the infection during sexual intercourse. In case any of the partners has sore on the penis or vaginal wall the infection is speedier, because the virus can move uninterrupted in such case and infection is faster. In other situation when the infected partner discharges pus or exudate from such sores these are rich with white blood cells. It contains heavy dose of HIV and can infect the partner most effectively.

During the menstrual period, HIV positive women will discharge HIV with blood during her periods and any sexual intercourse during menstrual course of such female, transmission of the infection will again be faster. Even the sanitary pads or 'tampons' of such female will be largely infected with the virus.

Studies suggest that the anal sex where a male inserts penis into the anus of another male or female, has been found to be of 'high risk' category. The biological reason is that the inner wall of the anus has typically different tissues and muscles than the inner tissues of vaginal wall. The former is more delicate than the later and as such are susceptive to damage and rupture during the sexual act. Once the injury or tearing off such tissues takes place the passage of virus becomes easier and speedier causing infection.

AIDS and Sexuality : Indian Cultural Construction

Barring few exceptions 'homosexuality' is not widely in practice in Indian society as in other countries of the world. As discussed by *Pat Caplan (1986)* in his book *"the Cultural Construction*

of sexuality "that homosexuality and lesbianism are very commonly known subjects in those countries and teenagers get familiar to this at the age of 12 years or even earlier but it is not the same in India. It is also stated by him that in Mombasa a boy of 5 years through his behavioural symptoms can be predicted whether he would be subsequently a homosexual or not. During night picnics in these countries act of homosexuality is found to be a common affair among the young generation.

In India it is a different story even today when the cable TV net work connections has culturally globalized the countries, the words 'homosexuality' and 'lesbianism' are yet far from the minds of very many people, specially among the young ones. The Indian society though is vast and full of diversity, yet there is a unique cultural blending among them which governs the minds of people as a remote censor and control their social activities. Sexuality is a subject of concern of all human beings no doubt, but among common people of India, it has been a common word useful to them. They are not concerned how much this word occupy the social dimension of their life influencing each individual of the society. Conversely the human values and ethics have been influencing the society more quantitatively to counter the evil side of the society. It generates some kind of hesitation, shyness and unwritten social restrictions to enforce abstinence from sexual act where it is considered to be unwarranted.

Such moral binding have been partly restricting them from learning 'sex and sexuality' as a subject of physical science practised every now and then. As a result, in India there has been no transparency of communication about 'sex and sexuality' which concerns every human being in the society. The hesitation to know about sex related issues have created a mental block in some group and deprived them to know more about it. Such obscurity has direct reflection towards awareness about AIDS/HIV infection.

When the gender inequality is in dominance, despite education programs introduced in both developed and developing countries of the world, it is rather advisable to evolve a method of male education program to abstain from discriminatory behaviour in actual practice of life facing realities. The realities in this context is regarding a pandemic disease which is sexually transmitted with faster speed. The disease once caused is incurable and as such prevention from its infection is a

positive step of escape from this demon. When the realities are known, it is imperative to out reach implementing 'condom' culture without inhibition and gender disparity. It is not physical strength of male folk which should dominate female helplessness, rather it should be the male physical strength and ruggedness that should help in driving away the evils of disparity in the context of sex. For male generation use of 'condom' should be voluntary before any sexual liaision.

In America the organization "Women Helping to Empower and Enhance Lives" (WHEEL) is aimed at learning more about the ways to reach out and negotiate the cultural construction of masculinity (*W.H.O. Global Program on AIDS : 1995).*

Discovery of the Disease

It was symptom of a rare tumour, Kaposis Sarcoma of two young men who visited doctors in New York City in 1979. In other US cities similar cases were also reported though partly different in nature but of rare kind of disease Pneumocytes carinii pneumonia. The number of cases continued to increase Cases of pheumocytes carinii pneumonia were noticed by Dr. Cotlieb and Harper - UCLA Medical Centre Los Angeles USA. These cases were notified to the Centre of Diseases Control (CDC) at Atlanta and it produced its first report in June 1981. Characteristically these patients were young homosexuals. Their disease indicated a drastically weakened immune system and as they had previously enjoyed very good health, the occurrence of these cases was considered unusual. The medical scientists were puzzled for some times and took time to realize that these scattered mysteries were a part of a trend which was soon to devastate the entire world *(W.H.O. AIDS, Images of the Epidemic : 1994).*

Scientists then tried to find out common factors among the life styles of these homosexuals. For a short while, this syndrome was called GRID (Gay Related Immune Deficiency) in the United States. One common factor found was use of inhalant poppers stimulant drugs based on amyl nitrate. Scientists wondered whether this was the cause of the weakening immune system (ibid).

The second theory put forward was that there might be over burdening of the immune system to the point of collapse, as AIDS was seen more commonly in men who had many sexual partners, sexually transmitted diseases and intestinal infections. When Kaposis sarcoma and pneumocystis carinii pneumonia started occurring in intravenous drug users, the above hypothesis was further strengthened as it was argued that hepatitis B and other infections caused by needle sharing might similarly overload the immune system. When features of the new syndrome started to occur in haemophiliacs, the evidence then pointed out an infectious agent carried in the blood *(ibid)*.

Identification of the Virus

The identification of HIV1 (Human Immune deficiency virus) as the causative agent of AIDS came about in May, 1983. It was the discovery by Temin and Baltimore independently in 1970 of the Retroviral Enzyme Reverse Transcriptase which laid the first corner stone for discovery of AIDS virus *(ibid)*.

The first human retrovirus human T cells leukemia virus Type 1 (HTLV-1) the causative agent of leukemia and tropical spastic paraparesis was discovered by Gallo in 1979. In 1982, Gallo and coworkers reported the discovery of HTLV2 which was genetically related to HTLV1 but whose clinical significance is currently unknown.

Early suggestions that AIDS might be caused by an infectious agent was supported by the fact that (1) The AIDS epidemic was new in 1981 (2) the disease first appeared in a limited geographic region and spread to further areas (3) It occurred among socially, economically and geographically desperate groups that shared a propensity for communicable diseases (4) Clusters of diseases were identified in individuals linked by common sexual contacts and by receipt of blood products (5) Children of affected mothers developed AIDS despite having no other risk factor for infection (6) Filtered factor viii coagulant transfused to haemophiliacs resulted in disease transmission *(ibid)*.

The AIDS might be caused by a retrovirus which was suggested by the selective loss of CD4

helper T lymphocytes in patients with the disease, implicating with an agent T-4 lymphocyte cell tropism reminiscent of infection with HTLV1 and HTLV2. AIDS originated in Africa where other human and simian retroviruses were known to be endemic. A retrovirus acts in feline leukemia virus, was known to cause AIDS like illness as well as Leukemia. Based on these circumstantial evidences, teams led by Luc Montagnier at the Pasteur Institute in Paris and by Gallo at the National Institute of Health, undertook studies to isolate and identify retrovirus from patients with AIDS and AIDS condition. In 1983-1984 a report of HIV1 was given which was then called HTLV2 or Lymphadenopathy associated virus. HIV1 was shown to be present in patients with AIDS and also be the cause of destruction of T lymphocytes in culture *(ibid)*.

Theories of Origin

Many theories have been put forward about the origin of AIDS. Two hypothesis are postulated to explain the origin of the AIDS virus. The most favoured is based on cross species transmission from non human primates. There is supportive evidence that Simian immune deficiency virus/(es) or SIV, could get the humans. Incidence of a lab worker poking his finger with a needle while working with the Simian immune deficiency virus and who developed anti bodies to the virus, has been recorded. Evidence of isolation from a Liberian agricultural worker of an HIV2 virus, which is much more closely related to SIV than to HIV2 strains, has been recorded. Simian viruses have been obtained from captive monkeys used for lab experiments. In India the isolation from a rhesus monkey (Macca mulatta) has been carried out which is called SIV(MAC). Later however, no antibodies were found in wild caught monkeys and it was possible that these animals could have got infected from other monkeys in the cage during some fight or accident leading to bleeding. It was postulated that there was also a possible transmission of the virus from the Sooty Managabeys monkey since these species were found to be infected in the jungles *(Pavri K : 1994)*.

