CLARIFICATION

COMMUNICATION FOR HEALTH EDUCATION KNOWLEDGE AND PERCEPTION OF ARMY PERSONNEL ABOUT AIDS AND HIV INFECTION

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PREFACE

India has a large standing army. Their role in providing security and maintaining country's sovereignty needs no special mention. On the question of security, in addition to external threat, now there is a greater threat to our human population in general and to the army population in particular from a pandemic disease called AIDS. As it is a direct threat to the health of the people, it may also cause disaster by affecting Army Organization of our country. That was a prime concern in undertaking the present research.

At the outset, I must convey my sincere gratitude and regards to my research supervisor Dr Rajat Subhra Mukhopadhyay, professor, Department of Sociology and Social Anthropology, North Bengal University. I am equally thankful to Dr Amitabha Basu, former Professor of Anthropology, Indian Statistical Institute, Calcutta, Lt Col G P I Singh, Army Medical Corps, Indian Army and Dr Subrata Roy of ISI, Calcutta.

Brigadier (now Major General) G S Negi of Gorkha Rifles, Indian Army, was kind enough to accord me necessary permission to carry out this work among Army personnel of a particular contingent. The commanding officer of 33 corps Signal Regiment kindly allowed me to conduct my survey in the unit under his command. I am extremely obliged to both of them.

I am indebted to the library authorities of British Council, Calcutta, the authorities of W.H.O., Geneva and New Delhi, the TATA Institute of Social Sciences, Mumbai. They helped me by furnishing information and literature as and when the same were required.

I am thankful to Smt Gopa Biswas for her able secretarial assistance. The cooperation and assistance received from my respondent officers, junior leaders, and jawans was extremely useful during the field survey. Without their help and cooperation, my research would not have completed. I convey my sincere thanks to all of them.

At last, I should not forget to express my thanks to my daughter Miss Rajroopa Banerjee and my wife Smt Mridula Banerjee. They actively participated at the stage of data analysis and encouraged me to complete my research relieving me from many family chores.

I shall feel highly rewarded if my humble effort is found useful as a contribution to the field of development Sociology and the findings embodied get some policy relevance in the organizational spheres of Indian Army.

Date : 10.10.2002

Place : North Bengal university

Lt Col Bharat Chandra Banerjee
Signature

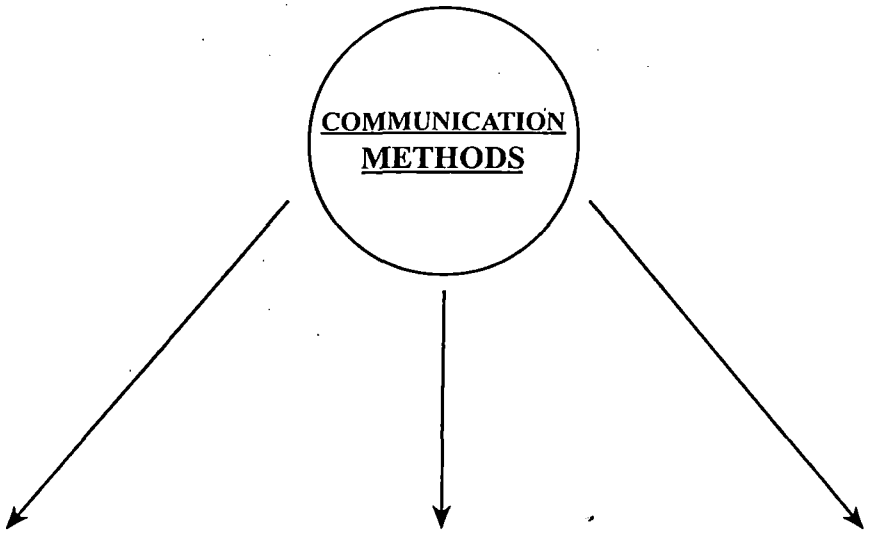
CHAPTER ONE

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.

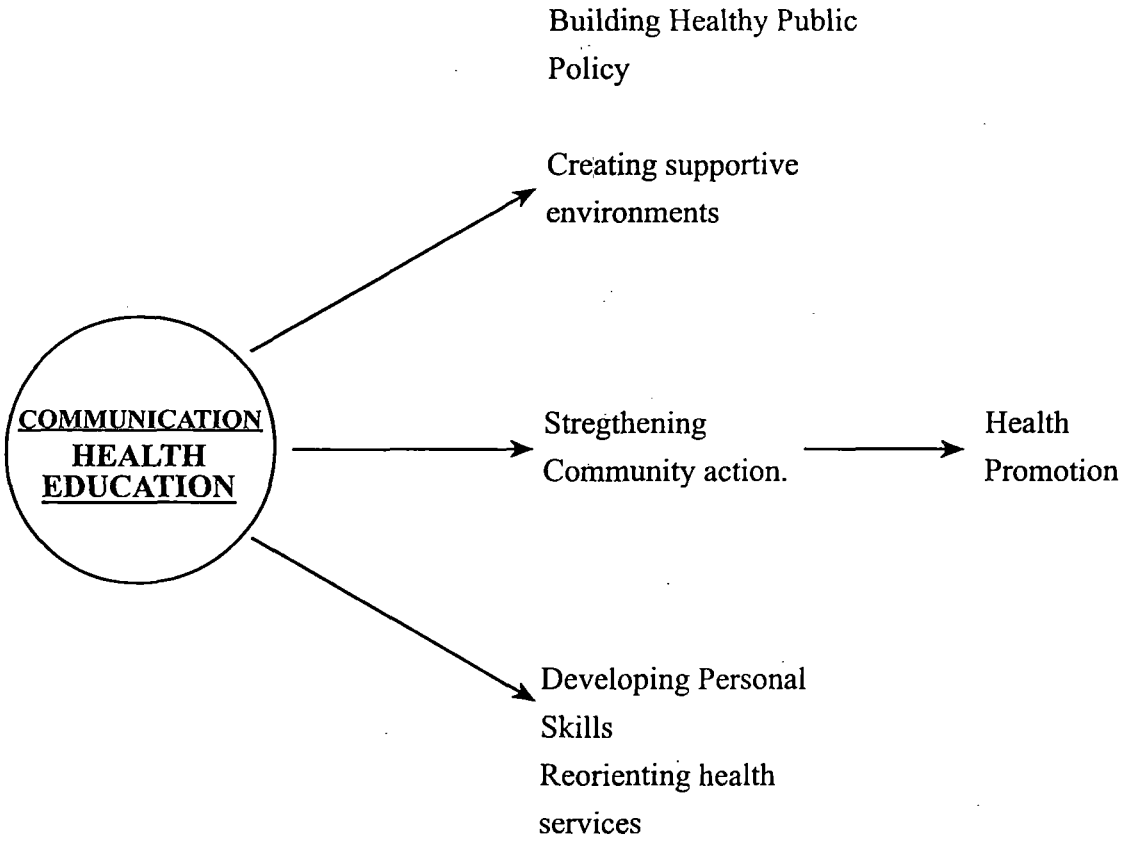
If communication has to be effective, it must be in an understandable language, keeping in mind the social norms, cultural beliefs and sensitivities of the community. Above all, communication programs must give cultural sanction for interaction, clarifying doubts, addressing misgivings on the issues 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.

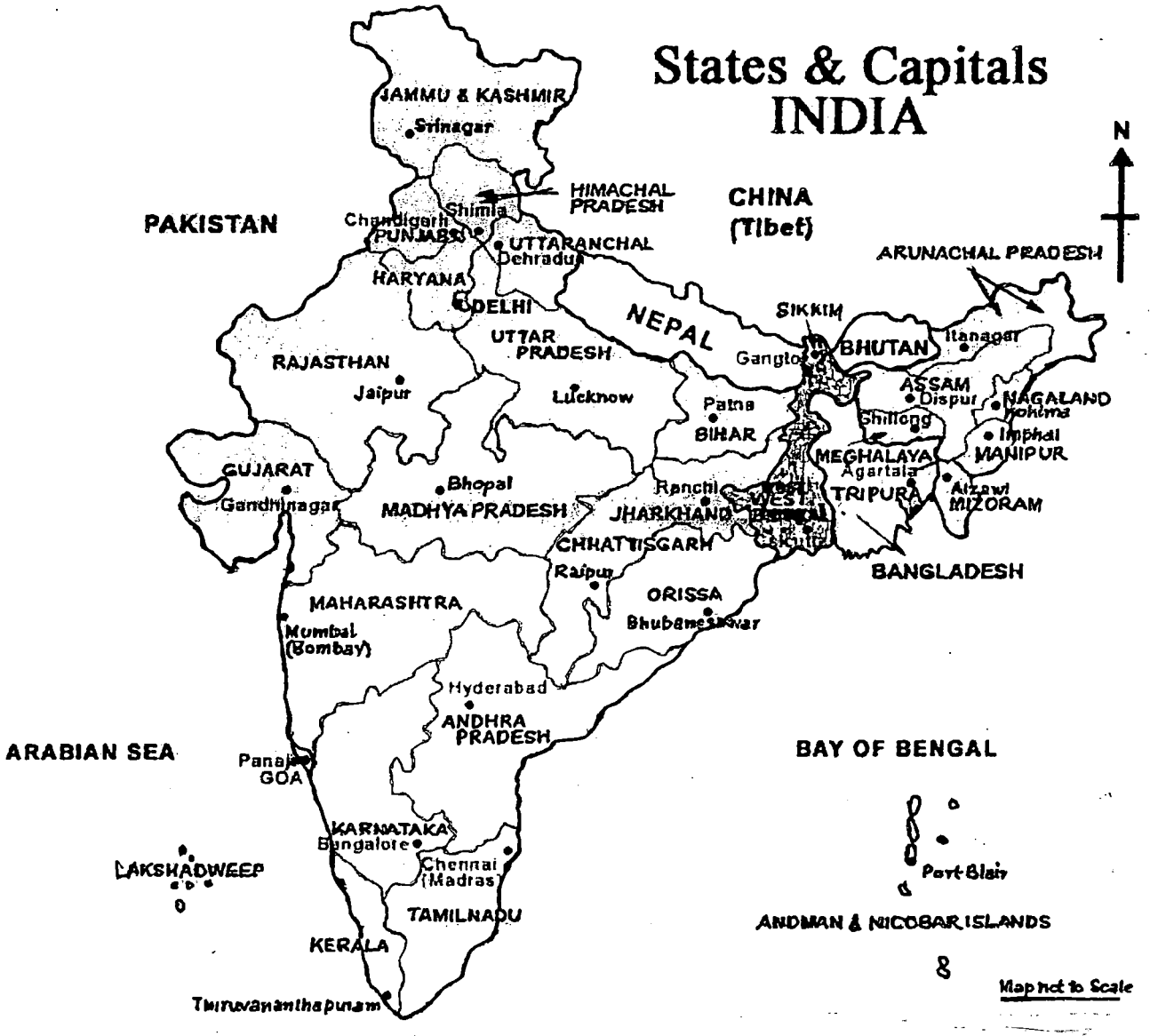
To carryout the field studies, one army unit from the contingent of North Bengal has been selected. In this particular unit, the army personnel are quite heterogeneous in terms of their native background, caste and community, language, conjugal life, social behaviour and socio-cultural customs. Because 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

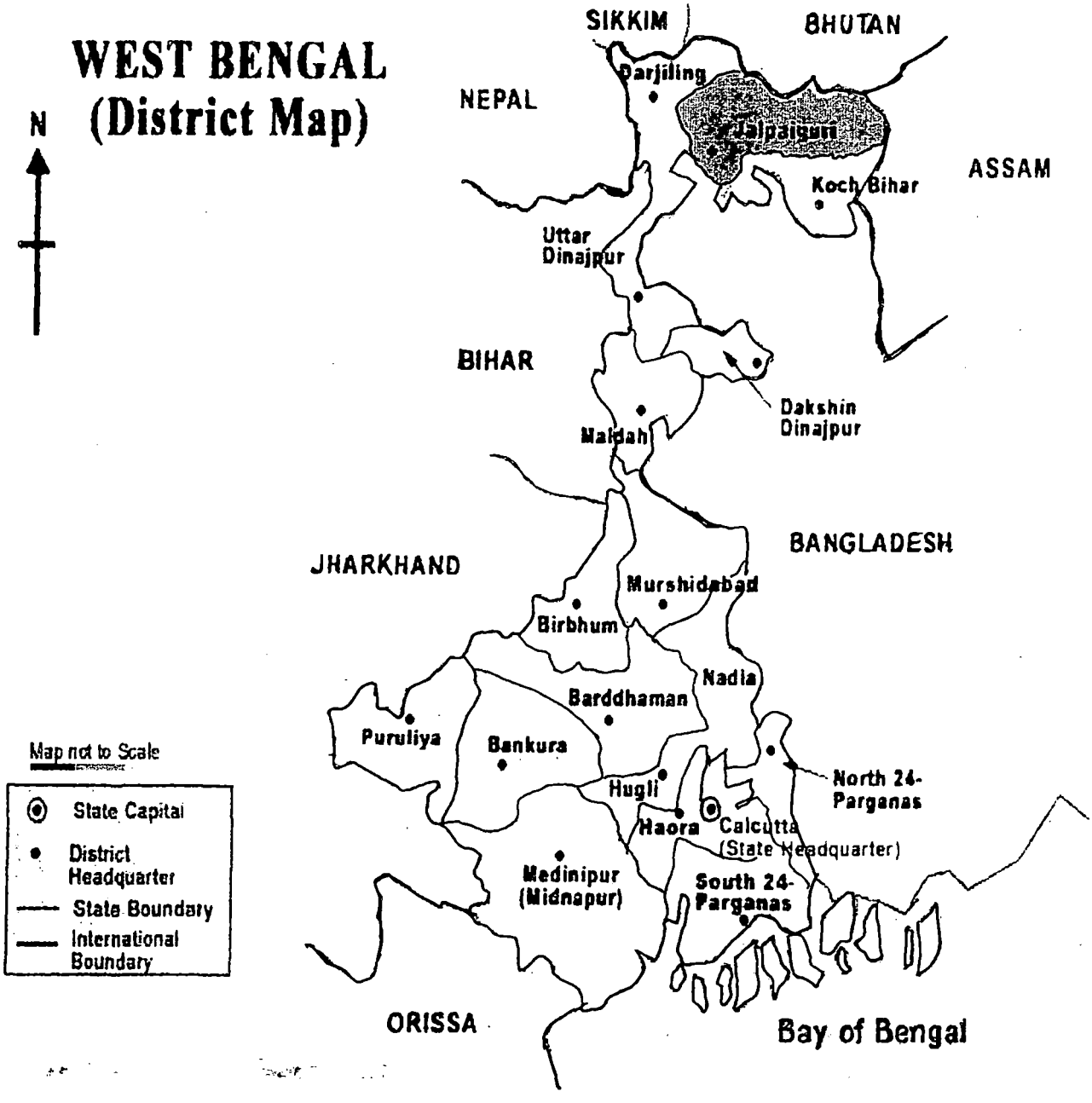
lax. Such state of sudden liberty provokes them to volunteer for sexual pleasure. Examples of troops visiting professional sex workers are not rare in army units, though not openly verified during the present field enquiry.

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



WEST BENGAL (District Map)



CHAPTER TWO

METHODOLOGY AND PROFILE OF RESPONDENTS

The study area

The present study was conducted in a military unit located in northern part of West Bengal State (India) commonly called as North Bengal. Tribal population who works as labourers in the adjoining tea gardens surrounds the unit. It is situated at a distance of 15 Kms from New Jalpaiguri railway station and about 13 Kms. from Bagdogra (Siliguri) airport. The unit is one of the Signals units of Indian Army responsible to provide radio, line and satellite communication to various army units located in North Bengal, Sikkim and areas of North East states. In addition to providing above communication support, the unit has also a role of interception, counter electronic warfare, and monitoring overall radio communication of this sector.

Historical Background of the Unit under study

The unit, from which the sample population has been selected, was raised to provide radio and electronic communication as required in the organization. It was initially raised at Shillong (Assam, India) in 1960. During the Sino Indian border conflict in 1962, the unit was shifted from Shillong (Assam) to Bagdogra (Siliguri, West bengal, India). It has direct communication link with stations like Calcutta, Shillong and Delhi through radio and telephone. An additional communication network of this unit also exists with various military units in Sikkim, Binnaguri, Siliguri and parts of Assam.

The unit is geographically located in an area of north-eastern part of India connected by rail, road and air with rest of the parts of the country. Another important consideration behind selecting

the unit was that this unit was under direct observation of the investigator. The geographical proximity of the researcher with the unit and its socio cultural milieu was a matter of consideration before designing such a sensitive study. While conducting this study among Army personnel of the Indian Army, certain socio cultural aspects in relation to the personnel of Indian Army in general vis-a-vis the other armies of the world, has been kept under consideration. So far the Indian Army does not have female entry in ranks. It has a small percentage of female officers (introduced in 1993) and lady doctors and nurses. As known the American, British, Israel armies have women in the ranks and the Indian army has a basic difference in organization with these countries. As mentioned earlier the universe of study the researcher has opted for interview of the personnel of a Signals unit. In such a unit the composition of other ranks is of male population from various states of India unlike an infantry unit which are mostly comprised of one single community, e.g. a Gorkha battalion, a Madras unit or a Bihar regiment. In case of a unit of single community composed with a homogeneous mix of population it would not have been possible and the study would have been prototype with bias only. But the selected study population has been such that it represents a cross section of almost all states and union territory of the country, since a Signals unit comprises of a mixed population.

Manifestation of sexual behaviour of respondents.

Historically "Prostitution" have been inseparable with Military Bases. But it has taken calculated policies to sustain that fact : policies to shape man's sexuality, to ensure little readiness, to determine the location of businessmen, to structure women's economic opportunities, to affect wives, entertainment and public health. It is striking that these policies have been so successfully made invisible around bases local and foreign in North America and western and Eastern Europe, where as they have attracted so much notoriety around bases in poorer countries of third world.

It is worth thinking about why military prostitution is so politically invisible in some places and so notorious on others. Which facets of foreign and domestic military base life have been

deemed to be 'political' so to warrant public action? In North America, Europe, New Zealand and Australia, local military bases only rarely become issues (often when threatened with closure), while foreign military bases have become politicized when local citizens have begun to see them as geopardizing their own security and soverignity. Prostitution and its attendent threats to public health and morality have been scarcely mentioned. By contrast, groups protesting against foreign bases in third world countries have made prostalution as a central issue. *(Cynthia Enloe : 1989).*

India is one such country in the third world where professional sex work is always publicly highlighted. The prevailing scenario in this regard prior to world war II and post Independence of Indian union and post Colonization period have distinct demarkation and significance. No foreign military base exists any where in India after 1947 and the present composition of Indian army is indigenous. Though their own army bases are located at different places of the country there is no designated area of professional 'sex workers' to publicly entertain soldiers of Indian army. There are odd 'red light' areas in almost all cities as explained earlier, which are part of the society and not meant for or earmarked for the army as such. Circumstantially some of the Indian army personnel at times get allured to visit prostitues, though during the survey only very few evidenced it. Here unlike an American or Soviet soldier, such visit to prostitutes is not offically approved. This act on the part of army men is considered to be against unit administration and is considered as a violation of the unit discipline which restricts movement of its personnel in normal course. As *Cynthia Enloe* in her book mentions that visiting prostitutes by soldiers of an American or Russian army is quite common, but it is a culturally considered as a central issue incase of personnel of Indian army.

As per *Cynthia Enloe*, the Fillipino women line up twice a week to undergo VD and AIDS check up because the American servicemen demand 'VD and HIV clear' from the 'sex workers' they visit which conversely is demanded by such sex workers from them also. Such example depicts the exact political picture of the society where prostitution for the army is not made public. Such is

the cultural construction of sexuality in Indian society which reflects directly on its army population also. It affects them more because the professional circumstances compel them to starve sexually and yet there is no official approval for sexual release.