African Green Monkeys (AGM) captured in Kenya and Ethiopia have also yielded a retrovirus termed as SIV. These monkeys showed no illness themselves but carried the virus. Following this,

the theory of likely origin of HIV/AIDS because of the use of polio vaccine which had been derived from the primary kidney cultures of AGM, has also been put forth. The hypothesis was plausible, but what went against this was if poliovirus vaccine was contaminated with some SIV retro virus, then how it is that hundreds of millions of people (mostly children) vaccinated through out the world have remained free from AIDS? Another suggestion put forward was about the possible use of poliovirus vaccine in much larger doses for protection against recurrent herpes virus infection commonly affecting gay males. This was suggested by a doctor in USA in 1974. This theory has been refuted later *(ibid).*

Pavri K states that she considers Sooty managabeys SIV (SM) to be potential ancestral candidate for HIV2. The Sooty managabeys live in the coastal forest belt of West Africa; the area where the HIV2 is also prevalent. The virus SIV (SM) seems to infect the animals in nature although both the virus and the host seem to live in some harmony. Wild Mandrills from Gabon were also found to be infected with the virus called SIV (MND). From the phylogenic tree, some workers have considered this virus as a possible ancestor of SIV and HIV2 *(ibid).*

The monkey origin of HIV has not yet been clearly established. The closest appears to be a virus isolated from a Chimpanzee called SIV (CPZ). Two wild born chimpanzees from Gabon in Central Africa, very near Cameroon were found to be positive for antibodies to HIV1. These virus were isolated from one of them. Whether this virus was the ancestor of HIV1, or they evolved separately, but in parallel without crossing species barrier is still questionable. In relation to this came the theory, that the virus and thus AIDS, might have entered the human population via direct inoculation of blood containing a malaria parasite from infected chimpanzees also (some sooty managabeys) into human prisoner volunteers. It was postulated that if one of these animals harboured a retrovirus similar to HIV1 (chimp SIV) or HIV2 (Sooty managabeys SIV), it might be the seeding of what we know at present day HIV causing AIDS. However, it was refuted by the fact that such blood was used only in attempting mosquito transmission studies and not for human inoculation *(ibid).*

In conclusion, the theories of cross species transmission from non human primates could be rare phenomenon occurring at one point of time (ibid). The other possibility of the origin is that it could be considered that the virus might have pre existent in humans but in extremely low prevalence or low virulence or both and if it was causing AIDS, the cases must have occurred sporadically *(ibid)*.

A combination of these two theories put forward by Pavri K who considers that all studies have been caried out on HIV strains and the Simian strains which are complete viruses, indicating that the compliment of the different genes are available. Of these, the various isolates may show varying divergence in one or more of these genes.

Myres and Associates as quoted by *Pavri K (1994)* have formulated a genealogical tree based on the core (gag) and envelop (env) genes to show close relatives. Five groups were made of HIV1. HIV isolates from Gabon (an equatorial country on the Atlantic coast of Africa) fitted into all the five groups and thus suggested that Gabon could be considered as the epicentre or the source of AIDS is questionable as it has one of the lowest AIDS infection rates among African nations bordered by Guinea and Cameroon whose infection rates are low *(ibid)*.

However it was found that highly divergent isolates of HIV1 and HIV2 have been recorded mainly from low prevalence countries in West and Central Africa. Considering Gabon to be in the Central Africa region, and slightly to the north being Cameroon *(ibid)* then the isolation pattern of the highly divergent, and less infectious strains of HIV2 and HIV1 can be considered *(ibid)*. Hence in relation to this theory of origin from Gabon could be considered *(ibid)*.

In Ghana in West Africa, yet another HIV2 called HIV2 ALT (for old) stood out separetely. Pavri K states that Helga Rubsamen, Waighmannand Ursula Dietrich from Frank Furt, believe that the disease and the virus are an old invention of nature and the crossing over to the pandemic state

may be due to an association of social facts, technico medical upheaval and viral variations. They discussed this in relation to HIV2 ALT isolated by them *(ibid)*.

In Central Africa where HIV1 seems to be prevalent divergent though complete human viruses resembling HIV1 are those reported from Cameroon. HIV1 ANT 70 is found to be closer to the Chimpanzee virus has some overlap with SIV from Gabon Mandrill. Antigenic evidence of the presence of ANT 70 like virus has been recorded not only in Cameroon, but also in Gabon. Isolation of another Cameroonian virus has also occurred which is so very divergent that antibodies to the virus (called HIV1 and type 0) can be missed by routinely used serological tests.

There is antigenic evidence of the presence of at least one aberrant strain in Gabon i.e. aberrant but complete HIV1 like virus(es), have been circulating in these countries without causing much of AIDS. In Gabon, evidence is provided of a highly defective HIV1 strain isolated from healthy Gabonese pregnant women and several other typical serological patterns were observed in Western Blot tests. Antibodies only to the P25-P25 gag protein were detected. This type of result is generally disregarded as negative or considered intermediate. Because they were not uncommon in Gabon, the aim was to isolate incomplete type of HIV1. The possibility that these virus like particles could be protecting persons harbouring them-can not be ruled out. Such incomplete defective virus(es) could be one step behind the evolution to the aberrant, though complete HIV types. Possibility of such defective particle circulating in Cameroon also can not be ruled out. In the case of HIV2, a recombitant might emerge with a virus such as the one from Sooty mangabeys or wild mandrills.

Reverse Transcriptase the enzyme found in HIV virus progenitor has been found in the genetic material was found in the mitochondria which is believed to have evolved from a bacteria some billion years ago. Gradually, these elements could have developed into retro elements or retrotransposons, indigenous elements which remain totally hidden in cells, which could be passed to the off spring hereditary. Humans are known to harbour such silent viruses that could remain dormant over centuries. It is possible that humans carrying these retro elements living at different

places, encounter exogenous virus(es) who acquire some required generic material forming a recombinant of a virus which envelop and the full compliment of regulatory genes emerges. Hence the possible emergence of HIV1 *(ibid)*.

If sera collected in the year 1950s and stored at low temperature showed positively for anti bodies to AIDS, virus theory of African origin of AIDS could have to be considered. Studies by Kreiss, et. al, in sera collected in Nairobi, showed antibodies only in sera after 1980 i.e. 2 years before earliest recorded case and two years being the incubation period of AIDS agreeing with the data on clinical cases. Other studies showed positively to antibodies in earlier collected sera – coming to the conclusion that over 30 years ago, nearly the entire African population was affected and yet the disease went unnoticed. Other point noticed was that older the sera, greater the apparent prevalence of infection. It is postulated that under conditions of storage, antigen antibody reaction may be affected. Also improperly stored serum samples can lose their specificity over the years. Also mere heating of the serum samples show false positive tests for the presence of antibodies.

The biological warfare theory states that about six months before the first case of AIDS occurred, the virus was ready and tested on some criminals. Not knowing that the virus was slow virus, when nothing happened after a few weeks the subjects were released. The link between prison life, homosexuality and drug usage is more than obvious : hence the initial spread of the disease *(Mansukhani M, 1990)*.

Host factors

Among human population, the 20-40 years age group is the most affected section. However, in countries where heterosexual spread is common, the pediatric age group also get affected. Men aged 18-34 years and women aged 16-24 years are at highest risk of contracting HIV (*Geddes AM. et al : 1991)*. HIV infection has been studied to follow a particular pattern. It is distinct and defined.

Pattern I

Depending on the mode of transmission the pattern of infection has been found differing between

countries. As found in pattern I that in industrialized countries like USA and western Europe the infection has been mainly among homosexual and bisexual males and urban intravenous drug users. The ratio of infection as detected is 10-15 : 1 between male and female. In such pattern the pediatric cases are very negligible. However, with gradually increasing heterosexual transmission (3%-7% between 1985-1991), HIV positivity among females and pediatric AIDS has been increasing *(Sahni A, Xira Sagar S : 1993).*

Pattern II

This is predominant in sub Saharan African countries. HIV transmission has been predominantly effective through heterosexual route, where the infection has been the same between male to female. It is mentionable that in these countries homosexual, or intravenous drug use infection has been the least.

Pattern III

As per studies the third pattern of infection has been found prevalent among Asian, East European, North African and Middle East country population. In these countries the AIDS situation has been found almost inactive. The transmission of infection in these countries started with heterosexual contact, contaminated and untested blood during transfusion and unsterilized use for injection. The transmission through IDU has been rampant. Yet both, the level of awareness and number of cases of infection, have been found to be on the lower side of the index. These countries include India also. The epidemic in these countries maintain a ratio of one to one between male to female.

Sex

'Sex', which ought to be an incident of life, in the obsession of the well fed world *(Rebecca west, the clavion : November 29, 1912),* applies to both categories i.e. male and female. The social construction of sex has discriminated as gender. The word sex is a biological term which is

natural phenomenon where as gender is a cultural construct.

The word though is small, but the society revolves around this biological incident. Significantly this study relates to a disease which is mostly transmitted through Sexual Communication. As such the cultural construction of the disease refers back to sex. Though it has been widely defined by many researches, it is a basic anatomical, psysiological and sociological characteristics which distinguishes male and female as the basic determinant.

In this study the term 'sex' has been discussed keeping in view the infection ratio of the disease in various countries.