Though the statistical data of any unit of the Indian Army shows a very negligible percentage of VD cases and also of AIDS/HIV infections, it does not bring us to conclude that such urge to visit professional 'sex workers' is non existent in them. The cause of least percentage of VD cases among Indian army men is due to the following reasons (a) resolute leadership of Indian army officers who imbibe strong motivation in their command (b) application of direct interpersonal communication between the leader and the led (c) the cultural construction of 'sexuality' enabling them to exercise penance and self control of sexuality. So far as the transmission of VD to the army men are concerned, it is due to 'unprotected sexual liaison' with an infected partner or a 'professional sex worker' deliberately or inadvertently. In case a soldier is found to be HIV positive it will be unjustified to out rightly conclude that the same infection is caused through sexual contact only. In many cases it has been initially contacted by a single source either due to sexual liasion or due to use of unsterilized syringes in hospitals or the medical information rooms (MI rooms) and there after the careless use of infectious needle caused spread of further infections. Later the use of disposable syringe has been enforced. Such infections other than through sexual route carried on unchecked till the detection of the first case. There had been many such transmissions through transfusion of untested blood also. There should be no illogical deduction against any victim and there should be no moral condemmation of the infected ones.

Till such time this disease was detected and identified, its epidemiology was not known to the army personnel. So far, VD was considered to be a damaging disease which is yet curable. So, the army health care department and its administrative machinary was geared up to disseninate the prevention policies to army units so far regarding STDs. With the appearance of such ghastly virus (HIV+) the system was alarmed and meanwhile few got infected due to non existence of knowledge

about such disease.

When the infection of AIDS/HIV was initially detccted, it aimed at one deduction only that the infected one is a guilty person of having enjoyed sexual intercourse with some one infected with HIV positive. At that stage it was beyond the perception of everyone, that it may be due to use of infected needle or use of contaminated blood through unchecked blood transfusion till they learnt the epidemiology of AIDS. Such basic social mental block in the society inscribed a stigmata and discrimination against those who were unfortunate to be affected with HIV virus at its inception.

In the complete process of transmission of this virus, women are the receivers and male promiscuity often becomes the prime cause of spreading such disease sporadically. We find statistically the literacy rate of women surveyed upto 1995 of above 15 years in the world is 71.2% and in India it is 39.29% which is much less than that of men being 64.13% *(Demographic Year Book : 1995, UN Newyork)*. Since the strength of any community develops through 'Education' achieved through literacy which is still very low among 'Women' in India, so the scope of access of this disease is wide. This noticeable difference of profile of HIV infection between male and female is socio cultural; male dominance and superiority, rampant illiteracy among women, poverty forcing women into commercial sexual exploitation, domestic sexual abuse, low access to women to socio economic opportunities. As if this is not enough, the plight of women is further exacerbated by denial or neglect of their basic human rights or in other words gender discrimination.

The power imbalance in the gender relationship is now being seen as the root cause of women's vulnerability. There are numerous hurdles to prevent HIV infections among women. They include certain sexual norms that limit women's access to seeking information on matters related to her own body and sexuality.

Violence against women, both at the domestic level and outside, the familial and social acceptance of male promiscuity are contributory factors to women's increased vulnerability. It is not uncommon at least in India to hear from some women that her husband enjoys sex with others

and if she ever protests she would be left. Women's economic and social dependence on men is wide spread, and provides the most powerful weapon in the hands of male chauvinists.

Double standards in marital relationship, and woman's dependence on man for economic and social support, lack of male initiative and responsibility in women's reproductive health problems and low access to health care facilities compound the already threatening social milieu. To top it all there are no 'women controlled' method of HIV prevention except for the 'Reality Female Condom'. Female now has a very limited option on this account. But the rest of the technology available is men centred and men focussed.

The real challenge in our society to day in this context is to empower women so that they can avoid exposure to infection and help themselves to cope with the threat of HIV. This is easier said than done.

Women in India, generally are not able to talk openly to their partners/spouses about sexuality and condoms because they are afraid of raising doubts about their fidelity. 'Condom' use in India as found till now is mainly to prevent pregnancy *(Shankar Chowdhury : 1998).*

Though under the circumstances before any sexual liaison a woman may try to persuade her partner to use 'condom' to ensure 'safe sex' she may not be successful. For her side also there is a small option in that she can use the 'Reality Female Condom' if she can get it. It may protect them against HIV, but it is not as good as the latex 'condom' men use. It has been verified during this study that the army men are encouraged to carry condom before they visit the city shopping centres. While mixing up with the civil population, some one may indulge in a casual sexual liaison with any professional sex worker in the town. Such use of condom if encouraged as a practice it will guard against HIV infection to them.

The degree of knowledge and its overall outcome through awareness regarding 'sex' and

'sexuality' of the army men has been examined in the close quarter and found that some amount of inconsistency exists among them. The reason found of such 'unawareness is mainly pointed towards the inadequate conception about such disease barring them from knowing the bio medical phenomena of human body, sex and sexuality in details. Their level of education is low and at that level Life Science which teaches of sex and sexuality is not in their curriculum and they are deprived to know about 'sex and sexuality' theoritically. For such group of people the knowledge about sex is only aimed at the sexual copulation and for that they hardly need any formal teaching on the subject as most of them feel. Their marital life is lead happily with this conception and there is no further desire to know about sex. Till date many educated people feel that it is against their dignity and social position to talk or mention about 'sex and sexuality' publicly. It even appears to be embarrassing for those who conduct study or research on this. This is the cultural construction of the society which differs grossly with that of many other countries in the world.

As discussed earlier the Indian culture depicting values and high ethical sense, inspire many not to indulge in sexual act other than with their own partner. Directly such motivation inspires them of 'abstinence'. Those who are fully motivated (though a very low percentage) do not need to follow 'safe sex' or use of condom because they are sure of there loyality to a single partner without using 'condom'. Such category of people are also existing though they are of insignificant percentage. Their knowledge about the disease is also inadequate, because they follow the path of ignorance, considering it to be a boon to them.

The cultural construction of 'sex and sexuality' of Indian army men has practically undergone test of time. While some Indian army contigents had been representing the UN force recently, they displayed a distinct pattern of sexual behaviour while staying abroad. Their record of achievement of non indulgence in any sexual affair in such countries, drew attention of many including the Secretary General of UN himself who along with this aspects appreciated their professional skill and high standard of discipline. Such sense of 'abstinence' scored a very high position among others on the UN mission representing many countries of the world. It only denotes that the cultural construction of 'sex and sexuality' of Indians is distinct and can not be compared with the people of

any other country.

As regards the cultural construction of this disease, it is felt that there is a cultural epidemic which need to be focused more than its bio medical angle. *Paula Treichler (1998)* calls it as an "epidemic of signification". The book acts as a guide of social science researchers on AIDS. As the disease has its bio medical chapters to be investigated, it is more pertinent as per views that a social scientist can stretch his views beyond the virus, its symptoms and ensuring prevention. It involves the health communication, health education, clear conception and identity of inscription of gender. Social construction of reality based on social concept also is part of this. It relates more with behavioural aspects of men and women, the dominance of masculinity and obscurity of male folk about the 'female' sex of the society. It is an applied state of 'sexuality' with adequate or inadequate knowledge whichever is applicable.

How value based education, cultural legitimization of human behaviour plays a significant role in growing awareness about AIDS, Paula Treichler explains in her book. In case of Army personnel, the sample population of this study, the investigator has been able to explore the behavioural aspect of the interviewees. Their answers to a typical query whether there should be an officially sponsored brothels around their respective units or not was vehemently objected and negated by the majority of the interviewees most deliberately and spontaneously. It goes to prove that an army man of Indian army, in his heart of hearts is not in favour of going against discipline. Because he thinks the presence of any brothel around any unit lines will break its discipline.

There was no comment by any respondent about 'Homosexuality" or "lesbianism" because basically most of them were not aware of these two words and were not found very comfortable when the act was explained. Under the circumstances where such population grew up are mostly of poor middle class villages of India. They are hard working, honest and peace loving being of religious nature. 'Homo Sexuality' and 'lesbiamism' are not the terms known to them in their daily life and they do not consider knowing it as essential. The sexual urge can be satisfied showing

loyalty to a single life partner and not being promiscuous. In Indian culture the women other than own wife are considered as 'Mother' community and are respected as a mother only. Such noble cultural concept continues generation wise and any thing committed against is considered as a sin. "Homosexuality" and "Lesbianism" are the words which in normal course no body would like know or hear about. They feel surprised to think how sex can be manifested like this. They expressed saying that such act is mostly unwarranted and below individual dignity. Even practice of 'masturbation' is felt that it goes against health. It is also considered to be something bad and not of normal behaviour.

When such is the basis of cultural platform of the society and majority of the Indian army comprises mainly with its rural population, their behaviour even after joining the services remains to some extent unchanged as regards such cultural aspects. Though some of them feel that they should visit professional sex workers for sexual release, many out of them love to abstain. Some due to fear and affrehension and some out of strict self discipline and dedication to his family.

In addition, the spiritual concepts which are also a part of their rich cultural heritage, are carefully preserved by many of them showing a deep sense of concern. As a result a transformation of thought takes place regarding sex among army personnel after they join the army. The result shows that some percentage grow promiscuous due to sudden exposures, flow of cash and availability of opportunities, some become frugal, but few yet remain conservative, value oriented after knowing the evils of diseases like AIDS/HIV.

As in other countries of the world, 'homosexuality' and 'lesbianism' are most common terms and there is no special significance attached to it, in Indian society even today after introduction of cable TV culture, cultural globalization, these are very much a specific terms and are not most commonly known or practically experienced by many. There may be some who practice 'homosexuality' or 'lesbianism' the number of such are negligible and statistically insignificant.

'Homosexuality' and 'lesbianism' have various social back grounds in America, Europe and in Mombasa. Their perception of these terms and practical application are also not comparable to Indians.

This study is based on practical evaluation of behavioural aspect of each individual or sample of Indian army population representing each of their state, ethnicity and culture through their day to day behaviour in an army unit, on all behavioural aspects including sex and sexuality and this is not a composition of theoritical statements.

So it has been taken into consideration that there is a need to high light the socio-cultural aspects of the Indian army personnel with special reference to this pandemic disease AIDS/HIV infection.

The very concept perceived by *Paula Treichler (1998)* is unlike many books written on AIDS/ HIV. She has covered an area of unattended thoughts and ideas which attract social science researchers towards a meaningful dimension of study. Her ideas arouse the sensitivity to culture which itself is a new technique of prevention of such disease.

Paula in her book says how a medical researcher can be attracted towards the cultural construction of the disease which is really difficult where as a social science researcher can do shifting his work design towards the epidemiology of the disease. There is a flexibility and option available with a social science researcher where as it is to not so incase of a medical scientist.

As regards this disease, medical research is possible and meaningful only when its sociological aspects of concerned population are taken care of. The cultural construction of AIDS differ significantly with various population attached with the disease. The interpretation of meaning of this disease will be different in sub Saharan Africa, in America, Europe and in India.

In this study the basic knowledge of 'Sex' and ideas about 'sexuality', 'women education

without gender classification' and introduction of 'Condom' culture will grow knowledge and the holistic awareness about AIDS/HIV.

Identification of Respondents

For present study, all the respondents were selected from the stated unit. The unit is organized with four subunits called 'companies'. Each company is earmarked with a specific technical and military role. The organization of the unit is such that it has more than one category of technical trades. They are radio operators, linemen, radio mechanics, telephone mechanics, drivers and various tradesmen. From this unit of about 850 personnel, a large group of volunteers came forward and then through a random selection a sample of 201 personnel was chosen for final selection and interviews. They constituted the ultimate unit of study and were the principal respondents of present enquiry. Individual background information as furnished by the respondents were verified from their office records. The master long roll containing biodata of each army personnel was found to be of vital importance to carry out such scrutiny of personal data. The fieldwork was conducted during April 1997 to July 1997 followed by a rechecking during Nov 1997 to Dec 1997. While identifying the respondents out of a military unit, the interviewer always kept in mind the point that such population basically belongs to Indian culture and have subsequently adopted a new way of life including their social habits,language and personal behaviour. So since the cultural aspect and perception of health, body, sexuality and the concerned disease are interrelated, its implication on the group of interviewees, has always been considered to be prime. As *Anthony Giddens (1989)* in his book '*Sociology*' mentions culture is the whole way of life. It includes how the Indian population dresses, their marriage customs and family life, pattern of work, religious ceremonies and leisure pursuits. Since the concerned disease is directly related to the behaviour of these personnel meaning of 'Culture' is obviously a significant starting point of such study.

Collection of data

For this study, every identified sample respondent was contacted personally by the researcher/

investigator. All the respondents were interviewed with the help of an interview schedule. The interview schedule was pre designed as per objectives of proposed research. It was pre tested with a view to add essentials and delete those not of any consequence. The pre testing of questionnaire was done on other individuals from a neighbouring unit for the purpose of avoiding any bias. The investigator on the spot recorded the responses as the interview progressed. The officers however filled their respective schedules themselves. At the time of interview of junior leaders (JCOs) and Jawans, the questions of the schedule were translated in Hindi and the respondents were asked to answer those in any language convenient to them. Most of them replied in Hindi barring a few in English. These were mostly filled up by the interviewer to ensure accuracy and speed.

Before commencement of the study, and during fieldwork, the investigator faced a series of difficulties. Firstly, at the initial stage it was difficult to convience the army authorities to allow the researcher to proceed with a sociological study concerning army men. However, when the aim and objective of the proposed study was explained, the approval to proceed with such an enquiry was accorded.

Secondly, there was practically no perception among the respondents about such a social investigation where their involvement was direct regarding a subject of 'sex and sexuality'. Almost all of them expressed that during their service life they had never come across such investigation or such an academic pursuit, which probes into the personal life of army men. For obvious reasons, an initial apprehension mixed with hesitation existed in the minds of almost all respondents excepting few officers. Thus, they appeared to be somewhat indifferent and inexpressive at the beginning of the field enquiry. Through regular addressing them collectively by the investigator prior to individual investigation the respondents gradually took him into confidence and ultimately came forward without any hesitation or fear to respond to the questions asked to them. The informal interaction between the investigator and the respondents grew with the passage of time as the enquiry progressed. As a whole it was a successful mission and the process continued systematically as desired.

The Interview Schedule

An interview schedule was administered in present study. Structurally, it was divided into the following sections :

In the first section, the information like the personal background of the respondents, their nature of exposure to media, preference to media programs and exposure/access to other various sources of information, communication for health related messages including prevention of AIDS and HIV infection were collected. The second section dealt with various questions on the way of life of army personnel. The third and fourth sections sought information on communication and media messages, media behaviour of each respondent, their knowledge on AIDS and HIV infection were further grouped into following categories : (a) General (b) Sources of infection (c) Signs and symptoms (d) Modes of transmission (e) Perception of risk and (f) Methods of prevention.

Analysis

The answers furnished in the interview schedule were edited, standardized and finally tabulated. A good number of tables were generated. Statistical information derived from those tables helped explaining the knowledge, perception and behaviour of the respondents about AIDS and HIV infection keeping communication for health education as the bench mark.

The Army Personnel and their organizational milieu : A Profile

Discipline is the back bone of any army. It is the basic Leadership trait, which results in success, whether it is in the field of administration or military operation. It breeds a defined work culture to work in organized manner. Thus, it is only discipline, which acts as a prime and essential determinant of leading an organized life in the Army or elsewhere. Starting from basic training days, a soldier learns how to be disciplined in his day to day routine life. This leads to transform certain individual habits allowing him to get rid of minor inhibitions to shape up his personality to become a leader of a team training himself through a systematic and rigorous way of life conducive to defence standards. Army life enforces discipline in a stringent way because the existence of army without discipline is

like a ship without radar. No army can fight a war successfully, however equipped it may be, unless it is disciplined.

The army, a huge organization by itself is an inseparable organ of the country's core machinery. India is a vast country with its complex geographical layout. Due to vast and widely spread of international borders, there is special significance and importance of these borders from defence points of view. Thus India needs to maintain a large standing army which is expected to keep year round vigil along such borders. To achieve a high standard of alertness withstanding various climatic hazards, it is expected that an army person should be physically fit and mentally robust following outcome of a rigorous, systematic and methodical training procedure.

The term 'army personnel' in this context means its officers, junior leaders (Junior Commissioned Officers) and jawans (Other Ranks). Procedures of recruitment of each category of army personnel are different and are governed by a set of rules and regulations framed and passed by an apex body the Additional Director General (Recruiting), Army Headquarters, New Delhi from time to time as per policies of the Government of India. The selection and recruitment of officers is done through an examination conducted by the Union Public Service Commission (UPSC) and through departmental examinations in some cases. They are required to undergo written examinations and interviews held by the UPSC and Service Selection Boards respectively. Junior leaders are not generally recruited directly, except in Military Engineering Services or in Religious Teacher category. A soldier becomes a junior leader (JCO) in his organization when he attains a particular period of service and fulfils certain departmental qualifications. They attain this through gradual departmental promotions as laid down in the organization. The next in the category are the Jawans – who are recruited periodically by various Branch Recruiting Offices, which are located all over the country. Such recruitments (utilizing the existing trade wise vacancies) are also governed by certain laid down policies, rules and regulations edited by the Additional director General (Recruitment) Army Headquarters, New Delhi. The recruitment of Jawans is made through proper advertisement process in specified print and electronic media. Recruitment is finally carried out through all Branch

Recruiting Offices and Zonal Recruiting Offices as per existing vacancies.

Various departments in Army organization

Army organization consists of large number of departments first among those is the department of foot soldiers called Infantry, which is the largest in number. In addition to Infantry battalions, it has Armoured Regiments equipped with tanks, tank recoveries both of towed and self propelled version, the Artillery regiments with guns, howitzers, mortars, radars, Engineer regiments, to construct roads, bridges and tracks, laying mine fields etc. Signal Regiments to provide communication, Army Service Corps to look after all logistics requirements of the army, Medical Corps to provide medical support, Electrical Mechanical Engineering branch to provide repairs and recovery cover, Military Police to ensure discipline, Judge Advocate General branch to look after legal matters, Military Farms, to supply milk and milk products, Remount Vetenary Corps, to maintain and look after animals like mules, horses and dogs Army Dental corps, Army Aviation, the Pioneers. All these departments have their own technical roles to play both during war and peace. These are broadly classified as arms and services. The Armoured corps, Infantry and Engineers are called arms and the rest are called services.

Since the study is concerning the army population, it is considered to be mandatory to have as much detailed knowledge about the community as possible. Unless we know the organizational milieu in which they live and work, the life of army personnel cannot be understood properly. Similarly if the general way of life of this particular population is not reviewed before hand, the study may fail to comprehend the problem under examination in totality.

The way of life of army personnel is quite different from that of any civilian counterpart. The socio cultural milieu of army life is altogether different. How do the army personnel live and pass their daily life ? What type of hazards are involved in their professional and social life? How do these hazards and other factors affect their behaviour pattern while in war or at peace - are some of the significant areas which need due consideration in the context of present study.

Training

Training carries a special significance in the army. The highest policy making body regarding training in the army is the Army Training Command. The newly recruited army staff and officers are imparted training with a view to bring them up to a laid down standard of physical and technical fitness. Basic military training is compulsory for all categories of personnel and branches. The next phase of training pertains to on the job training or the technical training of the respective arms and services in which an individual has been recruited. The similar procedure is followed in case of officers also, though the institutions and types of training are different.

Similarly the training schedules specified for officers and other ranks are different. A trainee officer passes through queer series of training phases both physical and professional. This training is conducted in Military Academies and Officers Training Academics located at different places in the country. On the other hand the other ranks need to undergo basic training and later respective job specific training. It is quite tough and arduous. The training procedure is scientifically designed technically oriented and flowlessly executed in such a way that it enables the recruits to adapt themselves with altogether a different culture, inculcating all good habits and code of conduct in a man. The well said principle 'the more you sweat in peace the less you bleed in war' is strictly followed in military training schedule with no compromise. The training for the other ranks is preliminary education, which can be understood by all personnel from all states of the country. They undergo physical training comprising of vaulting & agility, unarmed combat, physical endurance, running long distances, battle physical efficiency training, boxing, jumping etc. The daily routine commences early at dawn and continues for hours. They are taught weapon training, small arms firing, drilling and map reading. In general the training period in the army is regarded most sanctitiously and executed in ruthless manner. Minor injuries and accidents never dissipate the momentum of army training at training centres. After each training course the students are put through a test and graded as per individual performance. At the end of each term there is a passing out ceremony which symbolizes the convocation of a particular course successfully completing

their training. The training program is so designed that an untrained physique of a young boy with under developed muscles and weak formations of health gradually gets tough and endured to withstand all types of physical rigours and strains. It is systematic and stage by stage, so as to be able to adapt easily.

In case of officers the training curriculum is further enlarged with versatile disciplines and subjects. It is again proportionately balanced with physical and academic modules. It has many outdoor activities simulation training in the jungle and mountain warfare and rock climbings. It teaches them swimming, boxing and horse riding as compulsory subjects. The academics consists of number of science and arts subjects, law, organization, tactics etc. Officers are specially trained in leadership qualities. Games are compulsorily played by all everyday.

As a whole the training in the army both for men and officers is very tough and enduring.

Socio-Cultural Life

To know about socio cultural life of army personnel, it is imperative to understand the pattern, composition, and functioning of military units. A unit is the smallest functional entity of any army organisation which is composed of officers, junior leaders (Junior Commissioned Officers) and Jawans (Other Ranks). Depending upon the role of a unit, manpower strength of each unit varies from each other significantly. Human aspect of military life can not be ignored while carrying out the study on armymen. Therefore the physical, sociocultural and emotional aspects of army life need to be known to get an overall idea about the way of life of the army personnel in their working set up. As already said the day to day life of army personnel is quite different from that of others of the society, so a specific angle of study is generated to know and understand about the socio cultural milieu of military life, the basic features of unit life, and other specific areas. Once the unit life is understood, it may help comprehending the way of life of the army personnel as required in this study. All the army personnel belong to the same human stock of Indian society but due to professional

demands they are compelled to lead a different type of life quite distinct from other civilians. Thus, the army unit life acquires a unique culture of its own.

Soon after joining the army, a gradual transformation takes place in social habit, behaviour and temperament of a new recruit. He starts leading a life, which is routinized, disciplined, circumscribed, and highly mobile. Among other things, their food habit, rest and medium of communication undergo a gradual change. All these ultimately lead to a change in the personality of a new recruit and he gradually turns into a full-fledged trained army man within a short time. While analyzing the socio cultural life in the army among others the first question comes up as to how do they live and spend family life ?

The number of family accommodation available to the army personnel in all military stations is not uniform. All married army personnel do not necessarily get posting to family stations always. There are field (non-family) and peace (family stations) establishments where each person has to serve during his service span. In a peace establishment, the army colony is called a Cantonment. In a cantonment, married accommodation is allotted to all army men on individual request maintained through a station seniority roster. Almost in all military stations the officers and junior leaders are facilitated more with quarters comparing with Jawans who are numerically large and because of policies on accommodation of each category, it does not allow 100% availability of accommodation to Jawans. When a married army person is not allotted with family accommodation, he perforce has to live as a single individual in unit lines with rest of the unmarried army personnel. The state of family accommodation and number of postings of an army man through out his service is such that there will be hardly few who is/are found to have stayed with family through out his service span. On the contrary, it is more common that the prime and fruitful period of life, of a soldier is spent out being far from his family for years together. The basic biological need of a human being is thus mostly denied to married army men debarring them from cohabitation with their wives which itself

is a major sociological concern that could be a separate topic of study. There is hardly any organisation where such social condition prevails. Apart from other reasons, such deprivation could be a cause of developing the tendency of promiscuity among the army personnel.

Social Profile of the Respondents

The army personnel generally enjoy a homogeneous social identity and status of a soldier. They are considered both financially and otherwise a privileged section of the society. The organization looks after their personal requirements so that they need not keep themselves preoccupied to meet up such necessity. In an event of any sudden death the family of an army man is provided with guaranteed financial support to a reasonable sum whether the demise is caused due to war, low intensity conflict, aggravation of service conditions or otherwise. Such financial security assurance has been introduced in order to provide a substantial financial help to the family of a deceased soldier.

Socio cultural life of army personnel is often influenced by inherent social conditions of the unit, area and place of living, the rank structure etc. The personnel staying at unit lines as single, have almost no scope to interact with family members. In any cantonment social intercourse takes place among the resident families particularly with those who live in the close vicinity of their quarters. Caste or community factor generally has no worth while effect in army life and as such it does not influence their social interaction also. Such socio cultural phenomenon in complex society to day is unique and exemplary only in case of army population.

In the case of married personnel their scope of social interaction with other families is somewhat better than those who are unmarried and staying alone at unit lines/barracks. Thus, marital status of armymen is considered as an important factor in regulating their social intercourse with his unit colleagues. Let us look into the distribution of personnel by their marital status by rank in the sample population.

Out of the surveyed sample, it has been observed that 63 per cent officers, 96 per cent junior leaders and 75 per cent jawans are married. Among the officers, in an army unit, the number of junior officers are more who are with less service, and who are mostly unmarried.

Therefore, proportionally the number of married officers in any unit is less because of their age structure. On the other hand, almost all-junior leaders (JCOs) are found married. It is so because they are the individuals who have put in minimum 16-20 years of service and they belong to higher age group. So it is obvious that in a unit the percentage of married junior leaders would be more than the officers. Among the jawans, about 25 per cent are new recruits who are found unmarried. Some of the unmarried jawans living in barracks may be found susceptive towards promiscuous activities. Broadly it is, because all of them keep sound health, they consume good balanced diet in routinized manner, they are highly potent due to their young age. Most of them are immature in their decision making. They do not understand the after effects of any action taken by them. They stay away from their families so there is a possibility to develop keenness to meet a female and let loose their sexual urges. Health education guidelines are essential for such army men who are young, bachelor and who live as a single at the unit lines. Their perception about sex and its effects on health should be clear and specific. They should know what are the evils of diseases on health grown out of ignorance. Knowledge with adequate exposure to health education will help them grow awareness about AIDS/HIV infection which is the area of concern of this study. The study reveals the percentage of married and unmarried army personnel in a unit and the proportion of jawans who are in exact potent age group are found to be unmarried. As deseribed already such status of army personnel may be one of the significant factors to develop keeness to indulge in sexual liaison with female without realizing after effects.

The factor of marital status of army staff may not be the sole criterion in determining the propensity towards their often displayed promiscuity. Some co-related factors like educational

standard, knowledge about 'sexually Transmitted diseases' and various means of entertainment available to the personnel often influence their sex related behaviour to determine their proneness towards promiscuity.

Table : 5 COMBINED ANALYSIS OF AGE, STATE AND MARITAL STATUS WITH RANK OF RESPONDENTS

	Officers (16)		**Junior Leaders** (23)		**Jawans** (162)	
Age Group	No.	Percentage	No.	Percentage	No.	Percentage
20 – 30	7	42	–	–	74	46
31 – 40	6	36	9	35	72	45
41 – 50	2	12	14	55	12	8
51 above	1	6	–	–	4	2
B. State	–	–	–	–	–	–
U. P.	5	33	7	30	27	17
Maharastra	2	12	–	–	26	17
W. B.	1	6	2	8	22	13
H. P.	–	–	2	8	2	1
T. N.	2	12	–	–	5	3
Rajasthan	–	–	1	4	4	2
Kerala	1	6	2	8	9	5
Others	5	33	9	39	67	42
C. Marital Status	–	–	–	–	–	–
Unmarried	1	6	–	–	28	18
Married	15	92	23	100	132	82
Widower	–	–	–	–	2	1

The sample population in Table 5 above shows, that majority of population belongs to the age group of 20-30 years. It is known that people of age group of 20-30 years are more prone to AIDS/ HIV infection than any others. From the above statistics, it is clear that the suceptivity of infection from AIDS is more among the youth of the army population. The nucleus fighting force of the Indian Army is young, who are justified to have the tendency and attraction towards frequent

sexual liaision. This leads to understand that army, as an organization needs to lay down a strong and well-defined prevention policy to safeguard its young population against the spread of such a ghastly and fatal infection.

As per studies there are least chances of infection of HIV to the people of higher age group. Therefore, the Commanding officers of army units can suitably utilize the knowledge and perceptions and involvement of serving soldiers towards dissemination of preventive messages to the rest of the population keeping in view the cultural construction of both the society and that of the disease. The total strength of this population is about 2-5 percent of the total population of the country which is no less. The population who are senior in age and service are mostly senior in rank also, and they normally have the leader's role to play in a unit, so far as motivation of the jawans regarding this disease is concerned. Therefore, it is a workable proposition to utilize the experience of senior soldiers in a unit with their perception of the disease and keenness in educating their juniors on AIDS/HIV through regular counselling and motivation in the unit lines. Being the largest state of India, UP subscribes maximum manpower to the army. Therefore it is obvious that health education campaign in UP state should be proportionately exhaustive according to its demographic status down to the village level. Similar program will exemplify other states in the country with which the dimension of awareness about AIDS/HIV will be multiplied. Individual State culture influences its population individually which they display in their day to day life when they join the army. Their manifestation of sexual urge differs grossly with each other as they grow up in this organization. A man from Punjab (one of the states of North India) and the other from down south i.e. Kerala state may display different course of action to satisfy their sexual desire though living in same unit. The one will hesitate to visit a sexual worker where as the other may not. Such variation relates to individual state culture, their family back ground and ethical perception. Some personnel strictly abstain from sexual liaison with other women, because they follow principles of *'Bramhacharya'* (abstinence) mainfested by Swami Vivekananda or Mahatma Gandhi. Where as some one thinks it otherwise and he loves to enjoy life in a way as the opportunities arise. There is no significance of national culture for them who has no education. Though it is a diverse population, yet under discipline

and motivation, a unique culture is found to take shape in the Army. The life in the Indian army teaches all to lead a uniform life without discrimination of daily customs, food habits religion and the general way of life. Their Regimental life is regulated through a continuous motivation system administered by their officer corps through self examples. For a leader of such mixed group of people, it is very hard task to guide them to a common cultural spectrum. Though the army population is considered to be of 'high risk' category their risk can however be receded helping them to adopt exact practices through exact knowledge about the disease disseminated through firm leadership and executive command.

While studying the level of literacy of the subject population it is seen that 100 percent officers are literate and higher educated. Therefore, as a responsible citizen of the society, it is the moral responsibility of each officer of such organization to help grow awareness about AIDS/HIV infection even if no official instructions/orders to such effect is issued to them. Out of junior leaders 5 per cent are found illiterate where as 1 per cent jawan can not read and write. So the commanders at all levels, while implementing prevention policies regarding AIDS/HIV have a great deal of responsibility to improve upon the educational standard of junior leaders and jawans. Such endeavour would achieve 100 per cent literacy in a unit. It will also enable such group of people to gain adequate knowledge regarding AIDS/HIV and help them growing awareness of required standard that will obviate further spread of the disease/virus.

The worked out data (see Table 5) also shows that 39 per cent of junior leaders are educated below class X level where as 65 per cent jawans are found non-matriculate. This signifies that health related messages to the army population, require to be simple, logical and interesting. Thus it will easily help them in gaining required degree of knowledge about AIDS/HIV infection.

As discussed earlier the Army as an organisation consists of a heterogeneous population, which is represented by the people hailing from various states of the country. By religion majority of the respondents (90%) are Hindus, 6 percent are Muslims, 4 per cent are Sikhs and 2 per cent are Christians (Table 6).

Though individual religion has no consideration to identify an army personnel, it can however

influence behavioural changes of such personnel, with sermons of respective religious heads who are also part of an army unit. Their duties are considered to play a significant role in the army unit life. The sermons of religious heads of units easily help in motivation of army personnel. This religious approach can assist in modifying their behaviour and certain habits as contextual to this disease. Such changes are possible because they follow respective religious values, prescriptions and proscriptions. For a unit with higher percentage of Muslim population, it is easier for a Mullah (the religious head) to motivate the men on an account of behavioural change than it can be done by any officer, Junior leader or any senior commander. Similarly, a 'Sikh' soldier in a 'Gurudwara' (Sikh religious throne) will understand the religious sermons of a 'Gyaniji (their religious head), better than the same is prescribed by some body else.

The suggestions given by respective unit religious heads of army units are easily understood and followed by the jawans without raising query of any kind. This amounts to their devotion and religious sensitivity. Therefore, to regulate even the sexual behaviour of such a large body of youth in the army and preventing them from infection from AIDS/HIV the preachings of religious heads can create an impact which has lasting effect in the minds of soldiers and that is why the religious status of such population has been surveyed and tabulated in this study. The distribution of personnel by rank and religion is given in Table 6.

Table : 6 **DISTRIBUTION OF THE RESPONDENTS BY RANK AND RELIGION**

RANK	RELIGION				TOTAL
	CHRISTIAN	HINDU	MUSLIM	SIKH	
Officers	0 (1)	15 (91)	0 (0)	1 (6)	16 (100)
Junior Leaders	0 (1)	23 (100)	0 –	0 –	23 (100)
Jawans (OR)	4 (2)	143 (88)	9 (6)	6 (4)	162 (100)
Total	4 (2)	180 (90)	9 (4)	7 (3)	201 (100)

Figures in the parenthesis denote percentage.

It is seen from Table 6 that as per rank there is no junior leader other than Hindus out of the sample population. The Christian and Muslim armymen are found only among the jawans rank but in lesser percentage. This indicates that for motivation of the soldiers of Muslim community, the officers have a major role to play in such unit. In contrast, the representation of the Sikhs in the rank of officers and jawans is relatively higher and the 'Gyaniji' (Religious head) has a major role to play in disseminating health related messages concerning AIDS alongwith other religious teachings.

When there is a need to propagate health eduction about AIDS/HIV infection one can not ignore the question of literacy playing a major role to receive such messages and perceive clearly about the disease. So, among the respondents their level of education has been cross-tabulated with their ranks for easy comprehension (see table 7).

It is obvious that to grow knowledge about this disease it is imperative to survey the overall literary background of sample population first. An educated person is expected to be a good receiver of all messages on AIDS and once he receives such a message, he will be able to adjudge its applicability as is expected. His interpretation will be specific and meaningful. On the other hand, an illiterate person is a poor receiver of any message and disseminating any message to them will be futile. Table 7 depicts that only 2 percent of the respondents are illiterate. Among the jawans 64 percent are found literate up to secondary standard. So an appropriately edited health message should be administered to them. The cause of ignorance on the part of many among population is lack of educational strength and lack of knowledge regarding health and associated diseases.

Conversely the replies of officers (all educated) were definite and specific. Hardly an officer gave a misleading reply. This anthenticates the fact that education has a major role to play in acquiring knowledge about AIDS/HIV and implementing those in real life. So the survey of literacy standard among this population infact is the preliminary requirement before proceeding on the ultimate study.

Table : 7 **DISTRIBUTION OF RESPONDENTS BY RANK AND LEVEL OF EDUCATION**

RANK	LEVEL OF EDUCATION				TOTAL
	Illiterate	Less than Class X	Class X to BA	Post Graduate & Above	
Officers	0 –	0 –	13 (81)	3 (19)	16 (100)
Junior Leaders	1 (4)	9 (39)	11 (48)	2 (9)	23 (100)
Jawans (OR)	1 (1)	104 (64)	57 (35)	0	162 (100)
Total	2 (2)	113 (56)	81 (40)	5 (2)	201 (100)

Figures in the parenthesis denote percentage.

As shown in Table 7 the highest level of education in the army has been found among the officers. There are 19 percent postgraduates among officers and 9 percent among the junior leaders. Junior leaders are found mostly (56 percent) educated up to secondary and collegiate (40 percent) levels. The majority (64 percent) of Jawans has education up to secondary standard. The awareness about AIDS among officers is the highest and it is highly variable in case of junior leaders and other ranks. The standard of education has also a very significant role as regards this disease because it enables an educated individual or a group to understand exactly the ground realities. In case of army population the basic characteristies remain unchanged, to understand the simple epidemiology of this disease, the basic standard of education is not barely the ability to read and write alone. As higher is the level of education, easier is the method to understand the epidemiology of this disease.

The social interaction pattern of army personnel in a unit has certain significance in the matter of communication and exchange of information. It is assumed that if there are regular entertainment programs interesting and healthy enough to satisfy the need of young armymen in units, they would never run after any cheap source of entertainment outside. So it suggests that, there should be adequate, accessible and repeated entertainment programs in units to be enjoyed by all, at their

own turn.

The next point of consideration of social welfare is the accommodation pattern of army units. It has direct bearing on their nature and form of social interaction. Due to inadequate number of houses/quarters at army stations, all of the married military personnel do not get the opportunity to stay with their families and children when they want. However, provisions to live in rented houses though exists, in all practical considerations it does not appear feasible everywhere because of number of difficulties. Consequently, many army personnel, married, perforce have to stay 'single' in units and have to wait (often prolonged) for their turn of allotment of accommodation. This is one sort of deprivation of socio-psychological need of individual creating adverse effect in their mind.

Out of those who get accommodation the pattern of interaction among them is somewhat unit based and rank oriented. Those with family also lead a life within boundaries of norms and restrictions. But there are institutions like Family Welfare Centres in each unit/station where the resident families assemble every month on a predetermined date and time. In Family Welfare Centres apart from meeting each other, programs like lectures on health & hygiene and prevention of diseases etc are also often organized. The wife of the Commanding Officer of army units is supposed to be the president of Family Welfare Centres (FWC) who is responsible to work out programs and conduct those effectively. She is also expected to communicate/disseminate valuable information, points which are related to current topics of social importance. She maintains discipline of such gathering explicitly through her administration. While interacting with the wives of junior leaders and jawans of such units, the president FWC, becomes familiar with many small administrative problems related to its members informally. This enables her to intervene to sort out problems on health, accommodation, and many day to day problems to upgrade the living conditions. In some cases, sensitive family issues also figure in, which with timely audience and appropriate counselling by the senior most lady that is the wife of the Commanding Officer, are easily resolved. The president of the welfare centre sometimes seeks assistance of unit administration on some matters which are

beyond her jurisdiction. Therefore, it is a highly workable interactive machinary of army cantonment life which benefits all married families living in areas which are away from civilization and are at secluded places. The FWC is an intimate social forum of a unit which harnesses all families of that unit with a bondage of love, understanding, personal care and concern about all. The ladies of army units mutually share their ideas of house-hold management including finance, problems of small children, children education, cooking recipes of other regional dishes, guest care and many other domestic management problems. This is an informal forum which directly contributes to a soldier's family life in developing a common culture among themselves. These interactions enable them to communicate through a common language i.e. Hindi/Hindustani which the South Indian and Eastern parts of India, ladies pick up very easily.

In addition to family welfare centres about wives welfare, there is another bigger welfare organisation in the army, which is called Army Wives Welfare Association (AWWA). It is run under the aegis of all formation (of army organisation) headquarters. It is a recognized welfare organisation, with its headquarters located in New Delhi and headed by the wife of the Chief of the Army Staff. All wives of serving army personnel, irrespective of the rank of their husbands are the members of this association.

AWWA is an active organization, which renders all kinds of assistance to the families of army personnel through employment, financial help and vocational training. It promotes educational facilities to army wives by holding special classes at AWWA centres. Entertainment programs at regional and national level are also organized to raise its funds. The widows of army personnel are employed by offering them inhouse jobs as per individual educational qualification. At times it arranges marriages of needy/deceased soldiers' daughters and promotes many such social welfare schemes to help army wives and their children. It also runs Spastics Schools of Army Children with trained technical staff. Most of these schools are named as ASHA (hopes).