For example in North America, Europe and Australia, 70% of the cases are among homosexuals or bisexuals *(Park & Park)*. HIV transmission through sex between men to men, accounts for nine tenths of cumulative AIDS cases on the West Coast of the USA and two fifths of East Coast. In Australia, the vast majority of AIDS case have been due to homosexual transmission. In countries of Southern Europe, AIDS affects mainly drug injectors. There is a rising tide of infections transmitted through unprotected intercourse between men and women with incidence in western Europe of over all proportion of AIDS cases due to heterosexual transmission are unprotected heterosexual intercourse and needle sharing *(W.H.O., AIDS : Images of the Epidemic, Geneva : 1994)*. In Africa the sex ratio, where infected women out number men is 6 is to 5, *(ibid)* certain sex practices increase the risk of infection more than others e.g. multiple sexual partners, anal inter course and male 'homosexuality'.

Women are likely to be infected more from AIDS than men, though precise sex specific risk is yet to be ascertained. Seropositivity rates among women who have attended an antenatal clinic were found high in a particular study *(Harris et al, 1983 : 1181-4)*. As per a study in Zambia, HIV seroprevalence was higher in women who had high fertility, were young, black or Hispanic and from a low-income group *(Anderson, 1988 : S63-S67)*.

How AIDS is Treated

When AIDS first surfaced in the united states, there were no medicines to combat the underlying immune deficiency and few treatments existed for opportunistic diseases that brought out results. Over last 10 yeats however, researchers have developed drugs to fight both HIV its associated infections and cancers.

The US Food and Drug Administration (FDA) has approved number of drugs for treating HIV infection. The first group of drugs used to treat HIV infection called nucleoside Reverse Transcriptase (RT) inhibitors, interrupts an early stage of the virus making copies of itself. Included in this class of drug (called nucleoside analogs) are AZT (also known as Zidovudine or ZDV), ddc (Zalcitabine), ddI (didwe oxyinosine), d4T (stravudine) and 3TC (lambivudine). These drugs may show the spread of HIV in the body and delay the onset of opportunistic infections.

Health care providers can prescribe non nucleoside transcriptase inhibitors (NNRTIS), such as delvaridine (Rescriptor), nivirapine (viramune) and efravirenz (sustiva), in combination with other anti retroviral drugs.

More recently, FDA has approved a second class of drugs for treating HIV infection. These drugs called Protease Inhibitors, interrupt virus replication at a later step in its life cycle. They include (a) norvir (b) in virase (c) Crixi van (d) agenerax (e) viracept (f) kaletra.

Because HIV can become resistant to any of the drugs, health care providers must use a combination treatment to effectively suppress the virus.

Currently applicable antiretroviral drugs do not cure people of HIV infection on AIDS and these all have side effects that can be severe. Some of the nucleoside RT inhibitor may cause a depletion of red or white blood cells, especially when taken in the later stages of the disease. Some may also cause an inflammation of the pancreas and painful nerve damage. There have been reports or complications and other severe reactions including death to some anti retroviral nucleoside analogs when used alone or in combination. Therefore health care experts recommended that the people on

antiretroviral therapy be routinely seen and followed by their providers.

The most common side effects associated with protease inhibitors include nausea, diarrhoea, and other gastrointestinal symptoms. In addition, protease inhibitors can interact with other drugs resulting in serious side effects.

Researchers have credited highly active anti retroviral therapy or HAART, as being a major factor in reducing the number of deaths from AIDS in the country by 47 percent in 1997. HAART is a treatment regimen that uses a combination of reverse transcriptase inhibitors and protease inhibitors to treat patients. Patients who are newly infected with HIV as well as AIDS patients can take the combination.

While HAART is not a cure for AIDS, it has greatly improved the health of many people with AIDS and it reduces the amount of virus circulating in the blood to nearly undetectable levels. Researchers have shown that HAART can not eradicate HIV entirely from the body. HIV remains present, lurking in the hiding places such as lymph nodes, the brain, testes and retina of the eye of even the patients who have been treated.

A number of drugs are available to help treat opportunistic infections to which people with HIV are especially prone. These drugs include (a) foscarnet and jaciclovir to treat cyclomegalovirus eye infections (B) fluconzole to treat yeast and other fungal infections (c) trimethoprim/ sulfamenthoxazole (TMT/SMX) or pentamidine to treat pneumocytes carinii pneumonia (PCP).

In addition to antiretroviral therapy, health care providers treat adults with HIV, whose CD4+ T cells count drop below 200, to prevent the occurrence of PCP, which is one of the most common and opportunistic infections associated with HIV. They give to children PCP preventive therapy when CD4+ T cells count drop to levels considered below normal for their age group, regardless of their CD4+ T cell count. HIV infected children and adults who have survived an episode of PCP, take drugs for the rest of their lives to prevent a recurrence of pneumonia.

HIV infected individuals who develop Kaposis Sarcoma or other cancers are treated with radiation, chemotherapy or injections of alpha interferon, a genetically engineered naturally occurring protein.

The above medical knowledge if imparted to most of the members of the society it will act as a model. It is understood through theory of averages that it may not be possible for all to know about what is AIDS, how does it get transmitted and how fast you treat the same. The rate of growth of new cases will fall and there will be simultaneous action by many others to transmit the knowledge to others than the transmission of this virus.

The study shows that there are some apparent inconsistencies among the interviewees regarding knowledge of the disease. Why some of them are misinformed about some aspects and accurate on others is an obvious query. The analysis of certain factors related to the cause of such observed inconsidtency is presented.

Unlike countries in the west and central parts of the globe, there is a significant difference of cultural construction of Indian society and others. These differences directly reflect on many sociological aspects of the Indian people out of which some will be pertinent in this context.

For example 'sex and sexuality' are not a very commonly known term though sexual act and intercourse may be the known facts of life to all. The cultural construction of this society is such that these terms are not commonly applied by people and such subjects are discussed very discreetly and confidentially among them. It is perceived that who reads, discusses or exhibits any knowledge about 'sex' can not be defined as good people. Specially discussion about 'sex' by any one of young age is considered to be a sign of perversion. Though there are lessons taught in schools as a part of Life Science now a days where 'sex' is taught adequately, yet people are not mentally prepared to accept the words 'sex and sexuality' to be included as part of social knowledge. The mindset to accept it, is yet to grow in the society.

Due to such cultural construction about 'sex and sexuality' in Indian society, knowledge about

sex is inadequate among male and female at prime age who are not fully aware about the positive and negative dimensions about 'sex and sexuality'. There are serious diseases which are sexually transmitted and which can be severe if timely preventive measures are not taken and appropriate treatment is not administered. AIDS is one such disease which is also sexually transmitted and infected through blood, blood products or transplantation of organs of human body. Therefore there needs to be adequate knowledge about this disease which will further grow appropriate awareness among all about symptoms, its causes and consequences to enable them to adopt adequate preventive measures.

'Sex' is a reality of life and reality can never be suppressed. Since sexually transmitted diseases are predominant in the society, it is mandatory for all to know what are the causes, how such diseases are communicated, what are its symptoms, and how to prevent against its infections. For gaining such information it is necessary to introduce a well planned communication strategy adequate enough to educate an individual, a group or a community. There are various methods of such communication which can be included in the strategy and be adopted.

It is experienced that among those who are highly educated in the society have no social inhibitions and are adequately knowledgeable about sex and sexuality 'from sociological points of view. As their perceptions are clear on this as subject the practices are balanced and appropriate so far as this disease aspect is concerned.

AIDS Situation in the World

A number of studies have been carried out all over the world to estimate statistically the situation of AIDS infected population in each country. Despite the fact that there may be many unreported cases in each country, the available statistics on AIDS however bring out the status of the disease largely in the world scenario. The Given table is the true reproduction of World Health Organization's countrywide data on AIDS covered up to Aug 1998.

Table : 1 **AIDS CASES IN THE WORLD**

Continents	Countries	AIDS Cases	Total Cases in a Continent
Europe	Austria	197,374	197,374
	France	46,032	
	Germany	16,413	
	UK	14,726	
America	Canada	15,101	839,189
	Dominican Republic	3,940	
	Haiti	4,967	
	Honduras	6,406	
	Mexico	30,970	
	USA	6,12,078	
Africa	Angola	1,296	617,463
	Congo	10,223	
	Gabon	1,367	
	Ghana	18,730	
	Kenya	74,754	
	Uganda	51,779	
	United Republic of Tanzania	88,667	
Asia	China	155	74,431
	India	4,980	
	Israel	1,447	
	Maynmar	1,822	
	Thailand	59,782	
Oceania	Australia	7,386	8,501
	New Zealand	621	
	Papua New Guinea	306	

Source : W.H.O. Nov : 1998

Before we look into the AIDS situation in India, it is worth mentioning some observations recorded in a report which has direct relation to this investigation. It was issued by the joint United Nations Program on HIV/AIDS *(UN AIDS)* and the World Health Organisation (W.H.O.) as up dated on Dec 1998. It says that during last year a further 5-8 million people were infected with HIV.

The latest data of AIDS epidemic in the World upto Dec 2001 is also given which brings out a cursory comparison of 3 years duration.