So with all activities we understand that the army life has its own culture and a typical social paradigm grown over ages. The composite administrative and welfare management system of army, helps them to maintain a well designed and disciplined life style which does not ordinarily require interaction with other institutions and agencies as far as their daily and individual needs are concerned.

An army unit is maintained with utmost cleanliness and pride. It functions round the clock and some personnel always remain on duty during day or night. The daily routine of an army unit begins early in the morning with a call of 'bed tea' and it's proceeds continue thereafter. During the day, other than various specified administrative activities training of personnel continues as a matter of routine. In such daily training schedule, both the operational and administrative subjects are taught in details. It also includes indoor and outdoor exercises, deployments, move practices as laid down in military tactics and field craft studies. Various capsule training schedules are also held on programmed basis. At the end of any working day or a holiday, there is a system of conducting a parade (forum) in each sub unit to account for all activities of the day which is called 'Roll Call' parade. This is a control and reporting system of personnel and equipment everyday ensured through such method. Through such type of interpersonal communication system, command and control of army unit is less prone to problems and there is least error of management. In this forum all administrative instructions are pass in the form of a short brief on any prevailing disease/infection explaining its causes and prevention, which also includes the preventive measures to be taken by them as an individual/group. In health care series of AIDS/HIV, lectures are also conducted by the Duty Officers or Regimental Medical Officers to impart/refresh their knowledge about such disease. These lectures are regular and are of great importance. It has direct impact since it is conveyed as an interpersonal message, where individual queries are clarified.

In addition to all the above administrative care, troops are counselled by the duty officers in units everyday to safeguard them against any infection from sexually transmitted diseases. STD is considered to be harmful and the infected cases count against good discipline of a unit. Now with

the discovery of infection of the ghastly disease called AIDS/HIV infection, it occupied a special order in disease cycle applicable to military personnel and the officers are trained to address troops regarding this disease occassionally in addition to VD.

In army units the structure of command is unique and has least chance to management failure. The duty officer is fully empowered by convention to check and report on any matter of the unit which he finds wrong, either verbally or in writing. He is available round the clock at the duty room who is assisted by a small administrative detachment. The duty officer is the authentic communication channel in a unit for passage of any information after office hours or an authority to handle an emergency.

Out of all communication methods, the army personnel are subjected mainly to direct communication system, which is free from error and has quick result. This interpersonal communication system enables the commanders to implement any impending job systematically achieving success to its target. The communication behaviour of army personnel is required to be known in details while studying their awareness about AIDS/HIV because communication is the major tool with which such a large organization is controlled. Accordingly, in the next chapter communication behaviour and exposure to health messages have been analyzed.

CHAPTER THREE

COMMUNICATION BEHAVIOUR AND EXPOSURE TO HEALTH MESSAGES

At the outset, it is to be remembered that the communication can play an important educative role if the media system can fulfill the information needs of the target population. For an effective and sustainable communication system, the messages communicated need to be understandable, target oriented, purposive and easily adaptable with relevance to the time and community concerned. There should be no gap between the perceptions and practices, objectives and accomplishments. The communication mechanism should not only be effective but also be of long lasting value. Every communication network has three components, the message designer, disseminator and the beneficiary. For the success of effective communication the well trained communicators are required to constantly and continuously interact with the groups. This may bring only desired changes among the target population. Moreover, the information needs could only be ascertained after reviewing the communication behaviour of the target population. That could be done periodically and contents and channels may be modified accordingly *(Rao, 1998)*.

In absence of medicine for cure, prevention is the most effective strategy in the fight against HIV/AIDS. In India, majority of the population is still unaffected. It therefore becomes imperative to continue intensive communication efforts that will not only raise awareness levels but also bring out behavioural change.

To have an effective communication system, it must be in the local languages, keeping in mind the social norms, cultural beliefs and sensitivities of the community. Above all, communication programs must give space for interaction, clarifying doubts, addressing misgivings on the issues of sex and sexuality which are not traditionally discussed openly in a conservative society.

In India, therefore development of appropriate, effective and sustained communication system to bring about changes in behaviour to prevent further infection is, of a crying need. Since the daily life of army men in a unit has bindings with time not akin to other population of the society, it is important to examine the possibility of exposure of such people to print or electronic media and their actual involvement. To disseminate health related messages to army personnel; there is a need to understand their time schedule in using those media. Media persons also can not ignore this very aspect particularly when it is said that important messages are normally transmitted at the time when the target group is not available to receive it. Let us look into the characteristics of effective health communication.

Characteristics of effective Health Communication

It promotes actions that are realistic and feasible within the constraints faced by the community. It builds on ideas, concepts and practices that people already have. Health communication to be effective its needs to be repeated and reinforced over time using different methods. It should be adaptable using existing channels of communication – for example songs, drama and story telling. Communication should be entertaining drawing community's attention. The language used for communication should be clear and simple with local expressions. The communication system should provide opportunities for dialogue and discussions to allow learner participation and feed back on understanding and implementation. There should be demonstrations to show benefits of adopted practices. For example in this case, use of 'condom' can be demonstrated to encourage the population to execute in practice.

Use of Mass Media

More and more people in the world have access to some form of mass media or other such as Television, Newspapers and Radio. Mass media are often used poorly to promote one way 'top-down' communication. However, it is possible to make effective use of media for the promotion of health by applying the guidelines described in earlier chapters, including understanding the audience,

pretesting the message and evaluating its impact. In this context the user of mass media has to ensure (a) how and in which way radio, TV and newspapers can be/should be used in army units to communicate health messages (b) how a media program regarding the concerned subject can be produced (c) how media can be influenced to publicize health education messages on AIDS/HIV to enable the community to grow awareness (d) and how mass media can be used as contact source with the community i.e. the army personnel.

Mass Media and its Effectiveness on Communication Behaviour

Mass media messages, tend to be general and are not always relevant to the needs of individual communities. It is also difficult to be selective and target one age group only. Unless there is a face to face communication, there is no direct feed back. However if carried out well, mass media has the advantage of being able to reach a large-audience rapidly which does not require infrastructure of field workers. Although many people prefer face to face communication – lack of time, shortage of field workers and difficulties of transport can make mass media the only realistic way of working.

Mass media are sometimes used poorly with a lack of audience resource, dull programs and inapplicable messages. In fact, well planned mass media,health education programme can achieve a great deal of sucess :-

Behaviour Change – When the behaviour is a 'one time' behaviour such as attending an immunization clinic, simple to perform or the community is favourly disposed, implement it and is merely requiring a trigger for action.

Agenda Setting – Bringing an issue to the public attention so that they begin talking about it raising it at the meetings.

Creating Favourable of Knowledge and Opinion – Media can provide specific knowledge about the issues that will influence felt needs of communications. They can provide a forward back ground for community based programs and health education activities at clinic.

Telling people about new ideas – media can make people aware of new discoveries on 'innovation's such as oral rehydration. Whether people will actually act on this information depends on the idea, its complexity and whether it meets a perceived need in the community.

Influencing Media – Can media be influenced for the purpose of useful practices on health matters ? Some one may not be in a position to prepare radio or Television programs, and feel that much what is described is not relevant to the needed situation. However making your own program is only one of many different ways of using media. Indeed, it can be easier, cheaper and more effective to encourage news papers, radio and television to voice on health issues, specially about AIDS/HIV awareness program.

Though for many reasons army population need not search to know about the journalists for coverage on health issues, the PR departments can always keep liaison with media and (a) suggest them of some messages on AIDS/HIV infection (b) Send them some leaflets etc as back ground support. Incase interviews are required of any personnel by them, they should be made available (c) some most important questions can be sent to be included in such quiz programs.

To influence media, the organization should basically bear in mind that AIDS related messages are to be given to the media, are news worthy and also one should ensure that the media should be informed about the latest score on the subject and exactly what is happening in the army as regards dissemination of information on AIDS/HIV infection, characteristics of effective health communication.

Using Media

Mass media is accessible to most of the people in the world. Mass media are often poorly used towards health education. However it can be effectively used by including understanding the audience, pretesting the message and evaluating impact.

Though in day to day culture of army unit life, mass media are extensively used, yet it may not be in an organized way to promote health education. So how radio, television and news papers can be best used to communicate health, is the mother of prime concern. Some guide lines need to be worked out as to how such media programs can be produced. Suggestions of ways how media publicizes the health education and health promotion work. Media should be utilized as a resource in building contacts with the community *(Shankar Chowdhury : 1998).*

Media Revolution

The society of India has undergone major changes in 1990s. Ability of people has increased towards acces to media. Many problems of visual literacy and unfamiliarity with conventions of films, television have disappeared as more people got exposed to different kinds of media.

For example in the context of this study radio along with television are the popular media for army personnel. Though it is used at times under constraints like non-availability of battery, obstruction of signals in thick jungles, defiles and caves, yet the local regional programs easily reach and are entertaining and educative.

In the 1980s the number of televisions doubled in developing countries. At that in Asia, Latin America and Caribbean became one in every 12 persons.

As the statistics signify that there has been a media revolution in 1980s, there evolved a gradual social changes among developing countries mainly in the communication aspects. Communication has been more accessible, versatile and attractive. It has been able to create transparency between the sender and receiver. The AIDS/HIV infection related messages are so important that the earlier it is communicated, the better was the proposal.

As the Literacy and Education increase in a society, so does the potential of print media such news papers, books and magazines.

Popular Media

While talking about communication a question normally arises what are the popular media ?

There are certain media which are traditionally established. The popularity of media will depend on certain factors :–

(a) Their entertainment value, (b) Their coverage of ideas and issues of universal concern, such as love marriages, honour, failure, success, gealousy, revenge, wealth, poverty, power, family and group conflicts and religion, (c) The fact that even though they are based on tradition they change and adapt to deal with new situations and incorporate the issues and concerns of the day.

Before dealing with different forms of folk media in more detail, let us consider some examples of different popular media.

(a) *The calypso* is a type of song that has become highly popular in the Caribbean, both through live performances, radio broadcasts and on records. The music has a fast popular beat and contain words that comment on current issues. They often criticize the govt actions and make fun of national institutions.

(b) *The Ram Lilas* – In India 'Ram Lila' take place every year in many villages. Members of the community participate in acting out scenes from Ramayana, the Hindu epic poem that describes the life of Lord Rama and his battle with evil in the form of demon king Ravana. The performances are often in the open air involving the whole community.

(c) *Ngonjera* is a form of written and spoken poetry in the local kishwahithi language, that become popular in Tanzania in the early 1970s. So two or three actors act out the poem which is often on political or social events. Media such as charts, photographs and real objectives are often incorporated. Poetry is so popular that many Sowahili news papers reserve a page for reader's poems.

(d) In the 1960s among the TIV people in Nigeria a new style of theatre, kwag-hir evolved, combing traditional and ritual elements with a story teller, acrobats, dances, puppet shows, stories and tales. In open air performances themes dealing with traditionalism and modernization are performed. The TIV people also use singing, dancing, music drama and story telling in their rituals, feasts and leisure activities to express their traditions. For many years the drum beats of 'talking drums' were used to communicate over hundreds of miles and many people today still understand this language. In their music, the rythms of the drum beats can communicate messages to the audience.

(e) In state of Kerala in Southern India trucks are elaboratly decorated with folk paintings and proverbs. The decarations vary from elaborate and intricate flower designs to characters from western cartoons.

(f) The medicos in Mexico are medicine men who set up stalls at markets and other public places and use ventriloquism, mind reading, snake handling and other arts to sell medical products. They are treated with respect by the community. The medicinemen communicate information about health in their performance.

(g) In west African towns and villages, important announcements are traditionally made by a town crier. Folk media that have used in health education include :

(i) Story telling – oral or written

(ii) drama – theatre as performance, participatory, theatre puppets.

(iii) songs – pop songs, Folk songs

(iv) pictures – art cloth designs

Though such traditional methods may not be adoptable for communicating health messages to army personnel, in a unit, story telling, pictures and songs can always be edited incorporating such messages *(John Hubley : 1993)*.

While composing any such media to administer them, it should be borne in mind that the message as intended should be conveyed in its true spirit. It should be simple and interesting, it should be short which are easy to understand and entertaining. In this context, AIDS being a disease with unfamiliar terminology, the best possible interpretation is required to be made while presenting any health related message. Associated with this are the social factors which are unwritten taboos on sex related messages. These are to be conveyed with cultural care and privacy respecting feelings of individuals and communities.

Since AIDS is a disease, which always links up with explanation of 'sex' and 'sexuality' and that these are not openly discussed in the society even today, lot of care and attention to be taken before administering any health related message to the people.

While discussing the popular media, the words and music of songs have a powerful effect on the emotion of human beings. Musicians carry great influence in a community and therefore songs can be used to rouse people to action.

In many countries like Uganda, Nigeria, Zaire there are popular songs which carry health messages.

In a nutrition project in Uganda, a popular ballad singer was asked to compose a song about Kwashiorkar and its prevention. The song is prepared, called 'kitoboro' was made available as a record and was a great success. Songs have been used in education of the public on AIDS in many countries and are particularly valuable in reaching young people.

One project in Zaire recorded songs about AIDS and installed cassette recorders on public buses to play the songs to the passengers.

Songs were also an important part of health education program directed at young people aged 13-18 years in 11 countries including Mexico, Peru and Bolivia. The message 'its ok to say no' was the theme of the campaign that was directed at reducing the incidence of teenage pregnancies.

Following initial research, it was found that the most important interest of the young people was music and the project produced two songs, one of each side of a record, with a colour record jacket which opened into an arrtactive poster.

The singers were carefully chosen to appeal to the young people, who accepted the main messages in their own lives.

Songs play an effective role in army community. Such songs carefully composed of health message will go a long way to carry the actual theme. As the living barracks of army units are provided with public address system, and during breaks and leisure hours songs are played as a matter of routine programme, such songs serve both the purposes of entertainment and education simulteneously.

Nature and Extent of Exposure to Mass Media

Initially an assessment was made to know as to how many of the respondents were exposed to TV and video. Was there any variation in the extent of exposure of the army personnel to TV and video by their rank? The quantitative findings have been presented in Table 8.

Table : 8 **EXTENT OF EXPOSURE OF THE RESPONDENTS TO TV**

RANK	NO ANSWER	NEVER	SOME TIMES	REGULAR	TOTAL
Officers	0 –	0 –	6 (37)	10 (62)	16 (100)
Junior Leaders	0 –	0 –	22 (95)	1 (4)	23 (100)
Jawans	2 (1)	4 (2)	143 (88)	13 (8)	162 (100)
Total	2 (1)	4 (1)	171 (85)	24 (11)	201 (100)

Figures in the parenthesis denote percentage.

TV is an important mass medium which has diverse role to play in the society. It is an effective tool of advertisement and it can mould consumer's behaviour largely. Table 8 shows that 100 percent officers and junior leaders watch TV programs where as 88 percent jawans are exposed to the same. It further shows that though junior leaders and jawans watch TV at a particular time, they can not make themselves available to TV programs on routine basis as per their wish and plan. So there is every possibility that any scheduled program of informative nature may not reach many soldiers directly because their attendance to watch that particular program can not be assured. On the other hand, an officer having more freedom of action can watch TV programs at any time even at his office. Among the army personnel, almost everyone prefers to watch TV program, more than any other type of entertainment. However, to many of them, timings appeared to be a major constraint. When 97 per cent of army personnel are exposed to TV at varying degrees some differences have been noticed in their time of viewing more particularly when they like to watch TV and when they actually watch it. An understanding of such differences may help to know what time of the day is more suited to army personnel for watching TV programs. The following table shows the distribution of the respondents by their time of watching TV.

Table : 9 **EXPOSURE OF THE RESPONDENTS TO TV BY TIME OF WATCHING**

RANK	EVENING	NIGHT	ANY TIME	TOTAL
Officers	7 (43)	5 (31)	4 (25)	16 (100)
Junior Leaders	19 (82)	2 (8)	2 (8)	23 (100)
Jawans	148 (91)	8 (5)	6 (3)	162 (100)
Total	174 (86)	15 (7)	12 (5)	201 (100)

Figures in the parenthesis denote percentage.

Table 9 shows that majority (86%) of the respondents watch TV programs at evening. Keeping in view their duty hours they found evening is the most convenient time for TV watching. Moreover, the evening programs of TV are considered more attractive and entertaining. These respondents out of their routine day to day life find time to watch such programs in the evening only. The daily working hours and duty schedule including night duty allotted to unit personnel stands in their way to watch TV anytime as they desire. It is rather the specified duty hours which determines the exact spare time that are and may be available to most of them for watching TV programs.

Officers watch TV as per their fair choice. As such, there is no specific bar, which restricts them to watch TV program at any time. However, only 25 per cent of them have been found to watch TV anytime. On the other hand only 9 per cent junior leaders and 4 per cent jawans watch TV anytime. Thus if the educative programs conveying health related messages are telecast at the evening, there is a possibility that a majority of the army personnel may be exposed to such messages. However, the problem lies elsewhere. The advertising houses may not like the idea to telecast health related educative messages during prime time of TV programmes for commercial reasons. The mass media communication can enable an individual to focus on various social issues. Such exposure provides them education and entertainment with variety. It also updates them with various national and international programs; subjects and issues as per their choice. Army personnel confined to border areas pass through a life with boundaries who get least chance to be exposed to media variety. But those posted at peace establishments and staying in cantonments get better media exposure through cable TV and radio in addition to some print media also. The visual medium or audio programs can be a suitable release mechanism for such group of people who feel burden of boredom in unit life. Visual media programs entertain them with dance, music and movies and it imparts them with the messages to make them aware about certain subjects of concern. Community Health Education is an essential program undertaken through audio and visual media as a matter of national policy. For army personnel such programs are of immense value.

While programs on health related matters are transmitted, topics on AIDS and HIV infection are often included to make people aware about such a fatal disease. However, the health related

messages disseminated through TV programs particularly on AIDS and HIV infection often do not appear all that interesting to the liking of an army man as compared to other entertainment programs. Since AIDS/HIV is an alarming disease, it concerns the whole society. Those belonging to 'high-risk' category like army personnel; need to look into this aspect more seriously. The role of TV in this particular sphere should always be considered to be typically important. It can be added in this context that television has emerged as a revolutionary medium in the world of mass communication. The television came to India as late as in 1959. It started as a part of All India Radio on an experimental basis. The UNESCO decided to grant $ 20,000 for setting up a pilot project to study the use of TV as a medium of social education, rural upliftment and community development. In this context TV has been considered as the prime and potent mass medium to disseminate health related messages to the society *(Chauhan, 1998)*

Despite advanced communication network developed along with the introduction of TV, the role of another medium i.e. radio is none the less important and attractive. Though audiovisual medium has its typical attraction and significance, the audio communication skill retains its unique role to play in the context of communication. Therefore, the study also enquires about the exposure of army personnel to radio as another communication medium.

Table : 10 **DISTRIBUTION OF RESPONDENTS BY THE TIME OR RADIO LISTENING**

RANK	EVENING	NIGHT	ANY TIME	TOTAL
Officers	2 (12)	2 (12)	12 (75)	16 (100)
Junior Leaders	6 (26)	3 (13)	14 (60)	23 (100)
Jawans	22 (13)	12 (7)	128 (79)	162 (100)
Total	30 (14)	17 (8)	154 (76)	201 (100)

Figures in the parenthesis denote percentage.

Table 10 shows that among the respondents there is as such no specific time for listening to radio. Radio offers more liberty of its use to a jawan suiting best to his opportunity and time, than any other media tool. While discussing about the TV program, it was observed that the army personnel enjoy TV programs mostly in the evening. In contrast, the situation is altogether different in the case of radio. For army men a radio set is almost an inseparable part of his personal kit like any other essentials. It has been observed that 80 per cent of army personnel own a transistor set. It is a commodity, which they can afford to own individually as a tool of entertainment. This apart, a transistor set is portable and does not require much space and effort to carry. Radio is such an item, which can be carried on pouches (part of army combat dress) while an army man moves from one place to another, or he is even at one place. Whether in peace or at war, a soldier finds a best friend in a radio/transistor. It provides him the variety of programs with an open choice of time and frequency. To operate a radio it is easy to switch on/off and a radio can be listened in any posture. It also does not occupy much space and it never becomes an awkward load.

Radio plays a vital role in generating social education. Radio programs of educative nature disseminated through AIR (All India Radio) help developing perception on many specific matters including those of health and diseases. Listeners of radio programs can also get some knowledge about AIDS and HIV infection and its preventive measures, if national programs on such diseases are centrally transmitted as a matter of policy. Since radio listening is regular among the army personnel, it is expected that this may help in growing knowledge and generating in them awareness about this particular disease through many such special radio programs.

According to some media experts, radio can be used in many different ways to educate the people about AIDS and HIV infection *(Hubley, Chowdhury and Chandramouli : 1993)*. These are through (a) interviews with local communities, (b) panel discussions, question answer with health workers and other listeners, (c) short spot announcements, (d) magazine programs with music and information, (e) short dramas on AIDS education themes built into 'Soap Operas' and (f) competitions where the audience is asked to send correct answers.

Present study shows that 90 per cent officers consider TV as the major tool of mass medium through which health related messages could be communicated effectively. As per their views the interpersonal channels can also be a potent source for disseminating health messages. On the other hand, about 75 per cent of junior leaders are of the opinion that alongwith TV, for the growth of knowledge on AIDS and HIV infection, interpersonal channels, could pay better dividends. About 68 per cent of jawans expressed their views in favour of both types of communication. Some of them considered that communication through daily lectures, briefings etc, could also meaningfully disseminate health-related messages in addition to those which are transmitted through audio visual means as a matter of policy. Such a media mix may help the receiver group to assimilate and register important health related messages in a better way.

Because of their daily commitments, most of the jawans have no time to go through newspapers. Therefore, question of going through health messages published in Newspapers in case of jawans is hardly applicable. It is the verbal orders, lectures, briefings etc, which make an easy impact on them about such health related issues/matters. They usually keep themselves busy throughout the day as per work schedule and do not find much time to go through such reading materials, even if they desire to do so.

As far as the sources of information are concerned, 90 per cent army officers have identified TV and various literature on AIDS and HIV infection as the best source to make people aware about the said disease, its causes and prevention. About 67 per cent junior leaders felt that periodic lectures and demonstrations by the medical officers to be the effective channel to educate the population about the disease. About 90 per cent jawans have also shared the similar view. It was suggested that such lectures should be conducted by the Regiment Medical Officers (RMO) for men folk and by lady medical officers for their wives. Interestingly, each respondent was keen enough to be administered with educational matters in the unit with the aim of achieving better awareness about AIDS/HIV concerning them and their families and children.

The study shows mixed reactions on the question of using TV merely as a source of programmed entertainment. Among officers, 81 per cent were in favour and 9 per cent were against using such an effective medium for entertainment purpose only. It has been observed that TV and magazines (including cheap porno type) are sources of entertainment to 81 per cent of the respondents. Among the junior leaders 75 per cent get them entertained with TV programs whereas the corresponding proportion of jawans was 89 per cent. In addition to TV for 85 per cent of jawans, gossip is another important and favourite source of entertainment for them.

It has been accepted by most of the respondents that TV programs are always constructive. Those can promote awareness by inculcating specific knowledge on health matters. The social responsibility of national TV programs to educate masses about AIDS and HIV infection, has been endorsed by 99 percent of officers, 93 per cent of junior leaders and 96 per cent of jawans. As per their perceptions we find that, TV programs can carry messages for health education effectively and usefully.

According to the views of 92 per cent of army personnel it is the mass communication system that intends to keep everybody updated with modern way of life including entertainment, politics, consumer market policies, share and stock exchanges, sports and games and several other matters. It also disseminates various health-related messages including news and views on immunization of children, causes of infection and prevention against AIDS/HIV etc.

Though the jawans form the grass root level of army organization, they however, lack requisite knowledge about their overall health observing various preventions. Therefore, there is a need to communicate more to them the messages related to health so that they can develop adequate knowledge about AIDS and HIV infection without any misconceptions, and can adopt all possible preventive measures to keep themselves guarded against further aggravation with this disease.

In the army unit under study a number of TV sets are found to be in use for the entertainment of jawans. In addition to such common arrangement, many jawans were found to possess their personal

transistor sets also. A sizeable proportion (94 per cent) of jawans stated that they entertain themselves regularly enjoying movies in 'defence cinema halls'. Among the jawans, they confirmed that only 10 to 15 per cent visit the city to see movies in public theatres.

These are major sources of entertainment available to the jawans and through these, they get exposed to the outside world of entertainment sitting in their unit lines, branches and bunkers.

Books, magazines, newspapers are also adequately stocked in unit libraries, information rooms for those who love reading. The sole purpose of unit Library and Information Rooms is to keep their unit life updated with current affairs and news providing them with enough scope to maintain reading habit during leisure hours. Present survey reveals that about 99 per cent officers read newspapers regularly. They also read different types of magazines and periodicals. Among the junior leaders 20 per cent read news papers regularly. The corresponding proportion of the jawans was only 12 per cent. Such a low percentage of reading habit obviously weakens the channel of dissemination of information through newspapers particularly to jawans and junior leaders.

As far as media exposure of army population is concerned, the younger generation of jawans are found relatively better exposed to mass media and are more keen to adopt modern ways of life than their senior colleagues. The low percentage of readership of newspapers and magazines among this group does not convey the meaning that they are least interested in print media. It is their nature of job, restricted availability of time for reading news papers, circumstantial lethargy grown out of physical exertion are some of the factors that do not allow them in developing reading habit, which needs more time and concentration. Therefore, they generally like to be entertained with the means which are quick and easy available. For example, TV serials, songs in TV and partly radio programs which can provide instant entertainment to them. In promoting health education among the army personnel, training kits like posters, flip charts etc can be used and be made available at the unit common place i.e. unit information rooms. The display of items of educational information. act as permanent impersonal source of knowledge for the unit personnel. The Education department of

army units are entrusted with the responsibility to develop and maintain a well stocked and rich information rooms in units displaying all information including that of diseases like AIDS and HIV which are of fatal and infective nature. Army as an organization equally extends facilities to all its members to grow reading habit, though they have many constraints as discussed above.

Most of the army personnel stated that they watch Indian doordarshan and other TV programs regularly. It was brought out by the respondents that official advertisements in TV on AIDS and HIV were rare or non existent. The disadvantage with print media in this regard is that some statutory instructions for adopting preventive measures on AIDS are mostly published in regional languages and do not carry message for the community of cosmopolitan population. The publications in English attract only few readers where as books, journals and news paper in Hindi or regional languages attract more subscribers' attention. This fact brings out the exact medium required to disseminate health education curriculum in units.

While identifying the sources of information received by unit personnel about different diseases it was understood that 50 per cent of them had received some information about AIDS/HIV from TV/Radio. Friends were the first source of information about AIDS and HIV for 27 per cent of the personnel. Another study among personnel of the Indian Navy however shows that 81.30 per cent of them came to know about AIDS and HIV infection through lectures and only 29.59 per cent through TV and radio. It is due to the fact that the said study was conducted in 1991 when the Indian media campaigns on AIDS were in their formative stage, and also TV viewing was not as popular and versatile in the Army as among the naval personnel.

Though the health related messages are communicated through TV advertisements, short plays, talks on TV and Radio, yet such messages are often legitimized and disseminated by the commanders at all levels through counselling and addresses. It has been observed that in educating the people about health related matters, interpersonal communication plays a major role. About 95 percent of

army people prefer to know about AIDS and HIV from face to face communication. It provides them wide scope of clarification, repetition and easy understanding. Above all interpersonal communication has more human touch and as such for a receiver it is easy to perceive and assimilate the messages transmitted from the source. Thus, interpersonal communication system is often found to be a successful medium for transmission of valued information. All army units have unique system of passing verbal instructions/orders on many matters including those of health and hygiene. While holding daily 'Roll Call' parade by the duty officer in a unit or conducting a monthly "Sainik Sammelan" by the Commanding Officer, messages on AIDS/HIV, infection often gets a priority among other points concerning the troops.

The interpersonal communication through "Sammelan" etc are unique of army life and it forms an integrated part of communication system in the organization. Such communication system is also utilized to carry health-related messages slowly among this population to develop knowledge about various subjects including AIDS and HIV infection.

To grow awareness about AIDS/HIV it is contextual to build up knowledge about this disease. Once specific knowledge about the disease is developed, exact perception will automatically grow to change and modify their behaviour pattern towards sex. This particular behavioural change may act as a full-fledged prevention method, which help to obviate further spread of this disease. So the important area identified in this regard is the knowledge, perception and behaviour as regards the AIDS/HIV infection which has been analyzed in the succeeding paragraph.

CHAPTER FOUR

KNOWLEDGE, PERCEPTION AND BEHAVIOUR ABOUT AIDS AND HIV INFECTION

It is presumed that health behaviour of a person is often influenced by his knowledge and perception about various diseases. Knowledge and perception are therefore considered as the preconditions for determining the health behaviour of an individual. In present study, the health behaviour of army personnel has been examined with particular reference to their knowledge and perception about AIDS/HIV.

What is Knowledge

Knowledge constitutes the motivating dynamics of institutionalized conduct. It defines the institutionalized areas of conduct and designates all situations falling within them. It defines and constructs the note to be played in the context of institutions in question. Infact, it controls and predicts all such conduct. Since this knowledge is socially objectivated as knowledge, that is, as a body of generally valid truths about reality any radical deviance from the institutional order appears as a departure from reality. *(Peter Berger and Thomas Luckmann, 1966).*

What is taken for granted as knowledge in the society comes to be coextensive with knowable, or at any rate provides the frame work within which anything not yet known will come to be known in the future. This is the knowledge that is learned in the course of socialization and that meditates the internationalization within individual conciousness of the objectivate structures of the social world.

Knowledge in this sense is at the heart of fundamental dilectic of society. It programs the channels in which externalization produces an objective world. It objectifies this world through language and cognitive apparatus based on language, that is, it orders into objects to be apprehended as reality. It is internationalized again as objectively valid truth in the course of socialization. Knowledge about society is thus a 'realization' in double sense of the word, in the sense of apprehending the objectivated social reality, and in the sense of ongoing producing this reality.

As social stock of knowledge is constituted, which is transmitted from generation to generation and which is available to the individual in everyday life. "I live in the common sense world of everyday life equipped when specific bodies of knowledge. What is more, I know that others share at least part of this knowledge and they know that I know this. My interaction with others in every day life is therefore, constantly affected by our common participation in the available social stock of knowledge. Social stock of knowledge includes knowledge of situation and its limits" *(Peter Berger : 1966)*. Having realized the definition of knowledge, the knowledgeability of AIDS/HIV is the area of prime concern of this study which is discussed now.

Knowledgeability about AIDS and HIV

In order to assess their knowledgeability about AIDS/HIV the respondents were asked whether they have heard the name of this particular disease or not. Interestingly the response score reveals that majority of them (90 per cent) have heard about the lethal disease called AIDS/HIV. The respondents, who have heard about AIDS/HIV infection, their sources of information were however not the same. About 9 per cent have learnt it from TV, 30 per cent from newspapers, 6 per cent from radio, 13 per cent from posters, 3 per cent from leaflet/pamphlets, 0.50 per cent from slides/films, 6 per cent from doctors, 11 per cent from senior officers and 14 per cent from seminars/lectures. The majority of army personnel thus first came to know about AIDS from newspapers and then from posters and other sources. So to make the respondents aware about AIDS and HIV infection newspapers had a definite and major role to play. The other mass communication media had certain positive but limited role in this regard. The seminars and lectures on the other hand have been

found somewhat effective in making the respondents aware about AIDS in general and its causes and preventive measures in particular.

A respondent was asked that since when he knows about AIDS/HIV and when did he first come across the term AIDS. That information was important in order to judge his initial state of knowledge about this killer disease and its present status. The findings reveal that only 4 percent of respondents came to know about this disease before 1985. On the other hand, about 85 per cent of them have heard about AIDS only during the decade 1985-95. Since mid '95 until date the corresponding proportion was only 9 per cent. This particular trend denotes that majority of army personnel became initially familiar with the pandemic disease called AIDS during the decade 1985-1995. They do not fall in the category of long standing knowledgeable persons and the proportion of army men having late knowledge about AIDS is not all that significant. The latter phenomenon urged upon to review the method of communicating AIDS related messages to the target population.

The abbreviated term AIDS is not simple and easy for comprehension. Many personnel do not know the exact meaning of the words AIDS and HIV. However, when among the officers 80 per cent were in a position to explain the actual meaning of the abbreviation, the corresponding proportion was 11 and 5 per cent among the junior leaders and jawans respectively. Thus the majority of the lower ranked personnel did not know the actual meaning of the word AIDS and could not make even wild guess as to what exactly those abbreviated words are meant for.

Knowledge and Familiarity

The respondents stated that none of them came across any victim of AIDS. Only 8 per cent of them reported that they have seen only HIV positive person in their units. Some of them confessed that their level of knowledge about the symptoms of the disease complex was so poor that they could not differentiate an HIV positive person and a normal unaffected person in the unit. Moreover, for many reasons and restrictions very few of them had the opportunity to come in personal contact with some HIV positive individuals within the military unit.

As it has been discussed in 'Profile' chapter, the discipline of unit life of army personnel is such that when a person reports to be suffering from any ailment he is immediately evacuated to Medical Information Room (MI Room) and he does not return to the unit lines till he is declared fit for duty by the MO (medical officer). So even if some one is detected as an HIV Positive patient, other members of the unit are not supposed to know it and may not be able to meet him till his further disposal. The one who is detcted as HIV positive, his colleagues stand limited chance to visit a patient of such diagnosis, even while he is awaiting disposal to any military hospital. Thus any possibility of acquiring knowledge about the disease from personal contact with an AIDS/HIV person is almost non existent for jawans because of the laid down channel of evacuation of patients, distance of hospitals from the unit lines, and confidentiality in medical follow up procedures maintained in the organization. Information on certain diseases if disseminated to troops, may affect their morale seriously. In their day to day life, it is appreciated detrimental if confidentiality on many accounts is not maintained, it may cause man management problems.

Specific Knowledge

A particular type of virus causes AIDS and it is known to 87 per cent of the respondents. Even when they do not have any fair idea about what is a virus, they can easily guess that some minute germs, possibly which cannot be seen with naked eyes, are responsible to infect any person with the virus of this lethal disease. About 65 per cent of the respondents know that an HIV positive person is a carrier of AIDS, and 61 per cent know it as a serological precondition of AIDS. A sizeable proportion of army personnel (38 per cent) is totally unaware of the exact medical causes that lie behind infection of AIDS. About 58 per cent of the respondents however know that an HIV infected person at a later stage ultimately becomes an AIDS patient.

These surveyed data depicts that among the army personnel, there is a dearth of knowledge about HIV infection and its ultimate manifestation. About 67 per cent of the respondents are rest assured that an HIVpositive person can easily infect others whereas 7 per cent do not believe so. Such a response score exemplifies the knowledgeability level of army personnel about AIDS/HIV and its causes of transmission.

Regarding treatment and care of AIDS patients, 81 per cent of the respondents believe that they can be treated and cured, whereas 6 per cent know it well that there is no cure of AIDS patient. Surprisingly 40 per cent of the personnel have no idea about the treatment and curative measures of AIDS. The knowledge score on clinical detection of HIV virus reveals that most of the respondents (90 per cent) know about the prescribed pathological procedures involved in it. The others are totally ignorant about any such test.

It was the general opinion of 82 per cent of respondents that an AIDS infected person needs personal care, psychological support and regular medical assistance. On the other hand 3 per cent had a diametrically opposite view, and 14 per cent expressed their absolute ignorance in this matter. The basic perception about the disease that it is not curable one is not known to a sizeable section of army population. The specificality thus lacks seriously. The methods of propagating proper knowledge about the disease appear to be inadequate. The available channels of information do not pass on all the messages with authenticity. If the basic fact that AIDS is a non-curable disease, is not clearly known to a respondent that will certainly delimit his concern and attitude towards this disease. Therefore, each individual needs to be well informed about the symptoms of this disease as early as possible to avoid fast spread of infection.

Symptoms

Every disease shows some symptoms in normal course unless the state of infection is asymptomatic. AIDS, being a syndrome, which enable any disease virus to grow sporadically causing ultimate end of the life of an infected individual, has also certain manifested symptoms. Medical detection of AIDS is normally done through observation of such symptoms. The present study shows that there is an urgent need to grow adequate knowledge about this particular syndrome and its manifested symptoms. Inadequate, incomplete, wrong and erratic perceptions about AIDS were quite common among larger number of army personnel (see table 11). About 22 per cent of them however knew about certain symptoms of AIDS. On the other hand, another 36 per cent contested the very symptoms otherwise specified against AIDS. There was hardly any general consensus about the characteristics of this disease among the respondents.

One of the known symptoms of an AIDS patient is his suffering from prolonged diahorrea which is confirmed by 30 percent of the respondents. Another 19 per cent do not consider prolonged diahorrea, as a symptom of AIDS, and a large proportion (50 per cent) of personnel was totally ignorant about such a symptom and its pathological relation to AIDS. Excessive or abnormal bleeding during menstruation is often apprehended as a manifestation of AIDS. However, when respondents were asked only 20 per cent of them affirmed the same, whereas 17 per cent negated it. Interestingly 63 per cent of the army men had no idea about the stated symptom and its causal association with AIDS.

Table : 11 DISTRIBUTION OF RESPONDENTS BY THEIR KNOWLEDGEABILITY ABOUT SYMPTOMS OF AIDS

SYMPTOMS	RESPONSE			
A Person With AIDS will show the following	**TRUE**	**FALSE**	**DON'T KNOW**	**NOT REPLIED**
Frequent Vomiting (F)	43 (21)	51 (25)	105 (52)	2 (1)
Prolonged Diarrhoea (T)	60 (29)	38 (18)	101 (50)	2 (1)
Heavy Bleeding during Menstruation in Women (F)	40 (19)	33 (16)	126 (63)	2 (1)
Repeated Attacks of fever (T)	122 (61)	15 (7)	63 (31)	1 (50)
Deafness (F)	15 (7)	63 (31)	120 (60)	3 ([illegible]
Extreme Weightlessness (T)	143 (71)	6 (3)	51 (25)	1 (·50)
Swollen Glands in the Neck (T)	46 (23)	46 (23)	107 (53)	2 (1)
Joint Pains (F)	59 (29)	38 (19)	102 (51)	2 (1)

Note : Percentage figures have been shown in parentheses. 'F' stands for False and 'T' stands for True.

It is important to note that 55 per cent of respondents had no knowledge or idea about different signs and symptoms of AIDS. That shows the level of their cognition about AIDS and its physiological manifestations. It seems that many of them were not aware of the disastrous end which this symptoms may lead to. Their perception about AIDS was somewhat casual and not very clear and complete. Many of them even had no hesitation to record smilingly their total ignorance about symptoms of AIDS.

Major Symptoms

It is a loss of ten percent of body weight within a short period, chronic diarrhoea persisting for more than a month, chronic fever for more than a month.

Major Signs

Diarrhoea is very common in people with AIDS. The diarrhoea is usually a clear and watery in nature. It is sometimes asociated with abdominal cramps and vomiting. Chronic diarrhoea leading to a significant loss in weight is the most striking feature of AIDS. This led to the disease being called 'slim' in Uganda'. Diarrhoea is often accompanied by persistent fever and night sweats.

Minor Signs

There are six mentionable minor signs of AIDS which have been recorded so far.

(a) persistent cough for more than a month (b) generalised itchy skin basins (dermitites) (c) Recurrent Herpes Joster (shingles) (d) Oral Candidiasis (thrush) (e) Chronic Herpes Simplex (f) Generalised enlargement of Lymph nodes.