Table : 2 **WORLD HIV & AIDS STATISTICS**

Summary of the HIV/AIDS epidemic, December 2001

People infected with HIV in 2001	**Total**	**5 Million**
	Adults	4.3 Million
	Women	*1.8 Million*
	Children <15 years	800,000
No. of people living with HIV/AIDS	**Total**	**40 Million**
	Adults	37.2 Million
	Women	*17.6 Million*
	Children <15 years	2.7 Million
AIDS deaths in 2001	**Total**	**3Million**
	Adults	2.4 Million
	Women	*1.1 Million*
	Children <15 years	580,000
Total no. of AIDS deaths since the beginning of the epidemic until 2001	**Total**	**21.8 Million**
	Adults	17.5 Million
	Women	*9 Million*
	Children <15 years	4.3 Million
Total no. of AIDS orphans since the beginning of the epidemic until 2001	**Total**	**13.2 Million**

Source : W.H.O. report online : 2002

Table : 3 CURRENT COUNTRY WISE DETAILS OF AIDS CASES IN THE WORLD

Region	Epidemic started	Adults and children living infected with HIV/AIDS	Adults and children newly infected with HIV	Adult prevalence rate*	Percent of HIV-positive adults who are women	Main mode(s) of transmission# for adults living with HIV/AIDS
Sub Saharan Africa	Late '70's-Early 80's	28.1 Million	3.4 Million	8.4%	55%	Heterosexual sex
North Africa and the middle east	Late '80's	440,000	80,000	0.2%	40%	Heterosexual, IDU
South and South East Asia	Late '80's	6.1 Million	800,000	0.6%	35%	Heterosexual, IDU
East Asia and Pacific	Late '80's	1 Million	270,000	0.1%	20%	IDU, Hetero MSM
Latin America	Late '70's-early 80's	1.4 Million	130,000	0.5%	30%	MSM, IDU, Hetero
Caribbean	Late '70's-Early 80's	420,000	60,000	2.2%	50%	Hetero, MSM
Eastern Europe & Central Asia	Early '90's	1 Million	250,000	0.5%	20%	IDU
Western Europe	Late '70's-Early '80's	560,000	30,000	0.3%	25%	MSM, IDU
North America	Late '70's-Early '80's	940,000	45,000	0.6%	20%	MSM, IDU Hetero
Australia and New Zealand	Late '70's-Early '80's	15,000	500	0.1%	10%	MSM
Total		**40 Million**	**5 Million**	**1.2%**	**48%**	

* The proportion of adults (15 to 49 years of age) living with HIV/AIDS in 2001, using 2001 population numbers.

MSM (sexual transmission among men who have sex with men), IDU (transmission through injecting drug use), Hetero (Heterosexual transmission).

$ Defined as children who lost their mother or both parents to AIDS when they where under the age of 15.

Source : W.H.O. report online : 2002.

Out of them, approximately 11 men, women and children every minute and the total number of people living with the virus rose by one tenth to 33.4 million world wide. Half of all new infections are now occurring among young people aged 15-24. This year "World AIDS Campaign" Young People Force for Change" was prompted in part by the epidemics threat to those under 25 years of age. Thus when there is a general rise in the HIV rates in the overall population new infections are going to be increasingly concentrated in the younger age groups.

The global epicenter of AIDS continues to be Sub Saharan Africa. Since the epidemic began, 34 million Africans have been infected and almost 12 millions of them have already died. In 1998, the region experienced four million new infection and rise in AIDS death tolls.

In the United States on the other hand the number of people dying from AIDS dropped by two thirds between 1995 and 1997, and particularly since the antiretroviral combinations came into wide use. Alongside the undoubted therapeutic success, a disturbing lack of progress has been recorded in the sphere of prevention. In the last decade, the number of new HIV infections per year have remained stagnant in North America and Western Europe, despite the fact that 75000 people have acquired the virus in 1998 alone. In this context the observations made by *Peter Piot* Executive director of *UNAIDS (1988)* are worth quoting.

"Two decades into the AIDS epidemic, we know better than ever better about prevention – how to persuade people to protect themselves, make sure they have the necessary skills and back services, and remove social and economic barriers to effective prevention. Yet almost six million people became infected this year. Every one of these new HIV infections represents a prevention failure – our collective failure.

The details of statistics in Table 3 gives descriptions of current status of AIDS in continents. The data shown against south and south Asia includes the AIDS states of India also. It shows that the mode of transmission is Heterosexuality and IDU, where as the transmission mode in central

Asia and Eastern Europe has been restricted to 16 only through IDU, which is easier to control through stringent intervention policies, implemented in such countries.

In South and South East Asia, the category of men sexual transmission with men does not appear anywhere. Therefore it is not prejudicial to refer that AIDS/HIV infection in India is not through men having sexual transmission with men and restricted to hetero sexuality or IDUs alone. To ensure prevention in this regard, active intervention policy is to be enforced through adoption of 'safe sex' practices and use of sterilized syringes and tested blood for transfusion.

The available data brings out a clear indication of comparative states of the decreases between 1998 and year 2001.

AIDS situation in India

The AIDS situation in India, by number of detected cases and status is given in the Table 4.

Table : 4 STATEWISE NUMBER OF AIDS CASES FOUND IN INDIA FROM 1995 TO 2001

Name of the State	No. of Persons Tested	Tested in Western Blot	No. of AIDS Cases Found upto September 1995	Per centage	No. of AIDS cases upto Mar 2001
J&K	7009	10	Nil	Nil	2
Punjab & Chandigarh	54019	165	100	60	423
Haryana	119080	135	1	0.74	48
Rajasthan	33462	46	3	6.52	272
Gujrat	36960	517	18	3.48	689
Madhya Pradesh	66741	206	66	32.03	664
Daman Deu	250	8	1	12.5	1
Maharashtra	25064	5928	1041	17.56	4459
Goa	55906	594	12	2.02	29

Table : 4 *(Contd.)*

Name of the State	No. of Persons Tested	Tested in Western Blot	No. of AIDS Cases Found upto September 1995	Per centage	No. of AIDS cases upto Mar 2001
Karnataka	353505	1882	51	2.70	918
Kerala	40253	180	76	42.2	267
Himachal Pradesh	12848	13	9	69.2	85
Delhi	307522	978	87	8.89	500
Uttar Pradesh	80473	542	8	1.47	282
Bihar	8401	3	1	33.33	44
West Bengal	102081	251	39	15.53	57
Orissa	57162	143	2	1.39	55
Andhra Pradesh	41734	214	1	0.46	612
Pondichery	60433	1485	12	0.80	141
Tamil Nadu	573156	2706	372	13.44	9712
Assam	10288	134	10	7.46	110
Nagaland	1466	122	4	3.27	103
Meghalaya	14013	53	Nil	Nil	8
Manipur	34518	3246	99	3.04	790
Mizoram	15601	59	Nil	Nil	16
Andaman Nicobar	7819	78	Nil	Nil	13

Source : NACO : 30.9.95 & March 2001.

The figures presented in Table 4 depicts the number of AIDS cases as on Sept 1995 & 2001. There are four states namely Jammu and Kashmir, Meghalaya, Mizoram and Andaman Nicobar Islands which have no population infected with AIDS. The highest percentage of AIDS infected cases are 69% found in Himachal Pradesh; Kerala shows the second highest (42 percent) AIDS infected cases. As per UN press release dated November, 1998, HIV is now firmly embedded in the general population and is spreading into rural areas of India that were previously thought to be relatively spared. A new survey reveals that the infection rate is three times higher in villages than in the cities. The above table 4 shows that it has mostly affected the coastal areas, whereas the

population of hilly regions except Himachal Pradesh has been least affected in our country. At such a stage where few states are not yet affected with this ghastly disease, if adequate preventive strategy is enforced and an overall awareness is gradually developed, the spread of the disease can be arrested to some extent. Analyzing the statistical data of AIDS infected cases as on March 2001, it shows that the number of cases of AIDS continue to increase in all states except Andaman Nicobar Islands. The highest number of cases are found in Tamilnadu being 9714 which was only 372 in 1995. Such gross variation shows that there is an immediate need of policy implementation regarding prevention of AIDS in such a state. As there has been no awareness grown among people through a strong health education program, the common and affected group of society has not taken adequate preventive measures.

Heterosexual promiscuity has been identified as the principal mode of transmission of HIV in India, except in Northeast region where it mostly was propagated through contaminated syringes in most of the cases (50-74 per cent in Manipur, 50 per cent in Nagaland). The other sources of infection of HIV in India are through male homosexual relationship, from infected mother to their children, use of contaminated implements of sharp nature, child birth and lactation. However, no data is available to the extent of male homosexual relationship in India. Regarding the prevalence of transmission of HIV during child birth, it has been estimated that out of 24 million deliveries per year in India, 20,000 cases of infected child birth are likely to occur out of HIV positive women.