The diagnostic diseases, kaposis sarcoma or crypto coccal meningitis, are sufficient by them selves for a diagnosis of AIDS.

Enlarged Lymph glands.

The lymph nodes or glands are an important part of the body's immune system and are located in various parts of the body such as under the jaw and neck, armpits and groin. An early sign of AIDS is often painless lumps or swcllings of at least one centimetre diameter in these lymph nodes. This is called "persistent generalised lymphadenopathy" or PGL. Lymph node enlargement can occur in other diseases such as mumps, glandular fever and tuberculosis *(John Hubley : 1995)*.

Oro - Pharyngeal Candidiasis (Oral Thrush)

A common sympton of AIDS is a white furry coating on the tongue and roof of the mouth and sometimes the vagina. This is caused by a yeast candida albicans. Candidasis is not ususlly seen in healthy people because their immune systems are able to resist the infection. It can be seen in bottlefed, ill babies and in debilitated elderly persons. In persons with a damaged immune system such as persons with AIDS, candidiasis can persist for a long time and can spread from the mouth to the gullet and lungs.

Chronic Herpes Simplex

Herpes simplex is a virus that produces sores-often called cold sores – in and around the mouth or in the genital or in rectal areas. In people with normal functioning immune system these sores are usually few in number, small in size and last only two to three days. In AIDS patients the sores are more severe and recur more often.

Recurrent Shingles (Herpes Joster)

Shingles is a viral infection which used to be seen only in older people or in those with weakened immunity. Now shingles is common opportunistic infection in younger people with AIDS.

Shingles begins as extremely painful rash with blisters, usually on the face, limbs or trunk.

Shingles on the face may affect the eyes, causing pain and blurred vision. It usually appears at the trunk or face and stops exactly at the mid line of the body.

Pneumocystis Carinii Pneumonia

This is common in AIDS patients from America and Europe. It is caused by a fungus that infects the lungs and results in a form of pneumenia. It appears as a persistent dry cough and as the infection spreads, the patient could develop a fatal pneumonia.

Diagnostic Diseases

Kaposis sarcoma

This is a cancer of the cells in the blood vessels or lymph system, which was very rare before 1980. It appears as dark (brown or purple) raised areas on the skin or in the mouth. It may also begin as enlarged skin nodules (lymph glands) which are not itchy or painful. The cancer can spread to internal organs of the body causing the enlargement of the internal organs or bleeding from the lungs or digestive tract. Kaposis sarcoma affects patients differently – some people have only mild complains arising from the apperance of the lesions, while others may become very ill as a result of the cancer.

Cryptococcal Meningites

This is caused by a yeast like fungus. Early symptoms include fever and mild headache followed by nausea, vomiting, headache and blurred vision. If untreated this disease is fatal.

Other symptoms found in AIDS patients

Tuberculosis (TB)

TB is another disease that can take advantage of a weakened immune system and develop in a patient. The symptoms are a persistent cough, loss of weight and increasing weakness, mild fever, sweating at night and loss of appetite. If some one has AIDS, he can also develop less usual

tuberculosis symptoms, such as fever without a cough. Tuberculosis can also infect the lymph nodes, especially in children – most often those in the area of the neck and shoulders.

In many developing countries TB is the most common opportunistic infection associated with AIDS. It is also a very important cause of death in people with AIDS. Many countries are experiencing a substantial increase in TB because of AIDS.

AIDS dementia complex

The HIV virus can pass the blood-brain barrier and damage the brain, spinal cord and nerves. The effect will depend on the part of the brain affected. Symptoms could be strange unusual behaviour and confusion. Other symptoms could be paralysis or uncoordinated movements.

AIDS-Related Complex (ARC)

This term was originally used to describe patients who did not fit all the rigid criteria in the initial case definition of the Centre for Diseases Control at Atlanta. With the W.H.O. case definition and the availability of tests for HIV1 and HIV2, it is a term that is being used less and less.

AIDS in children

HIV infection in children occurs mainly through two routes. Firstly, as explained in previous statements a HIV infected woman can pass on the infection to her urborn baby either before birth or at the time of birth. It has been estimated that between one third and one half of babies born to HIV antibody positive women are infected and will develop AIDS. Most of these children die by the age of five years.

A study shows that most children with AIDS are under five years of age and are infected from their mothers. The other group of children who has been found to have HIV infection is the one who receive repeated transfusions of blood or blood products for blood disorders such as haemophilia

or thalassemia. In addition to these routes, an older adolescent child may contract HIV through sexual intercourse.

Some babies must have become infected through breast milk but as described in the next chapters the numbers infected through breast feeding are likely to be very small.

A baby will carry his mothers' antibodies for the first 12 to 18 months of life. An HIV antibody test during this period will not indicate whether a baby is infected with HIV as a positive result might be due to the mother's antibodies to the baby before birth.

The transition from being infected to development of AIDS and death is much quicker with babies than adults and can take between two to five years.

However there is growing evidence that some children survive a little longer. The symptoms are similar to the major and minor symptoms described above. The child will grow slowly and show many childhood infections especially diarrhoea. Very similar signs may be seen in children who do not have AIDS; severe malnutritution can also lead to a damaged immune system.

The clinical case definition for children is still under review. It is important to confirm the diagnosis by testing the mother for HIV antibodies (although an HIV antibody positive mother does not always mean that the child is also infected). The W.H.O. has adopted a provisional case definition where a child is considered to have AIDS when it has two of the major signs and two of the minor signs (herpes is not included among the minor signs). For the purposes of the case definition, a positive HIV test on the mother is considered a minor sign.

Some vaccines used inimmunization contain live, organisms that have been weakened so that they do not, cause disease in a normal person. Some people have expressed concern whether it is advisable to give those immunizations to a child with HIV infection or AIDS. W.H.O. has recommended that all children should continue to receive the full range of normal childhood

immunizations including diptheria, polio tetanus, measles and mumps. Children with known or suspected, HIV infections are at increased risk of severe measles. The only exception is the BCG injection against tuberculosis. The increase in TB associated with AIDS makes immunisation against TB extremely important and W.H.O. recommends that BCG should be given to all children except when they show symptoms of HIV related illness.

Only very few respondents were clear and confident enough about the signs and symptoms of AIDS/HIV. It is observed that, often a person who knew about one symptom confidently did not know about the other. There are 50 to 62 per cent of army personnel who do not know anything about symptoms of AIDS. The level of knowledge found to be low about symptoms of AIDS and HIV infection is an obvious indication of poor Health Education System and required information available to the army staff. There is a need to enhance the knowledge level, which may help the respondents to be aware and cautious about AIDS and HIV infection. Unless symptoms of AIDS are known clearly and the perception about AIDS are thorough, it is difficult for the individual to adopt exact preventive strategies to counter its effects.

Transmission of the disease

Every virus of a disease has a set transmission paradigm, which follows a route typical for that particular disease. There is no deviation or alternate to this. The strategy to intervene transmission of the disease is normally worked out in a way to counteract the transmission system. AIDS also has a medium of transmission through which it spreads the infection from one person to another. Therefore regarding transmission of AIDS it is essential to know what are those common routes and how best they can be intervened before the tranmission. Where knowledge about the routes of infection of HIV is inadequate, it is difficult to adopt its preventive measures. Therefore, it is important to recover the wrong ideas and cultivate educational points to improve exact knowledge about AIDS through accurate and specific health education programs.

'AIDS virus gets transmitted through blood' is known to 96 percent of respondents (see

Table 12). They know that blood and blood products are the basic medium through which this virus spreads from a carrier to another. There are also 30 per cent of respondents who believe that HIV can spread through saliva, whereas 42 per cent do not endorse the same. About 65 per cent of the personnel know that HIV does not spread through sweat. However, 10 per cent of the respondents understand that sweat of an AIDS patient may infect others. About 40 per cent of the respondents believe that HIV spreads into a new born baby through mother's milk, whereas 32 per cent do not agree with this particular view. The remaining 27 per cent are not aware about this channel of transmission of AIDS.

While studying the sources of such infection each possibility has been considered and accordingly the surveyed data has been analyzed. A large number of personnel (90 per cent) strongly believe that HIV gets transmitted through vaginal fluid whereas 6 percent is found ignorant about the same. Even most of them are quite sure of the fact that sexual intercourse with an unknown partner can be the major contributing factor behind infection of AIDS. Being an adult, almost all respondents know what is vaginal fluid and how it helps transmitting AIDS. This particular knowledge helps the community members to be cautious against establishing illicit sexual relationship with unknown or an infected partner. The fear of unknown acts as a matter of blessing for the rest of the population, so far as this disease in concerned.

When asked about specific medium through which AIDS gets transmitted, majority of the respondents (89 per cent) replied that semen is the prime medium through which AIDS virus passes on easily. In contrast, 4 per cent do not believe that semen could be a medium of transmission of AIDS. Even when AIDS is commonly considered as a sexually transmitted disease, 51 per cent of army personnel know it well that urine has nothing to do with AIDS and it can not be a carrier of virus.

Table : 12

KNOWLEDGEABILITY ABOUT SOURCES OF AIDS INFECTION

Type of Sources AIDS Virus spreads through	State of Knowledge		
	YES	NO	DO NOT KNOW
Blood	192 (96)	1 (.50)	8 (4)
Saliva	60 (30)	85 (22)	56 (28)
Sweat	20 (10)	131 (65)	50 (25)
Breast Milk	81 (40)	65 (32)	55 (27)
Vaginal Fluid	180 (86)	7 (3)	14 (7)
Semen	178 (89)	9 (4)	14 (7)
Urine	45 (22)	102 (51)	54 (27)
Tears	13 (6)	130 (65)	58 (29)
Spit	44 (22)	113 (56)	44 (22)
Insect Bite	40 (20)	109 (54)	52 (26)
Used Utensils	43 (21)	118 (59)	40 (20)
Contaminated Water	32 (16)	127 (63)	42 (21)
Body Contact	22 (11)	142 (71)	37 (18)
Used Garments	33 (16)	132 (66)	36 (18)
Any Other	02 (1)	34 (17)	165 (82)

Note : Figures shown in the parenthesis denote percentage.

Table : 13

GENERAL KNOWLEDGEABILITY OF THE RESPONDENTS ABOUT AIDS

Knowledge Items	State of Knowledge		
	YES	NO	DO NOT KNOW
AIDS is an infection caused by a germ (virus)	174 (87)	3 (1)	24 (12)
It is killer virus	170 (89)	7 (3)	14 (7)
HIV positive is carrier of AIDS	130 (65)	6 (3)	65 (32)
HIV positive is pre-warning of AIDS	121 (60)	5 (2)	75 (37)
There is no treatment of AIDS	163 (81)	11 (5)	27 (13)
HIV positive can infect others	134 (67)	14 (7)	53 (26)
HIV positive does not show symptoms straightway	114 (57)	7 (3)	80 (40)
HIV positive patients become formal AIDS patient subsequently	115 (57)	11 (5)	75 (37)
Special blood test can detect HIV positive	181 (90)	1 (·50)	19 (9)
For infected person regular blood test and counselling is required	165 (82)	6 (3)	30 (15)

Note : Figures shown in parenthesis denote percentage.

From the knowledge score (see Table 12) it evidences that 65 per cent of the army personnel know that tears and spit are not the media of transmission of this disease. Insect or mosquito bite does not cause any transmission of HIV from an infected person to another and it is known to 54 per cent of army personnel. Interestingly, 20 per cent army men still believe that insect bite can transmit HIV since the virus easily travels through blood. However, a large percentage of them are quite confident that insect bite could not be an agent of transmission of this virus.

Used utensils of an AIDS infected patient are not suitable media to carry such virus so the same can not be instrumental in spreading this disease. While 59 per cent of the respondents opined the

same, another 21 per cent have expressed opposite view. They are of the opinion that utensils used by AIDS patient are to be kept separate because those may cause infection. Water is often considered as the most susceptible medium for many waterborne diseases. It is only through water that many diseases spread quickly. However, 63 per cent of army personnel understand that AIDS is not a water borne disease, and its virus can not spread through water. On the other hand, in the minds of 16 per cent of this population there is still an apprehension that water used by an AIDS victim must be avoided otherwise it may cause infection. This apprehension is related to use of a swimming pool by an infected person.

How far any simple body contact between an AIDS victim and others can cause infection is quite a common question in a society today. Findings show that 71 per cent of the respondents do not agree with the view that AIDS spreads through simple body contact, whereas 10 per cent do not endorse such an idea. As a matter of daily usable item another common query may arise in the minds of people whether HIV gets infected via garments used by an infected agent. About 65 per cent of the personnel know it well that the garments used by an AIDS infected person do not carry germs. But in the views of other 21 per cent, the AIDS virus can easily pass through the garments of an infected person; therefore, such garments are to be kept separate.

It is seen (Table 13) that in terms of the level of knowledge about AIDS the majority of the respondents are found to be quite afraid of AIDS/HIV. Moreover, there is high degree of incomplete knowledge and misinterpritations about the disease, its symptoms and medium of transmission, which need to be clarified through expert health educationists. So a well designed health communication plan may help them with specific and complete knowledge to grow exact awareness about AIDS.

Mode of Transmission of AIDS

There are many modes through which HIV positive virus is transmitted. For example unprotected sexual intercourse, infected mother to foetus, sharing of needle and razors, transplantation of body parts are few very common examples of such modes.

Table 14 shows the knowledge score of the respondents about transmission of AIDS/HIV. By now we know that AIDS virus is transmitted through unprotected sexual intercourse. It is strongly supported by 42 per cent of the respondents whereas 13 per cent do not agree with the said fact. Among this selected army population 16 per cent believe that dry oral kissing helps transmitting the virus. But a chunk of the population (61 per cent) on the other hand, however think that from dry oral kissing there is no chance of getting infected from AIDS/HIV. Any intimate oral kissing may cause infection, which is approved by 60 per cent of the respondents.

Table : 14 **KNOWLEDGEABILITY ABOUT TRANSMISSION OF AIDS/HIV**

Medium of Transmission	Knowledgeability		
	YES	NO	DO NOT KNOW
Protected Intercourse	84 (42)	27 (13)	90 (45)
Oral Kissing (Dry)	13 (6)	123 (61)	65 (32)
Oral Kissing (Intimate)	120 (60)	19 (9)	62 (31)
Infected Pregnant Women	166 (84)	7 (3)	28 (14)
Using Public Toilet	47 (23)	113 (56)	41 (20)
Sharing Needle	181 (90)	2 (1)	18 (10)
Blood Transfusion	178 (89)	5 (2)	18 (9)
Mosquito bite/Bed Bugs	64 (32)	100 (50)	37 (18)
Sharing Shaving Razor	145 (73)	21 (10)	35 (17)
Being Sneezed	30 (15)	130 (65)	41 (20)
Sharing Cups and Plates	42 (21)	124 (62)	35 (17)
Sharing Same Room	31 (15)	130 (65)	40 (20)
Embracing	29 (14)	133 (66)	39 (19)
Shaking Hands	16 (8)	150 (75)	35 (17)
Casual Contact	21 (10)	142 (71)	38 (19)
Through Air	12 (6)	151 (75)	38 (19)
Swimming Pool	31 (15)	128 (64)	40 (20)

Note : Figures shown in the parenthesis denote percentage.

About 83 per cent of the respondents know it well that an infected woman can transmit the virus to the foetus. This is not known to 13 per cent of the people and another 3 per cent when told do not believe so. The majority (56 per cent) of the respondents is of the view that HIV or AIDS infection is not transmitted through public toilet. However, other 23 per cent perceived that HIV infection might occur through public toilets/urinals. It is encouraging that 90 per cent of the army personnel know it well that sharing of unsterilized needles may cause infection of such virus. So they are likely to remain careful while being treated in military hospitals, health care centres and should advise their families and children to demand sterilized or disposable syringes when being administered with injections.

Blood transfusion is an essential medico pathological means to save lives of an injured/surgically managed patient by ensuring artificial blood transfusion. Since a recipient of blood receives it from another source or person, it is essential to know it beforehand that the quality of the blood, is free from contamination. About 89 per cent respondents have clear conception that through untested transfused blood the HIV can easily pass on from the carrier to the recipient of blood. In this context the next question may arise whether mosquito bites or bite of bed bugs may be possible causes of spreading infection of HIV? As per surveyed response score it shows that 32 per cent strongly believe the statement, when 50 per cent have ruled it out totally. The remaining 18 per cent have rarely thought about the matter.

In army unit life, the barbershops provide shaving and haircutting facilities to all its resident members and each unit is organized to run barbershops. With the passage of time and change of individual taste, most of the army personnel now a days prefer to keep a personal razor set in their shaving kit for daily use. Though the service of both hair cutting and shaving are available at unit barbershops, the army staff normally visit barbershop for hair cutting only. Very few of them avail the facility of shaving in barber shops in the morning. However, sharing of razors among troops, is not something new. The majority believes that sharing of a razor set may be a cause of transmission of HIV. Among the respondents, 72 per cent are aware that the common razors, which are unsterilized, may cause transmission of this virus easily. On the question of using utensils of an infected person 62 per cent are sure that the utensils used by an AIDS patient do not infect others who use the same utensils after wash.

The army personnel of a unit in general, live in barracks which are further divided into dormitories and rooms. So it was asked whether sharing of a room with an identified AIDS patient is risky or not. About 15 per cent of the respondents feel it quite risky to stay with an AIDS infected colleague. On the other hand, another 65 per cent (the majority) has clear knowledge about the disease who expressed no hesitation to share a room with an AIDS patient. Similarly according to the perception of 66 per cent of the respondents (when asked) said that any embracing does not cause transmission of HIV where as other 14 per cent stated opposite. Similarly shaking of hands with an infected person cannot cause transmission of infection and it is believed by 75 per cent of the army personnel. It is also felt by the majority (71 per cent) that any casual physical contact with an HIV positive or AIDS victim cannot cause any infection. Another 10 per cent however believe that it is risk prone and thus they prefer to avoid coming in physical contact with an AIDS infected person. About 64 per cent of the respondents feel that AIDS virus cannot be transmitted from a common swimming pool. In contrast, 15 per cent are of the opinion that an AIDS patient should not be allowed to use a common swimming pool, otherwise others may get infected from the water of the same pool polluted with HIV. A negligible percent of the respondents are not sure whether HIV can pass through swimming pool water and infect others or not. A similar query has been analyzed earlier. Whether HIV can transmit through water or not. It may be drinking water, other consumable water or the huge pool of it at swimming pool.

If modes of transmission of AIDS are known to all with exact knowledge, it is evident that all such people can adopt proper preventive measures against such infection. Any inadequate or incomplete knowledge about this disease may lead to adoption of wrong preventive measures which will be counter productive. By virtue of their better education and freedom of action, the officer community is found to be well acquainted with the symptoms, modes of transmission and the preventive means of this pardemic disease. Whereas the knowledgeability score of the junior leaders and jawans (OR) does not match proportionately. Thus, it is observed that a gross difference lies between the officers and other ranks in their perception about AIDS and HIV infection. With activation of effective intervention policy, such gap needs to be minimized.

As it is a dangerous disease it is essential to study its 'risk factor'. The study of risk factor of this disease brings out involvement of some typical professions which are considered to be prone to infection of AIDS/HIV, in comparison to other professions.

Detection of Risk Factor and Agents

As far as the professional risk factor is concerned, it is necessary to identify the categories of people who are quite susceptible to AIDS/HIV. Sexual intercourse is often considered as a prime cause in transmitting HIV. Homosexuality or Lesbianism are very susceptive sexual liaison responsible for transmission of HIV. Table 15 depicts that among the army personnel 64 per cent viewed 'homosexuals' as those people who belong to 'high risk' category and they can transmit AIDS easily. Women having sex with women are called lesbians. About 31 per cent of the respondents expressed that the 'lesbians' are in 'high risk', 14 per cent in the 'low risk', and 11 percent in the 'no risk' category. Interestingly a large number of personnel (43 per cent) are totally ignorant of both 'homosexuality' and 'lesbianism' as an act of sexual liaison. Unlike other countries, a common person finds no proved circumstance – which may make him to believe such fact. Mostly people are found to display expression of hatred when explained.