As it appears from various survey reports the situation of AIDS in India is quite alarming and its rate of growth is dynamic. The available year wise position of the country are, (a) Out of 290 AIDS cases reported up to the end of 1992, 187 (65 per cent) were reported in 1992 alone. Numbers reported in 1988, 1989, 1990 and 1991 were 15, 20, 26 and 43 respectively, (b) HIV prevalence rates among individuals tested through nationwide surveillance network were 2.5, 4.9, 5.5 and 11.2 per 1000 respectively during the period Oct. 1985 to Dec. 1987, (c) HIV prevalence rate in selected samples of males with multiple sex partners increased from 5.6 per 1000 in 1991 to 16.2 per 1000 in 1992, (d) HIV prevalence rate in selected samples of female sex workers in Vellore, Madras has gone up from 5 per 1000 in 1986 to 345 in 1990, and in Bombay, from 10 per 1000 in 1986 to 180

in 1990 and 350 in 1992, (e) HIV prevalence rate in selected samples of blood donors in Mumbai increased from 10.5 per 1000 in 1991 to 22.9 in 1992 and in Tamilnadu more drastically from 1.7 per 1000 in 1991 to 23.1 in 1992, (f) HIV prevalence rate in selected samples of pregnant women increased from 0.6 per 1000 in 1991 to 1.2 per 1000 in 1992.

Looking into the gravity of AIDS situation Subhankar Banerjee points out : In India, the first case was registered in 1986. Since then HIV, prevalence has reached almost all states and union teritories of India. Out of a total 3.20 million individuals practising risk behaviour and suspected AIDS cases that were screened for HIV infection (by Oct. 1997), 67,311 persons were found to be seropositive and a cumulative total of 5002 cases of AIDS have been reported. The predominant mode of infection of AIDS is heterosexual contact (about 74.2 percent). Males account for 78.7 percent of AIDS cases and females 21.3 percent. The majority of AIDS patients (89 percent) are in the age group of 15-44 years (*Subhankar, 1999).*

There is an apprehension that if HIV infection rate among various categories of population continues to increase at the same pace as indicated above, By 2010 AD about 45 million people would be infected in low and middle income countries. The estimates made by NACO upto 2001 in India comes to 3.31 million HIV infections. It is said that 3.97 million infections are estimated by NACO till 2001 including IDUS, MSM and other age group members. However, all these estimates are made on many assumptions, which need to be validated through systematic social science and biomedical statistical research data. Moreover, appropriate preventive actions could help to control the pace of increase in HIV cases, as has already been experienced in some other countries *(NACO on line, www.naco.nic.in, 10th September, 2002)*

Studies on AIDS in India

Before proceeding on analysis of some studies on AIDS carried out in India, there is a need to discuss social construction of sexuality. The subject in the true meaning deals with sexuality and gender relations, as *Pat Caplan (1986)* perceives. In his words what is relationship between sex, sexuality and gender ? It is perceived by some that 'gender' is expressed through sexuality and

each sex has specific sexuality. How it differs from gender that needs to be known and their articulation to be explored *(Vance : 1984)*. This term 'sexuality' appeared in the society in 1800 for the first time. As the growth of modern world started, the word 'sexuality' came into existence to indicate behaviour or set of ideas. As suggested by *Brake (1982)* 'gender' that is 'masculinity' or 'femininity' is not so much ascribed on the basis of 'physiological sex' as of 'achieved sex', and vital part of the achievement is sexual behaviour in terms of 'sexuality' which is the 'core' of the self. In this particular study only 'men' category of Indian Army has been the core area and as such during its entire analysis the feminine gender has not been subscribed as it may be observed.

It is not justifiable to state that universally and biologically men need sexual releases alone. Sex as we know is a biological phenomenon of human body and its urge is instinctual which can not be eradicated in a prolonged way. Since the universe of this study is concerned with the male population only, the irrepressible urges of 'female sex' has not been considered relevant in this study and as such has not been included. The author while studying has restricted his study, concerned with army personnel of the Indian army who are male only through a selected sample and has analyzed the inquired data as per aim and objectives of the study.

The instinctual desire to 'sexual release' by army men is a common human behaviour, but any additional desire to sexual outlet by army personnel has direct connotation to their daily living standards that is, highly potent hygienic food, exclusive medical fitness, a routine health care system, regular physical exercise which keep them fit always and every time. Such state of physical fitness obviously augments more sexual urge which require frequent release. In addition, their daily nature of work, prolonged separation from wives, frequent movements from place to place within short notice at the call of duty are very peculiar kind of life style which generate in them to more sexual sensitivity. This typical way of life is not akin to many armies in the world and as such can not be compared with them in any respect. Such social compulsions are major factors responsible to develop propensity to promiscuous behaviour significantly. As it can be explained that the Indian Army is deployed through out the year all along its long extended inhospitable borders. The Indian

International border spreads over a queer variety of geographical regions like the plains of Punjab, the deserts of Rajasthan and the Rann of Kutch in Gujrat and the mountains of the Himalayan Ranges stretching from Ladakh in the north to north east frontier agencies in the North East. This pattern of deployment is typical of its kind and it has its related influence in military life as well.

Secondly to man such huge borders physically through out the year around the sub continent the recycling of the man power carries on through out the year involving in movement of personnel from sector to sector. This aspect of frequent relief and its caused movement is also typical in Indian army compared to any other armies in the world.This directly affects the social life of the army men their sexual habits which has very important significance with the spread of AIDS/HIV infection.

Thirdly, unlike some countries where troops are in occupation of a foreign land over years no designated enclave of 'professional sex workers' exists around military cantonments in India. Even if there are 'red light' areas in cities of India which is for need of the rest of the population of such towns/cities. So such undesignated 'sex worker' population is not under control of the army and no health related preventive measures can be administrated to them with the initiative of the army.

The above facts denote significantly that due to the circumstances, most of the army personnel of the Indian army perforce lead their daily routine life under certain compulsions and constraints which are at times detrimental to their health and habits. It is a life without a partner for most of the time. There is hardly any scope to meet with a female most of the time and the avenues of sexual release except masturbation are also limited for such young group of circumscribed people. Under these cultural peculiarities the personnel of the Indian army spends their major part of life. This can be considered as a subject study by it self. However such socio cultural conditions have the reasons to say that an army personnel may become promiscuous attributed to the conditions and exigencies of their service life.

Promiscuity though is an ascirbed phenomenon among such group, it is not to be considered as a thumb rule for all members. Cultural construction of Indian society is such that many young army men remain away from induging in sexual activity either by being absolutely loyal to their own sexual parter that is their wives or practicing. 'abstinence' till their marriage. For such people the principles of *"Bramhacharya"* is not a high sounding word rather it is their part of life. The cultivation of mental power to control sexual urge to release it at an appropriate time and place is the basic point of motivation to many of them. The 'Gandhian' thoughts on sexuality "sex can not be eradicated but controlled" is practiced by the people of this country practically leading to a successful sexual life. Any deviation from the doctrines of sexual norms is always considered by such group of people as a matter of sin which no one wants to commit. It is one sort of social cultural binding benefiting the Indian society.

In page 19 of the original thesis an account of studies on AIDS in India have been given in which behaviour of some of the 'high risk' group of people have been discussed, there has been no comparison between such categories. The slum dwellers and drivers have not been clubbed with army personnel. While conducting a survey about the knowledgeability of risk factors of certain categories of professionals of the society, and analyzing the collected data, the reference of doctors, dentists, foreigners, soldiers, drivers and slum dwellers has been made. As mentioned in page 19 of the old thesis about this, further explanation has been tabled in page 72 and 73 in table no 13, where the collected data of all these category of professionals are analyzed and discussed. Detailed analysis has also been made subsequently of the knowledge level of the population about the connected data. It is a survey that states who all out of them belong to which category i.e. 'high risk', 'low risk' and 'no risk'. In no way a slum dweller can be clubbed with a doctor or a dentist as it is inappropriate to club a soldier with them – though all are tabled together for the sake of study.

In this study the data and analysis are self explanatory. As per *Kant* 'Masculinity' means the men folk are allowed by the society to act in accordance with their desires and feelings. Their behaviour is being externally determined and is thereby unfree. Such a sense of freedom as essentially

'inner still an intrinsic part of a Protestants culture, has only served to concern the greater freedom and autonomy of men. They are thought to be able to act out of a sense of duty, since they are supposedly more able to control the influence of feelings and desires. In this sense men have been taken to be the free sex, and women are only able to achieve their freedom through accepting their subordination to men.

The meaning of masculinity is dominance over once emotional life. This study on knowledge and perception of AIDS has not explored into such deep and abstract domain. There are certain practices in daily conjugal life of male and female which in this context are found pertinent to be discussed. Firstly the desire to enjoy sex between male and female may not be roused simultaneously, or emotionally coincident. In that case probably the desire of one (male or female) may win over other and this can be termed as dominance. Similarly while proceeding to enjoy sexual inter course, the use of 'condom' may or may not be acceptable to either of the partners (male or female) and the one who wins over may be called dominant. It is not exactly the masculinity which can dominate the domain of sexuality alone rather it is the individual emotional climax which should be the dominant factor individually and not universally. Though the author in his complete study has not discriminated masculinity as a factor of dominance. The aim and objective of the study does not lead us to refer to such study chapter.

There are not many studies on AIDS in India. A recent epidemiological study conducted in Mumbai *(Bharat : 1994)* highlights the swift pace at which the epidemic is growing in India. The study analyzed 10,139 infections reported at 12 public hospitals of the city between 1988 and 1994. The results reveal a rising trend in the infections over this period. The geographical mapping of HIV infections over 88 municipal sections of Mumbai city showed the presence of infection in almost all but six sections. The sections reporting highest prevalence are those located in the most congested and older parts of the city. These areas are centres of commercial activities as well as thickly populated residential areas. The section with the maximum number of cases includes Mumbai's red light area of Kamathipura. Municipal sections with zero prevalence, are the thinly

populated areas on the fringes of the city. The presence of infection is higher in old city areas compared to suburbs. The socio demographic profile of the HIV infections matches with that of the state and the country. Its presence is most acute in the age group of 21-35 years, the mean age being 27-41 years. A disproportionately large number of infections are reported among male (78 per cent) than among females (22 per cent). For about 10 percent of the cases, this information is not available *(ibid).*

Some studies on AIDS related matters have been carried out in Pune, in Maharashtra State of India, during 1993-1995. Prevalence and incidence of HIV infections were tested among 5321 persons attending two STD clinics in Pune, between May 1993 and October 1995. The overall prevalence of HIV infection was found to be 21 per cent, being 32 per cent in the case of females and 19 per cent in the case of males. A further analysis shows that old age work, life time member of several partners, lack of formal education were the prime causes related to high rate of HIV seroprevalence. The observed ratio of 10 per cent per year was very high. This was found to be much higher in the case of women (14 per cent), than in the case of men (10 per cent), and it was over three times higher among the sex workers. HIV prevalence in Asia and India was not noticed until 1980s, South East Asia has now become the epicenter of HIV/AIDS pandemic. HIV in India predominantly spreads, through heterosexual route and the infection is spreading rapidly among women. The prevalence of HIV infection among male patients from various sexually transmitted diseases has increased from 3 to 6 per cent in 1988 to 9 to 14 per cent in 1992 in the metropolitan cities of Madras and Mumbai *(Indian Council for Medical Research, December : 249-53).*

The College of Home Science, Jorhat in India, conducted a sociological study in 1977. Standardized structural questionnaire was administered among 75 randomly selected undergraduate female students in the age group of 19-21 years. Based on their response, the awareness level of respondents was calculated and categorized. It was revealed that majority of the respondents (72 percent) had medium level of awareness towards AIDS, followed by respondents of 21 per cent, having low level of awareness. The percentage of respondents having high level of awareness

was only 7 percent. It was also observed that majority of the respondents were cautious against infection of HIV, while majority (53 percent) of the respondents knew all about the preventive measures against AIDS. 45 per cent of the respondents were aware of the symptoms of this disease *(Baruah : 1998)*.

Truck drivers are often identified as quite susceptible to AIDS and a communicator in spreading HIV infection. So a few surveys have been carried out particularly on the long distance truckers. A study conducted by the South Indian AIDS action program, Madras, India, on 200 tuckers shows that 90 per cent of the truckers visited professional sex workers and a large percentage of them were suffering from STDs. What was shocking that less than 30 per cent of them were using condoms. Another survey conducted on 200 long distance truck drivers reveals that 60 per cent of those visiting professional sex workers were married, 87 percent consumed alcohol regularly, 57 percent has homosexual relationships, 82 percent visited 'sex workers' and 28 percent used condoms. Surprisingly only 29 percent of them knew about the disease called AIDS. Though the majority of them heard about the disease and knew that AIDS is not a curable disease. A few studies have also been conducted on seasonal migrant workers. In West Bengal today, long distance truck drivers are the second largest (after commercial blood donors of 26 percent) group of HIV infected persons (25 percent) *(De Sarkar and Tiwari : 1996)*.

Another interesting study was carried out among 19 year olds in Doncaster. This study highlights major confusions and uncertainty as prevalent among the respondents about the transmission routes of HIV. The respondents' overall knowledge about the main routes of transmission was very high. However, 14 per cent of them thought that infection could pass through lavatory seats. A similar number of such people felt that sharing cups and glasses could transmit infection. Another 20 per cent thought coughing, sneezing or kissing could transmit HIV. One fourth of the population did not know whether saliva was infectious or not. About 57 per cent were in belief that one could catch HIV from blood transfusions and 33 percent felt one could get it by giving blood. Regarding the attitude and practices of such population, 10 per cent said that they were not willing to answer to

this section at all, 17 per cent felt that people with AIDS should not be allowed to work. Regarding safe sex, 40 per cent said that single sex partner was safe for such disease. Use of condom was cited as a safe sex practice by 21 per cent, known sex partner by 7 per cent and celibacy by 6 per cent. The study shows that not many people were changing their sexual behaviour in response to the AIDS threat. The response rate in the study was 58 per cent. Therefore, it raises question about statistical representativeness of the findings. However, findings like confusion about kissing, saliva or sharing cups and plates as modes of transmission have been documented in other studies also. Majority of the population did not feel sorry for people who suffer from AIDS. This may be based on a condemnation of life style or a belief that people practising 'high risk' profession should know how to avoid contracting HIV. Of those who reported a change in several behaviour, one third of them said they had reduced the number of sexual partners and one fourth of them said they had started using condoms.

The Latest AIDS situation in India

Although HIV prevalence is low (0.7%) the overall number of people with HIV infection is high according the estimates by UNAIDS. The Indian official figures do not reveal such a scale of infection, but weaknesses in the surveillance system, bias in targeting group for testing and the lack of availability of testing services in several parts of the country suggest a significant element of underreporting. Given India's large population, a mere 0.1% increase in the prevalence rate would increase the number of adults living with AIDS/HIV by over half a million people.

HIV infection in India is currently concentrated among poor, marginalized groups, including commercial sex workers, truck drivers, migrant labourers, men who have sex with men and injecting drug users (IDU). Transmission of HIV within and from these groups drives the epidemic, but the infection is spreading rapidly to the general community. The epidemic continues to shift towards women and young people with about 25% of all HIV infections occurring in women. This also adds to mother to child HIV transmission and pediatric HIV. About 90% of the total reported AIDS cases occur among the sexually active and economically productive 15 to 44 age group. Men

account for 79% of HIV infections in India. The predominant mode of HIV transmission is through heterosexual contact, the second most common mode being injecting drug use (IDU). Previously blood transfusion and blood product transfusion were also major causes, but various adopted blood safety measures now enables us to prevent such transmission.

In 2001, In India the HIV infection rate went above 1% in the six states and the Prime minister of India, urged the Chief Ministers to intensify AIDS/HIV prevention activities. Three states (Maharastra, Tamilnadu and Manipur) account for 55% of the country's estimated.HIV cases. The burden of AIDS cases is beginning to be felt early and to be self controlled by the individual states of the country.

In the most affected state of Maharastra, HIV has reached 60% in Mumbai's (Bombay) sex workers 14-16% in sentinel sexually transmitted disease clinics, and over 2% among women attending antenatal clinics. It can be treated as an indicator for the prevalence in general population.

The prevalence rate has reached 6.5% in Namakkai in Tamilnadu and 5.3% in Churachand pur in Manipur.

The last four years have been the broadening of epidemic across the southern and western states of India, as well as a concentration of HIV among the injecting drug users in the north eastern states. The sharp increase of infection in Andhra Pradesh and Karnataka reveal that these states have over taken Tamilnadu as states with the highest prevalence rates. In other parts of the country, the over all levels are still low with some areas reporting no cases at all.

The AIDS epidemic in India consists of a number of local epidemics. Around 70% of India's population lives in rural areas, though these are relatively immune to many such epidemics. Some recent studies, however suggest that HIV has begun to spread in several rural areas. The epidemic is now meaning beyond its initial focus among sex workers and injecting drug users and is shifting towards the general population; making women and young people the most vulnerable for HIV infection.

In India elsewhere, AIDS is perceived as a disease of "others" – of people living in the margins of the society, whose styles are considered 'preverted' and 'sinful'. Discrimination, stigmatization and denial (DSD) are the expected out comes of such values, affecting life in families, communities, work places, schools and health care settings. Because of HIV/AIDS related DSD, appropriate policies and models of good practice remain underdeveloped. People living with HIV and AIDS continue to be burdened by the poor care and inadequate services, whilst those with power to help do little to make the situation better.