Table : 15 KNOWLEDGEABILITY ABOUT RISK FACTORS

Risk Caused by	High Risk	Low Risk	No Risk	Do Not Know
Men having sex with men	129 (64)	16 (8)	3 (1)	53 (26)
Men having sex with women	59 (29)	75 (37)	21 (10)	46 (23)
Women in sex with women	63 (31)	29 (14)	22 (11)	87 (43)
Prostitutes	151 (75)	9 (4)	1 (.50)	40 (20)
IDU	137 (68)	13 (6)	5 (2)	46 (22)
Dentists	17 (8)	68 (34)	71 (37)	45 (22)
Doctors/Nurses	11 (5)	68 (34)	75 (37)	47 (23)
Blood Donors	140 (70)	14 (7)	3 (1)	44 (23)
Foreigners	124 (62)	19 (9)	6 (3)	52 (26)
Soldiers	68 (34)	55 (27)	35 (17)	43 (21)
Truck Drivers	128 (64)	23 (11)	5 (2)	45 (22)
Slum Dwellers	126 (63)	24 (12)	6 (3)	45 (22)

Note : Figures shown in parenthesis denote percentage.

Among the respondents, 29 per cent considered that even normal sexual relations and intercourse might involve 'high risk' in transmission of HIV. On the other hand, 37 per cent believe it as a 'low risk' factor and 10 per cent thought that there is 'no risk' of being infected from HIV and AIDS out of normal heterosexual relations with own wife. With reference to the question of promiscuous sex relations as a contributing factor of HIV transmission, 75 per cent of army personnel believe that a 'sex worker' invariably belongs to the 'high risk' category, whereas only 4 per cent feel such a worker falls into 'low risk' group.

Though 'intravenous drug use' is considered as a clandestine act in the civil society, army personnel have least knowledge about such evil and its consumers. However, when probed into the matter 68 per cent replied that intravenous drug users belong to the 'high risk' category and through them HIV can easily spread. Only 6 per cent ranked them in the 'low risk' category.

Dentists by profession get themselves frequently exposed to oral regions of different dental patients. However, 33 per cent of the respondents thought that there is least of risk on the part of the dentists to be infected from HIV positive victims while attending dental surgery of such a person/ persons. However, 8 per cent thought that dentists also belong to 'high risk' category. Similarly, when 5 per cent of army personnel considered doctors and nurses as persons belonging to 'high risk' category the others did not think so.

As explained earlier, blood donation and particularly transfusion of blood is one of the needed facts of life, when some one needs to be cured through surgical management. Among the respondents, 70 per cent are of the view that blood donation and transfusion of blood involve 'high risk' as far as infection of HIV is concerned. Similarly, 62 per cent identified that foreigners as individuals should be categorised in 'high risk' so far as this disease is concerned.

Any army in the world, is represented through a sizeable population of such country. Many social scientists have viewed them as to be the population who comes under the 'high risk' category,

whereas 17 per cent feel soldiers cannot be the carriers or agents of HIV. Long distance truck drivers, because of their typical work schedule and mode of life, tend to be leading a promiscuos life and are out of such group about 64 per cent of the respondents believe this. A similar proportion of respondents feel that slum dwellers are the people who also belong to the "high risk" category. A sizeable proportion of the respondents is aware of promiscuous habits of truck drivers and slum dwellers. They are of the opinion that through such illicit sexual intercourse solicited by these category of people, the dimension of infection from this disease enlarges.

While studying AIDS as a disease, its cultural construction has to be known first. Unlike many, the Indian society has a concrete value based cultural heritage born through centuries. As Mahatma Gandhi has said that sex can not be eradicated but may be controlled, there are similar teachings by various 'gurus' on this. In Indian society sex is controlled through value based motivation. Mahatma Gandhi said *"Bramhacharya"* i.e. administration of self control of sex is 'abstinance' – which in normal course is manifestation of control of sexual desire. The term is not unknown to Indians, which used to be taught in schools from vedic ages. It's basic culture is related to sex and sexuality. Man as any other possesses it as part of the instinct. The sexual urge, a biological phenomenon which is not bound by gender but it is a social construct. The propensity to solicit sexual desire is common to both masculine and feminine gender. Since it can not be eradicated from human body, it is within the scope of reasonable control. Through growth of exact knowledge regarding sex and the disease, healthy practices can be formed. Thus healthy practices will further enable an individual to control such instinctual demon. Automatically the chance of infection will be controlled. It is essential for each sane human being to know and understand this cultural construction which will help them to protect against such infection, saving the disaster of the society in the long run.

As part of the design of infection of AIDS shows that it is most commonly spread by having used unsterilized injections and having indulged in 'unprotected' sexual contact with an infected partner. The virus can enter human body through the tract of the vagina, vulva, penis, rectum. *(UNAIDS Fact Sheet, May, 2001)*

Since the infection gets transmitted through direct contact of 'blood' or 'blood products', it can be transmitted between 'homosexuals' and 'lesbians' one being affected in each case. The 'homosexuality' is a gay subculture as *Anthony Giddens (1989)* says in his book *"Sociology"*. It is not distinctively associated with any form of psychiatric disturbance. 'Homosexuality' means sexual act between two males or a male and a female where the penis of the male is inserted into the anus of either the male or the female. In case of 'Lesbians' it is the sexual act performed by two females, which does not involve in any such penetration as may be between 'gaymen'.

The biological construction of human tissues and muscles are such that the inner walls of vagina and the anus are different in terms of structure of cells and its strength. The tissues of anal inner walls are more delicate, less elastic and prone to tearing off under stress, where as in case of vaginal tract the tissues of inner walls are stronger, stretchable and less susceptible to injuries. In case of 'homosexuality' the chances of permeability of the virus through such injured tissues is easier and faster than in case of sexual act between two 'lesbians'. In this case since there is no copulation and penile insertion, there is no chance of any injury to the vaginal inner walls, no bleeding and thus least chance of passage of any virus.

So the mode of transmission of the virus is not the same in case of 'homosexuals' and 'lesbians' for above reasons.

There had been continuous research on the drugs for AIDS as a major disease, in American and other countries. Such efforts are in progress in many developing countries also. Out of these, Brazil's AIDS program has become a model for developing countries around the globe. In absolute terms Brazil has a high number of registered AIDS cases as 210,000 but it has managed to keep HIV infection to less than one per cent of her population with aggressive prevention and education process. Brazil has also stood up to the international pharmaceutical industry, producing eight of the twelve drugs used in the anti AIDS cocktail and distributing them free of charge to patients.

Doctors without Borders, or Medicines Sans Frontiers, plan to work with Brazil to transfer the technology and training needed to establish similar programs in hard hit countries.

Pecoul (2001) said "countries like Argentina have the capacity to develop their own projects, while many nations in Africa and Central America have to pool resources to develop regional anti AIDS programs".

In the mean time, Doctors without Borders aim to buy AIDS drugs made by Brazil's state laboratory Far-Manguinbos, though Pecoul stresses it will not be a commercial operation.

Under the planned agreement, Brazil would sell medicines at cost, *Pecoul* said.

Doctors without Borders also buy generics from other companies like India's Cipla and would continue to buy the medicines offered at lowest prices.

"Today is just a letter of intent and in coming months we will try to turn it into concrete support" *Pecoul* said.

Doctors without borders currently operate in 29 countries, half of those in Africa. Brazil has become a leader in the fight, pressuring the International drug industry to lower prices or face competition from cheaper Brazilian made drugs *(Medline search Doctors group to export Brazil program, drugs, Sept 2001).*

Application of Knowledge in preventing AIDS

It is expected that along with the advancement of knowledge on AIDS there will be better awareness about this particular disease and that will ultimately influence one's behaviour and attitude towards AIDS and HIV infection. So when the army personnel were asked whether they would like to undergo screening of blood for HIV test, 96 per cent agreed to opt for such a test. Similarly, 90 per cent said that they would also allow their families to go for such a test. The facility for AIDS

screening test is available in Military Hospitals and it is known to 94 per cent of the respondents. Thus, almost all of the personnel are aware of the fact that there is a provision for a special serological test of blood in army hospitals and such provision is meant for detection of HIV positive patient.

In our society often an HIV victim is stigmatized as a guilty person. When such question was included in survey, it came out that among the army personnel 62 per cent believe it, whereas another 30 per cent do not admit it as true. They do not find any logic to label an AIDS victim or HIV positive person as 'guilty' and or to be an evil person in the eyes of the society. When it was asked whether an AIDS infected person should be treated like a criminal and to be kept in police custody, 61 per cent did not endorse the proposal of treating an AIDS victim in such a harsh way. However, another 33 per cent strongly agreed with the view and suggested that such a victim must be kept in custody otherwise the AIDS virus may spread easily.

Though AIDS spreads through a typical virus, one can always adopt preventive measures against its spread. There are chances of getting infection by default of circumstantial compulsions and accidents as well. It is known to many respondents that AIDS is transmitted through infected/used syringes/needles and transfused blood or blood products, which the recipient may not anticipate in advance. In this regard, a sizeable section (31 per cent) of army personnel who think otherwise. Therefore, it is mostly the circumstances, which make such persons a victim of this disease. When it was asked to the respondents, 38 per cent endorsed such a view whereas 53 per cent conceded with the fact that infection from HIV/AIDS cannot be a circumstantial manifestation alone.

AIDS is known to be a fatal disease and 55 per cent of the personnel are somewhat afraid of AIDS and its victim. However, another 39 per cent do not express any such anxiety and fear. Any individual knowledge about AIDS needs to be shared with others for verification, clarification if any, and for further dissemination to others. The majority (91 per cent) of the army men accepts it. Moreover, 82 per cent, of the personnel strongly felt that health education should be made compulsory

which will make them sufficiently aware about AIDS and its prevention. The pace with which such infection wave is engulfing the human race its fast growing rate can only be dissipated if knowledge and awareness attain relatively faster speed.

Use of 'Condoms' is considered as a preventive measure against sexually transmitted diseases including AIDS, by 77 per cent of the army men. The remaining proportion of respondents however did not agree with the same. According to 74 per cent of the personnel, it is better to go through necessary blood test before marrying an unknown person/girl. That may help them to detect the presence or absence of HIV in the serum of prospective spouses. In the context of sexual behaviour, when it was asked whether pre martial sex relation is good or undesirable, 21 per cent of the army staff replied that it is good, whereas 57 per cent considered it as a bad habit and the rest were found somewhat indifferent in this matter. Majority (89 percent) of the army personnel is of the opinion that to keep oneself free from infection of HIV/AIDS, a person should avoid promiscuity and remain satisfied with single and known sex partner. Moreover, it has been suggested by 86 per cent of the respondents that a carrier of AIDS needs to avoid sexual relations with any body. Otherwise, that may cause transmission of such a virus easily.

The knowledge, perception and behaviour of army personnel about AIDS and HIV infection also need to be examined in the context of their organizational environment where they live and work. The army personnel undergo a routine medical check up by the army doctors. It has a well-designed health management organization and adequate medical facilities are available in all units. Majority of the respondents knew that AIDS is a sexually transmitted disease. The propensity towards promiscuity among them is a professional aggravation of habit, which has also been reported by 73 per cent of the respondents. About 62 per cent of the respondent believe that a sizable section of army personnel visit professional sex workers for enjoyment and sexual outlet. When it was asked whether they want sponsored brothels to be located near the units, 82 percent army men vehemently opposed the proposal, while a negligible section endorsed it.

In army camp life consumption of liquor often stimulates some of them to get involved in illicit sexual act, such tendency has been noticed particularly among those living as single. About 42 per cent of the army men supported this fact whereas another 31 per cent did not find any logic against such an observation. Thus, 26 per cent of personnel suggested that the official distribution of hard drinks among the army personnel should be stopped immediately while other 59 per cent asked to maintain status quo in this matter. The majority of opinion was that, issue of hard drinks being certified by medical authorities has something to neutralize the effect of fatigue of troops. So there is no need to discontinue it.

In the unit under study, every second person was in favour to make ELISA test compulsory for all the personnel as a matter of policy and suggested making sex education obligatory. A sizeable section (86 per cent) of respondents suggested that exhaustive education on AIDS/HIV should be given to the army personnel. That will help them not only to know about the causes of such a disease but also enable them to adopt required preventive measures against it. They felt, once the required knowledge is developed, their attitude, perception and behaviour towards this disease will automatically change.

When the respondents were asked whether they have any hesitation in donating blood, out of fear of AIDS, 62 percent replied that they have no fear and they will continue to donate blood whenever it is required. However, another 21 per cent of army staff were somewhat apprehensive about this matter. Syringe is the only instrument, which is widely used for application of injection. Used and unsterilized syringe is likely to carry AIDS germs/virus from one person to another. The army population in general is found quite aware of the fact that blood and blood products are the major medium through which AIDS virus is transmitted easily from the carrier to others. Thus, majority of them (88 per cent) know it well today that disposable syringes need to be used while taking any injection and also for blood testing. They confirmed that it is already being followed in the army clinics and hospitals to safeguard the population against transmission of AIDS. A higher percentage of army personnel is not in favour of establishing any sexual relations with some one

who is suffering from AIDS. However, 55 per cent believe that there is no harm in having sex with such an AIDS patient if 'condom' is used. It shows the variation in knowledge and perception about the disease.

A large number (83 per cent) of respondents identified visiting of 'professional sex worker' as one of the major causes of being infected from AIDS. They thought that it is better to avoid going to such places to satisfy sexual need. Similarly, quack dentist is also identified as a risky agent in transmitting virus of AIDS. Therefore, 76 per cent of the respondents avoid visiting them.

Due to inadequate knowledge about HIV and AIDS, 46 per cent of respondents are found somewhat scared to touch a bleeding patient/person; whereas 33 per cent are free from such a fear. Blood is a medium through which HIV virus easily spreads. Therefore, any purchase of untested blood from private clinic is considered not safe enough for transfusion and it is believed by 81 per cent of the respondents. More or less similar proportion of army personnel suggested that before any blood transfusion, it is necessary to know for certain that the blood is free from HIV.

The state of knowledge, perception and behaviour of army personnel about AIDS and HIV infection has been discussed in preceding sections. It is assumed that the people under study are likely to be guided by their acquired perception about the said lethal disease. Through this, they will adopt possible preventive measures to protect themselves against any infection from AIDS.

Thus keeping in view the level of knowledge of this particular population it is advisable to introduce most effective prevention strategy to ensure resistance against further spread of this disease. It has been observed that knowledgeability of the army personnel about AIDS and HIV infections is not very satisfactory. A large proportion of respondents (20-49 per cent) is not aware of the disease at all. Even among the respondents (50-55 percent) whose knowledge about the disease is found inadequate and disjointed. Their perception about AIDS and HIV is not specific. The origin of the disease, its routes of transmission, symptoms and risk factors are not always clearly understood

by them. Such a level of cognition is detrimental to such large group of people, because they are mobile and circumscribed community and among them the possibility of transmission of HIV may become vigorous because of such state of knowledge and awareness.

The primary aim of any health education program is to develop a thorough knowledge base on preventive measures of all diseases. Health education has the potentiality to grow awareness through various aspects of health related to AIDS/HIV. Keeping in view socio cultural constraints of army life the preventive measures which are essential to be adopted by them to check and stop further infection of this disease has been discussed in the succeeding chapter.

CHAPTER FIVE

PREVENTION OF AIDS/HIV ADOPTED STRATEGIES AND SOCIO CULTURAL CONSTRAINTS

There is a proverb "Prevention is better than cure". The saying appears quite relevant in the context of AIDS and HIV infections particularly when there is no cure of such a pandemic disease. To counter AIDS epidemic, the W.H.O. introduced a special preventive program on AIDS and HIV infections delineating the following preventive strategies/measures : (a) Prevention of sexual transmission, (b) Prevention of transmission through blood/blood products, (c) Prevention of transmission through piercing instruments, (d) Prevention of prenatal transmission, (e) Prevention of HIV vaccination when available, (f) Reduction of HIV on individuals, groups and societies through health education and counselling.

Taking cognizance of the aforesaid directives of W.H.O, the Govt. of India also launched the National AIDS control program in 1987 and within a year since the first detection of HIV infected person in the country *(ICMR, 1992)*. The program embodies surveillance, screening of blood/blood donors, and health education and information as its three major components. Initially, the program was introduced in four states. The states were Maharashtra, Tamilnadu, Manipur and West Bengal, which recorded high prevalence of HIV. Activities under this program were later expanded, and a plan for a period of five years was framed. A National AIDS control organization was founded in July 1992 with an aim to prevent and control AIDS and HIV infections. The specific strategies and measures adopted by the AIDS control organization in India are as follows : (a) Strengthen program management, monitoring, review and evaluation, (b) Surveillance and research, (c) Information, Education, Communication (IEC) and social mobilization for prevention

of HIV transmission through behaviour, (d) Control of STD, (e) Condom programming, (f) Blood safety, and (g) Reductions of impact of HIV/AIDS with the help of counselling.

Strengthening Program Management

For operational purpose, four coordinating bodies have been formed at union level. A National AIDS Control Committee representing all ministries, selected private organizations and non government organizations (NGOs); a board of AIDS control from high level officials of Ministry of Health and Family Welfare to oversee and frame policy, a National Program Coordination Team to implement program activities; and a National Technical Advisory Committee to provide technical support to the program.

Surveillance and Research

A targeted surveillance program has been worked out to monitor development and spread of the HIV/AIDS epidemic with a view to generate necessary information systems specially designed for prevention and control of this particular disease.

IEC and Social Mobilization

This program envisages prevention of AIDS/HIV transmission through all known routes. It comprises of media campaigns, utilizing standardized messages, targeted interventions for high risk groups, collaboration with and support for NGOs, social mobilization, training, operational research, evaluation and monitoring.

Control of STDs

As a part of STD control programs, major emphasis has been given to diagnosis and treatment of high-risk groups in major urban areas. A plan has also been taken to upgrade STD referral centres and revitalize clinical services through STD clinics.

Condom Programming

A 'condom' is a thin membrane tube usually made from latex rubber that covers the penis to prevent semen from entering the vagina/anus during sexual intercourse. Condoms can also be used for anal intercourse which should be stronger.

In India, condoms are synonymous with the brand Nirodh, which is distributed free of cost at the family planning clinics and health centres. These are available for a long time and have been promoted primarily as a method of family planning. So in public opinion 'condom' is associated with birth control and not as a method of prevention of STDs including HIV/AIDS. Some surveys indicate that men do not like to use condoms because condoms reduce the pleasure of sex, are cumbersome to use, not readily available when needed, difficult to store in the house.

Considering the attitude of the users it is essential now to de educate and re educate prople about the use of condom in each and every unsafe situation. The important fact is that people may not use condoms every time they have sex, they may even put on a condom just before ejaculation, they may damage the condom while putting it on. There is evidence from investigations in both laboratory and field situations that condoms can prevent the transmission of HIV and other STDs. Laboratory studies have shown that the HIV can not pass through the thin membrane of the condom. It is much more difficult, both for ethical and practical reasons to set up experiments to prove the effectiveness of condoms in real life situations. There are evidences through studies of female sex workers in Kenya and Zaire and other studies of HIV transmission that regular users of condoms are less likely to be infected with HIV.

To ensure the above among a circumscribed population like Indian Army, condom programming at a unit level should be initiated.

This particular program fosters public and private efforts to optimize availability and use of good quality latex rubber prophylactics for prevention of STD/HIV. As a first step, the Government

has revised the minimum quality standards for condoms in the country. Efforts to expand social marketing of condoms for disease prevention and to involve the family planning programs are underway. *(John Hubbey, Choudhury, Chandramouli : 1995)*

Blood Safety

There are about 1018 recognized blood banks in India distributed between government, private and voluntary agencies. The priority of Government AIDS control program is to expand testing for HIV in India to cover all blood banks. In July 1989 a notification was issued under the Drugs and Cosmetics Act, 1940, making it mandatory for licensed blood banks to get a sample of every blood unit tested for HIV antibodies. However, this is being implemented to cover the nation in a phased manner. Already all blood in the metropolitan cities like Mumbai, Delhi, Kolkata, Chennai are screened for HIV before transfusion.