In a recent study by UNAIDS different levels of discriminations and stigmatization were found among people living with HIV/AIDS in India. UNAIDS found that there was uncertainty among health care staff about basic HIV transmission information and about the need for a purpose of prevention. Also the study revealed a depressing picture of lack of care throughout the health sector, with the possible exception a small number of hospitals where good policies and practices have been established.

While analyzing the latest AIDS situation in India, we find from UNAIDS study that the women are often blamed by their parents-in-law as responsible to infect their sons.

Women, children of HIV positive parents, whether positive or negative themselves are often denied the right to go to school or are separated from other children. People in marginalized groups [female sex workers, hizras (transgendered) and gaymen)] are often stigmatized in India on the grounds of not only HIV but also being members of socially excluded group.

The Future of AIDS Situation in India

For India to respond effectively to infection trends and limit the costly social and economic impact of HIV and AIDS, its efforts need to be accelerated, intensified and expanded while the country remains at a low prevalence of HIV and there is still time to slow the spread of the epidemic. With HIV prevalence doubling every one to two years in certain groups, there is still a narrow

window of opportunity over the next few years during which the HIV epidemic can be prevented from becoming generalised and difficult to control.

India's socio control status, traditional social ills, cultural myths on sex and sexuality and a huge population of marginalized people make it extremely vulnerable to the HIV/AIDS epidemic. In fact, the epidemic has become the most serious public health problem faced by the country since its inception.

The Indian Government and individual state governments have launched prevention programs to reduce high risk sex and, there is evidence that in some states these programs are resulting in safer behaviour. There are some success stories for effective prevention and control of HIV infection. An intervention program among commercial sex workers in Sonagachi, Calcutta has been able to increase condom use from 0% in 1992 to more than 705 in 1992-94 and sustained this at over 70% until 1998. If current prevention effects can be sealed up and sustained, India may be able to bring down the rates of HIV infection in particularly exposed groups and avert a widespread heterosexual epidemic *(UNAIDS, India : HIV and AIDS related discrimination, stigmatization and denial, 2002).*

As described in NACO surveyed data in 1995 there has been a sentinel survey data in 2000 which classifies HIV prevalence in India in three groups.

Groups I : Includes states like Maharastra, Tamilnadu, Karnataka, Andhra Pradesh, Manipur and Nagaland where the HIV infection has crossed 15 or more in antenatal women.

Group II : Includes states like Gujrat, Goa, Pondicherry where HIV infection in any of the high risk groups is still less than 5% and is less than 1% among antenatal women.

Group III : Includes remaining states where the HIV infection in any of the high risk groups is still less than 5% and less than 1% among antenatal women.

It can be inferred from the sentinel surveillance data from antenatal clinics in 7 metro cities in the country, that HIV infection has crossed 2% in Mumbai, is more than 1% in Hyderabad, Bangalore, Chennai and is below 15 in Calcutta, Ahmedabad and Delhi. This data clearly supports the evidence that HIV infection is percolating from various high risk groups to general population.

So the infection in future will continue to multiply, if not checked and controlled through effective intervention strategy. In the Indian context it is difficult to estimate the exact prevalence of HIV because of the varied cultural characteristics, traditions and values with special reference to sex related risk behavior. The west African model of making estimates can not be easily applied to the Indian scenario. Sociological study is essential to grow awareness in the society for implementations of correct prevention policy.

The Present Study

As necessitates the present study has been carried out on army personnel in India. Some similar studies have already been conducted upon Air Force and Naval personnel, but so far, no such study is there on army personnel. Therefore at the outset, the present study may fill the said gap. The study on communication for health education with particular reference to knowledge and perception of army personnel about AIDS and HIV infection has been chosen taking into consideration the susceptibility of concerned population to the pandemic disease called AIDS. This large organization is supposed to remain concerned about the health of every soldier individually irrespective of his rank and status. So a study on such a population is considered very meaningful from research and action points of view. The professional exposure of the investigator to the life of the army personnel was also another major important factor of selecting such a topic of study. The composition of Indian Army is of 'Men' only since there is no female recruitment in other ranks category. There is a small percentage of women entry as officers since 1993 as nurses&lady doctors. There is as such a fundamental difference in composition of man power of the Indian Army on the groundsof gender

compared to other armies like US army, Israel army etc. The women are recruited in these armies as other ranks, which comprises of a large number of females unlike the Indian army.

Aim

The present study aims to explore the details of effectiveness of present communication system and to educate the army personnel about AIDS and HIV infection. The perceptions of the army personnel about the said lethal disease infection has been examined against the backdrop of social, economic, cultural, psychological and professional conditions of the concerned population. From policy perspective, this study may appear useful in formulating strategies for necessary interventions. It should include identification of appropriate information system, channel and media of communication for inculcating necessary behavioural changes. It will also create a better knowledge and awareness towards AIDS and HIV infection among a population, which is quite susceptible to such a lethal disease.

Objectives

The present study enquires about (a) the role and effectiveness of mass communication system in disseminating information about AIDS and HIV infections among army personnel, (b) knowledge and perception of concerned population about this lethal disease; their attitude towards AIDS and HIV infections and preventive measures followed/adopted, (c) social conditioning and other related factors responsible to make them more susceptible to AIDS and HIV infection, (d) the most preferred or appropriate system of information to make the concerned people more aware about the said disease complex, and (e) along with information, what related measures are needed in social, cultural and professional fronts of the army personnel to counter AIDS and HIV infection.

Importance of Present Study

It is important to note that the army personnel are often considered as the people of 'high-risk' category in the context of HIV and AIDS. This is because they live in a typical socio-cultural set up

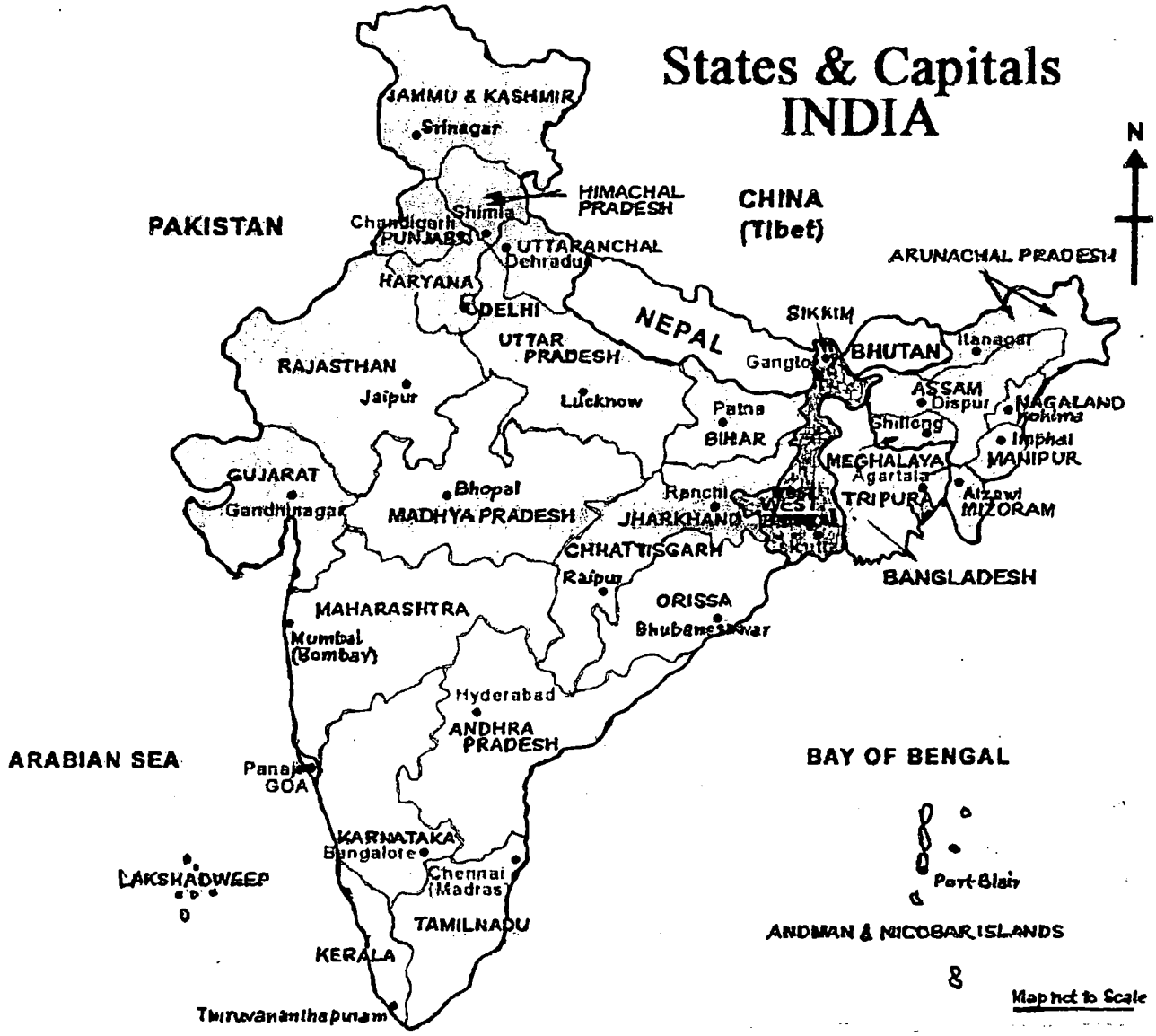
and suffer from unprecedented operational hazards, high degree of mobility and uncertainty about future. Therefore for such a circumscribed community, their cultural perception about AIDS and HIV infection need to be understood scientifically and that is what the present study intends to do.

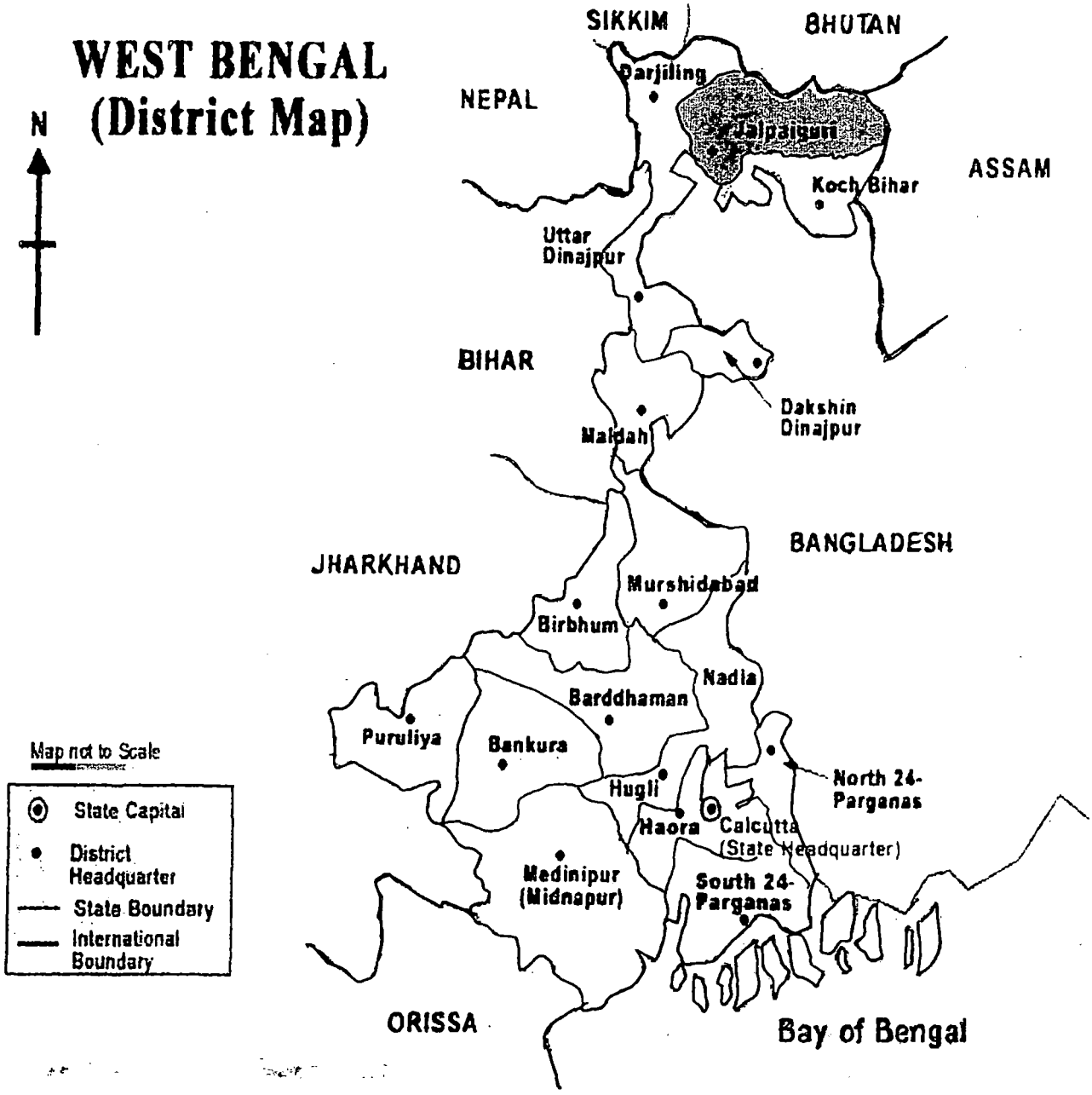
To carryout the field studies, one army unit from the contingent of North Bengal has been selected. In this particular unit, the army personnel are quite heterogeneous in terms of their native background, caste and community, language, conjugal life, social behaviour and socio-cultural customs. Because of socio political necessity Indian Army units are required to move internally very frequently. Such frequent migration due to service demands, is no doubt stressful, depriving its personnel the pleasure and satisfaction of living with their family and children. Mentally each one feels insecure and an appetite for emotional release of sex gradually creeps into their habits. The Indian army is a consistent migratory population of the country having high possibility of growing promiscuous in their place of work. Therefore, it was thought that one army unit would be an appropriate social group as well as universe for the purpose of present study. As far as North Bengal is concerned, this region has the greater chance of infection from AIDS and HIV next to Calcutta in West Bengal because several military establishments/bases are located here on special geo-political considerations. The socio-economic and cultural life of the population of this area is in flux since this particular area encounters with persistent trans border migration. It is a geo-political corridor where the population is quite heterogeneous and they display acute cultural diversity. Because of large and frequent immigration across the borders, here the poverty is also well accountable and prevalent.

Robson (1985) observes that members of the armed forces have always been identified as a high-risk group as far as sexually transmitted diseases are concerned. A sense of insecurity, boredom and monotony of being posted at far flung areas, are compounded with the lack of proper recreation. Restriction on personal movements, prolonged separation from family, a tough routinized life, tends a man to act dare devil whenever he finds laxity in daily life or when there is any administrative

lax. Such state of sudden liberty provokes them to volunteer for sexual pleasure. Examples of troops visiting professional sex workers are not rare in army units, though not openly verified during the present field enquiry.

In addition to general sociological relevance, the present study also has an applied significance in terms of policy making of the organization enabling them to modify its communication system for Health Education by administering adequate knowledge about this disease to all its personnel. That transmission of relevant messages through appropriate media may help them develop knowledge about AIDS/HIV infection. Self realization, which is related to socio psychological make up of a soldier, needs to be moulded in order to ensure his behavioural change with an aim to prevent him from infection of HIV and AIDS. It is expected that along with a better exposure to this disease related messages certain changes will take place in the behaviour of the army personnel towards sexual life, i.e. use of syringes for injection and liberal use of condom. Before we examine the field findings in detail, it is felt necessary to provide a brief socio-economic profile of the respondents and a synoptic picture of their way of life in their professional socio-cultural milieu, has been drawn in the succeeding chapter.


States & Capitals
INDIA
N
JAMMU & KASHMIR
Srinagar
HIMACHAL PRADESH
Shimla
PAKISTAN
Chandigarh
PUNJAB
UTTARANCHAL
Dehradun
CHINA (Tibet)
ARUNACHAL PRADESH
HARYANA
DELHI
NEPAL
SIKKIM
Gangtok
BHUTAN
Itanagar
UTTAR PRADESH
RAJASTHAN
Jaipur
Lucknow
Patna
ASSAM
Dispur
NAGALAND
Kohima
BIHAR
Shillong
Imphal
MANIPUR
MEGHALAYA
Agartala
GUJARAT
Gandhinagar
Bhopal
MADHYA PRADESH
Ranchi
JHARKHAND
TRIPURA
Aizawl
MIZORAM
CHHATTISGARH
Raipur
BANGLADESH
ORISSA
Bhubaneshwar
MAHARASHTRA
Mumbai (Bombay)
Hyderabad
ANDHRA PRADESH
ARABIAN SEA
Panaji
GOA
BAY OF BENGAL
KARNATAKA
Bangalore
Chennai (Madras)
LAKSHADWEEP
Port Blair
TAMILNADU
KERALA
ANDMAN & NICOBAR ISLANDS
Thiruvananthapuram
Map not to Scale


WEST BENGAL
(District Map)
N
SIKKIM
BHUTAN
NEPAL
Darjiling
Jalpaiguri
ASSAM
Koch Bihar
Uttar Dinajpur
BIHAR
Dakshin Dinajpur
Maldah
BANGLADESH
JHARKHAND
Murshidabad
Birbhum
Nadia
Barddhaman
Puruliya
Bankura
Hugli
North 24-Parganas
Haora
Calcutta
(State Headquarter)
Medinipur (Midnapur)
South 24-Parganas
ORISSA
Bay of Bengal
Map not to Scale
State Capital
District Headquarter
State Boundary
International Boundary