Prevention of infection from blood is not easy. In cases of emergencies there may not be time to test blood and the risk of possible HIV infection has to be balanced against the certainty of loss of life from the injury. The development of simple and quicker tests could be of great value in these situations.

Hospitals are now reviewing their transfusion practices to give blood only in genuine life threatening situations.

Another way to reduce risk of transfusing contaminated blood is to discourage potential blood donors who have indulged in 'high risk' behaviour in the past or who may be already infected with HIV. In some countries leaflets have been distributed to potential donors requesting them not to give blood if they have special characteristics which include : have recently had a sexually transmitted disease or have had multiple sex partners. This is called 'donor deferral' screening. In case of such screening procedure it is necessary to provide a counselling service for persons who are found to be HIV antibody positive or who develop anxieties from screening questions.

India still relies heavily on paid blood donors. These professional donors often come from economically deprived sections of the community. Studies have shown that HIV seroprevalence in this group is higher than among voluntary donors.

A non governmental organization in Ahmedabad, the Gujrat AIDS Prevention Unit, has been actively working to reduce the transfusion of infected blood. In 1990 they found that 30 percent of the total blood supply in Ahmedabad was coming from commercial blood donors. In a survey of 100 commercial blood donors they found a considerable lack of awareness about HIV and AIDS.

Publicity about AIDS and blood transfusions had led to some people becoming afraid to give blood. Health education messages to the public should stress the safety of giving blood and let, the public know what is being done to strengthen, the national transfusion services, and for that blood safety' policy is to be laid down. *(John Hubley : 1995)*

The aim of 'blood safety' program is to develop and strengthen blood transfusion system. The rules under the Drugs and Cosmetics Act have been amended to ensure that all blood products in India, whether of local origin or from abroad, are tested for HIV antibodies and that standard manufacturing practices are followed by all such agencies.

Reducing the impact of AIDS/HIV

Counselling for HIV infected individuals and people with AIDS has become an integral part of the existing health care systems. Assessment of home care schemes to accommodate future AIDS cases are underway in our country.

The national Program has been launched well in time by encompassing all the required measures for preventing AIDS and HIV infection. However, considering the constraints in resources and services in the country there is an apprehension that implementation of the programs under various heads may be far from satisfactory. Moreover, in our country some of the problems like malnutrition,

lack of knowledge about certain diseases, poor health care, unfavourable attitude towards use of contraceptives are very common. These are often entangled with the mental make up of the people belonging to diverse social background and culture. To counter the impact of such a ghastly disease, it is thought essential to acquire knowledge about AIDS and to bring positive change in the attitude and behaviour as regards the people and this particular disease.

AIDS Prevention and Control, General Considerations :

Infection from HIV and AIDS is a burning problem all over the world. It has many social, cultural, economic, political, ethical and legal implications. In a situation of chances of a remote cure and a long incubation period during which the person is asymptomatic and can infect others, prevention and control of AIDS acquires foremost importance. The only way to remain free from AIDS is to avoid infection with HIV and for which the following strategies have been recommended.

As a part of health education there is a need to ascertain how to prevent AIDS. Here as a first lesson one should know that sexually transmitted diseases can be prevented by : (a) having only one uninfected sexual partner (ideally own wife), (b) Knowing the partner's previous sexual and drug use history, (c) Educating children about HIV before they become sexually active, (d) Teaching HIV positive people about 'safe sex', (e) Avoiding chances of infection of any STD and treating the same promptly as early as possible.

Preventing transmission of HIV through drug abuse, the following methods have been suggested by *Saag (1988),* (a) to prevent use of intravenous drugs, (b) To administer education programs that are culturally sensitive and geared to young audiences which have the best chance of preventing drug use, (c) For those who can not stop taking drugs, the most effective way to prevent AIDS and HIV infection is to avoid sharing needles and syringes, (d) To outreach programs that vigorously maintain confidentiality which can be effective in reducing transmission to sexual partners or Intravenous Drug Users (IDU), (e) It is important to enable to access treatment centres for those on intravenous drugs use.

According to *Bharat (1993),* the risk of transmitting HIV through blood transfusions can be reduced by adopting following measures : (a) Minimizing blood and blood product transfusion unless essential for saving a life. Using synthetic substitutes whenever possible. For unavoidable transfusion, most of blood should come from voluntary blood donors only. Hence, promotion of voluntary blood donations must be an essential activity of every blood bank, (b) Avoiding use of blood from professional blood donors, (c) using blood and blood products from screened donors for transfusion, (d) making the people aware that blood donation itself is not a risk factor for AIDS and HIV infection, so long as disposable sterile needles and syringes are used.

Women who are not aware about HIV infection can be suitably counselled how to prevent vertical transmission of HIV. Condom promotion is also advocated for those who are HIV positive. When there is an early pregnancy of an infected woman they can be advised for medical termination of pregnancy which is also one of such methods of prevention and control.

Dissemination of knowledge to Army

Dissemination of AIDS related news, views and educative messages through mass communication system can play an effective role to make the people aware about this lethal disease. For propagation of messages on AIDS to the army personnel with effectiveness of existing communication and information system, needs to be reviewed thoroughly. Because communication is no doubt a powerful tool to enlighten the people about any matter of their concern, its results depend at the end; for what it is employed and the efficiency with which it is used. *(Roy : 1995)*

Health education program is an essential administrative function of army organization. At the level of any army unit the Regimental Medical Officer (RMO) in general is responsible for looking after health and hygiene matters of that unit personnel. The Station Health Organization (SHO) of any army station in addition ensures cycles of immunization, protection against cold and heat, prevention against infective diseases and local contamination, ensuring chlorination of supplied water to troops at all military stations.

The Station Health Organization (SHO) of army, often arranges lectures and demonstrations to impart education about various preventive measures against certain cyclic and infectious diseases including AIDS/HIV to increase awareness about such diseases among unit personnel. An individual Health Record card, is maintained as a confidential personal document of each individual. It contains all immunization, sickness, hospitalization and other health related records of an army staff. This document is scrutinized carefully during the annual medical examination of every personnel. The overall policies and programs on health matters of army personnel are worked out at the apex office of the Director General Armed Forces Medical Services, New Delhi. In fact, the existing medical services available in the army units are ultra-modern and highly advanced considering the requirements as per prevailing disease cycle and other congenital health problems of the troops. Prevention strategy of HIV/AIDS can be conclusively drawn in respect of the army population by formulating health education policy which could be structured by the army health organization and inplemented under the overall control of respective units/formations.

The findings of the study of an army unit reveals that the social, educational and health related messages reach to an army man through various conventional channels and means. Statistically, only 12 per cent reported that all such messages reached to them through radio. For another 10 per cent, lecture by the Regimental Medical Officer appeared quite useful to enhance their level of knowledge, where as according to the estimation of other 20 percent the periodic briefing by their own officers yield better result. Sometimes special lectures had been identified as quite useful in conveying valuable health messages effectively. Similarly, 10 per cent of the army men felt that monthly *Sainik Sammelan* (army assembly) serves as an important platform to provide educative messages on health and general subjects applicable to the armymen. However, it is interesting to note that a sizeable section of them (40 percent) believe that TV is the only ideal medium through which all important and socially relevant messages can be disseminated to army personnel speedily, clearly and meaningfully.

Among the army personnel gossip and chatting with colleagues and friends is a common means of releasing tensions, anxiety and fatigue, though among 90 per cent of the army officers chitchat or gossip does not constitute an integral part of their day to day life. Out of the jawans, 68 per cent are found to be fond of chatting with each other regularly. It is a source of recreation and an easy available means of tension and fatigue release mechanism for such large number of troops in a unit. The subject matter of gossip is mainly confined to their personal and family problems, where as only 5 percent of them discuss about their promotion, transfer and other matters related to profession. Health aspects of the army are rarely discussed as a subject of gossip. However any prevalent epidemic in the area around, or any recent infectious disease, or a recent case of sexually transmitted disease among any colleague, at times figures in their day to day gossip, which has a very short term effect. Many gossip group members know that AIDS and HIV infection gets transmitted through sexual intercourse and it is an alarming disease. About 6-9 per cent of army men were found keen enough to gossip about AIDS and they like to refresh their mind with new inputs on the subject. Therefore, in the matter of health education, gossip may not be an effective medium of communication as compared to a classroom lecture or any visual display, yet it acts as a potent and active fatigue and tension release mechanism among the army population who lead a group life. Such gossip exchange is highly effective for a group of persons living under stressful conditions and facing separation. It keeps them cheerful, friendly and healthy because of this.

From different information sources, the army personnel have learnt how the disease AIDS/ HIV is transmitted and what are its preventive measures. Irrespective of the rank and file it is now known to many of them (a) why disposable syringes need to be used, (b) how blood and blood products should be handled, (c) why 'condom' should be used, and (d) how 'safe sex' is to be adopted.

To dessseminate the knowledge about such pandemic disease, it is essential to know its culture and cultural construction.

Culture

In this discussion we shall look at the unity and diversity of human life and culture. The concept of culture, together that of society is one of the most widely used notions in sociology. Culture consists of the values the members of a given group hold, the norms they follow and the material goods they create. Values are abstract ideals, while norms are definite principles or rules which people are expected to observe. Norms represent the 'dos' and 'donts' of social life. Thus monogammy being faithful to a single marriage partner – is a prominent value in most western societies. In many other cultures, a person is permitted to have several husbands and wives simultaneously. Norms of behaviour in marriage include, to behave towards their in laws. In some societies, a husband or wife is expected to develop a close relationship with parents - in - law, in other words they are expected to keep a clear distance from one another.

When we use the term in ordinary daily conversation we often think of 'culture' as literature, music and painting. As sociologists use it, the concept includes such activities, but also for more. Culture refers to the whole way of life of the members of the society. It includes, their marriage customs and family life, their patterns of work, religious ceremonies and leisure pursuits. It covers meaningful for them bows and arrows, ploughs, factories and machines, computers, books, dwellings.

'Culture' can be conceptually distinguished from nations. 'Culture' concerns the way of life of the members of a given society – their habits and customs, together with the material goods they produce. Society refers to the system of inter relationship which connects together the individuals who ensure a common culture. Without culture we would not be 'human' at all, the sense in which we usually understand that term. We would have no language in which to express ourselves, no sense of self conciousness, and our ability to think or reason would be severely limited – as we shall show in later discussions.

The chief theme of both the current chapters is the biological versus cultural inheritence of mankind the relevant questions are : what distinguishes human beings from the animals ? What do our distinctively human characteristics come from ? What is the nature of human behaviour ?

Cultural variations between human beings are linked to different types of society and we shall compare the same *(Paula Treichler : 1992).*

Cultural Construction of AIDS

In a book of American writer who made an admirable balance between the contributions of individual men and women in forging a cultural response to AIDS and the social formations that make this so difficult. It is by the anthropologist and literary scholar Mary Catherin Bateson and the biologist *Richard Goldsly (1988).* They write their book, *'Thinking AIDS'.*

It is possible to respond to the epidemic by reaching for more open, just and intercommunicating society and world in which no one is disenfranchised and individuals have the information to make appropriate decisions. Thus if we were able, as a society, to talk openly about matters related to sex and to feel compassion equally for all our neighbours, the AIDS epidemic would probably be under control by now. Instead we are in a situation where help has been withheld because unslated ideas about who is and who is not deserving, where essential information is not imparted to those who need it, where many lack the trust and self esteem needed to use the information available to them. The perenial problem of our society and of the world, which we have not had the resolution or imagination to address, are the principal sources of vulnerability *(ibid.).*

In any given situation, if any army personnel is found to be behaving in a manner to be called promiscuous, it is not by default it is product of culture prevailing in such organisation and this study finds that the Indian Army personnel are one such community.

Socio Cultural Constraints

Indian Army as an organization has certain set patterns of cultural norms which are unique and which influence day-to-day life of army personnel. Here they are required to pass through a restricted life style quite different from that of civil life.

Staying away from the family frequently and for long duration is one major social condition that every army personnel, irrespective of his rank, has to face. In the unit under study only

10-14 per cent of the respondents are found staying consistently with their family during compleate service. In the case of remaining 76-80 per cent, they have been either staying without family or lived temporarily in few places of postings. When they were asked, 88 per cent expressed their strong resentment against such separate living. About 10 per cent of armymen however recorded their opinion in favour of staying single. More than 80 per cent of the respondents were in view that living separate from families has many adverse effects on one's life. Here one may note that due to employment reason or otherwise when the army personnel live alone and can not enjoy the pleasure of regular conjugal living, some of them may possibly develop a tendency of enjoying extra marital sex or opt for other ways of sexual release for themselves including visit/visits to nearby sex workers, masturbation.

To maintain discipline, orderliness and exercizing command and control, there are certain imposed restrictions on day to day movements of army personnel in every army unit. Without permission jawans are normally not supposed to leave the camp or unit at their own. For the junior leaders, however, there is no such restriction, and the officers when are not on specific duty, can move anywhere. Among the respondents 84 per cent said that they are given permission to go outside the camp only once in a week. It was twice only for one percent of them. Though it is essential to ensure discipline of a unit, yet it gives an impression that restriction imposed on freedom of movement causes some kind of restlessness and often helps growing clandestine attitude among some of the army men which are recurrently reflected in their behaviour and concealed act.

Army as a profession involves life risk, frequent movement from place to place, transfers to very remote areas, temporary rescue and relief duties, and exposure to various hazardous and unfavourable climates and prolonged separation from families. It imposes several restrictions on personal freedom also as discussed. The above said factors affect some of them in multiple ways. Some of these often put an adverse effect on personality, mental make up, and social behaviour of the army men. The common people (civilians) normally have certain ideas so they avoid interacting

with unknown army men openly. It is mainly because of the historical impression of pre independence conditions, which had army of other country as a colonial power.

In general an army man is found to be well behaved, courteous and helpful for any other person outside. They do not generate impression that should scare any body.

Physical separation from family and children, very often in life and that too at far flung places amounts to one of the basic socio cultural constraints. Since individual expression in the unit life has certain taboo, they hardly get an opportunity to vent out their mind in own language to deliberately express their felings whenever they desire to do so. This is another dominating sociocultural constraint, which creates a lasting psychological effects in the minds of soldiers.

The person from North India, may rarely be posted to his place of belonging. Leave during emergencies is not guaranteed to him and he can not attend to his family's social obligations due to such service conditions at times. This can be another socio-cultural constraint accountable. To keep such body of men released from fatigue the organization it allows them to drink sometimes when off duty. A survey of drinking has also been discussed and analyzed to study the effects of liquor in influencing their social life.

Present survey reveals that 65 per cent of the respondents like to consume liquor and the remaining 35 per cent do not drink at all. Those who drink did not specify any particular reason for their likes of drinks. However, 86 per cent of them were found to feel relaxed and happy, 5 per cent felt sick and one per cent became restless as a result of drinking. In the remaining cases, there was no notable behavioural change after consumption of liquor. It is important to note that as per opinion of 46 percent of the army personnel, consumption of liquor tends to increase their urge for having sexual intercourse. Such behavioural aspect has been discussed in previous chapter that consumption of liquor at times may stimulate some army personnel to visit sex workers and even seduce them to enjoy sex with any unknown female abruptly without adopting adequate safety precautions. As far

as adoption of precaution is concerned, it needs serious deliberation. In a situation, like this when the sexual involvement is abrupt it does not allow the user to make best use of 'Condom'. A condom may not be even readily available when required. The Commanding Officers of army units should anticipate such behavioural aspect of men under command and cater for counter measures. Such situation can only be negotiated with 'Condom' promotion action in such units. The adequate quantity of condoms can even be placed at the unit main gate 'sentry post' only; so that at the time of going out to the city one can always pick up 'condoms' without any hesitation and use it as required. If such procedures can be diserectly executed at unit/subunit levels, the administration to check infection of this virus (caused though sexual contact) will be effective on this account.

Reviewing the data on pass time activities and modes of entertainment of army personnel it appears that 34 per cent of the respondents enjoy reading magazines in their leisure hours, 42 per cent prefer to think about their family members and write letters to their near and dear ones, 20 per cent want to listen to musical programs on radio or watch TV, 3 percent enjoy drinking and only one per cent like to relish extra marital sex, fun/pleasure. With this it is fairly conclusive to say that the personnel of Indian army, are generally fond of leading their day to day life free from involvement of sexual act and spend their life with the hope to visit home soon. A person out side may not be able to understand such behavioural pattern till they practially experience it.

While concluding on prevention strategies against AIDS/HIV among army population, it is essential on the part of the policy makers and executors of health education including the Commanding Officers of units, to review periodically the effects of adopted policies and orders on the concerned population i.e. the soldiers. The aim of such a review could be directed to draw lessons from what the organization of army has done in the past and make use of available 'feed backs' for future interest and guidence of the organization. Such an approach may help to adopt certain strategic measures against prevention of HIV/AIDS in the army in clear and definite terms. That will ultimately lead to bring changes in certain behaviour of the army men conducive to AIDS/HIV. The formulation of prevention strategy regarding AIDS/HIV, needs to be designed at

national level, thereby facilitating all components of the society to adopt such measures that will safeguard the society in general and each individual section of people in particular. The level of knowledge of the armymen about AIDS/HIV needs to be updated, corrected and specified. It is expected that along with the induction of more staff knowledgeable about AIDS/HIV, there would be further awareness and changed attitude among the rest, regarding this particular disease.

Army as a community has all social roles to play as others. Therefore, formulation of a national strategy on prevention of AIDS/HIV would have an equal effect on such community directly. Thus, while carrying out the preventive programs among the army population, inclusion of directions of National AIDS prevention strategy are thus found equally important and applicable. Some of these have been briefly explained in succeeding paragraphs.

These are not recommendations but directions of an overall policy. While framing the policies and programs in preventing AIDS, taking into consideration the global concerns and measurements adopted to fight out HIV/AIDS, it is advisable to follow certain guide lines and directions as indicated below :

1. To implement HIV/AIDS prevention activities targeted at women it is essential to gain high level political support and commitment within national governments, donors, national AIDS programs, non-governmental organizations, community based organizations, and communities themselves to achieve effective and sustained national policies and/or large scale programs.

2. National leaders should be encouraged to recognize the important role they have to play in terms of advocacy. They can also ensure those policies; program priorities are integrated, as far as possible, within existing national strategies. They should ensure that the essential policy programs and objectives are adhered to.

3. It is vital that a thorough problem analysis is conducted, and that key issues are identified and understood, prior to policy formulation program design. Specific attention should be given to

short term and long term objectives; principal components required; current knowledge and situation; methodology, budgetary consideration and cost effectiveness.

4. To ensure successful implementation of a policy program it is vital to include in the planning progress a clear definition of the operational structures and responsibility levels before policy and/or program implementation. This should be done in accordance with existing implementation capacities and budgetary structures.

5. Appropriate mechanisms should be put into place to ensure policy and/or program continuity and sustainability, so that any changes in the social, economic or political situation should not impair the effectiveness or threats of survival of the policy and/or program in question.

6. To ensure a policy's long term effectiveness and usefulness, it should be monitored and evaluated at regular intervals. Given the high cost of evaluation, it may not be possible to subject every policy or program to such evaluation. Practical and simple monitoring, using indicators that are easy to measure, provides sufficient feed back for improvement.

7. For media centric national policies and programs, continuous campaigns are needed over time and across media. Those campaigns should be responsive to the particular needs of the targeted community. Further, media information should be culturally sensitive, help providing correct information and where possible promote dialogue within a community. New messages need to be developed in accordance with the changes in social circumstances and require to be adjusted and renewed frequently to maintain interest.

8. Non governmental and community-based organizations are important component of AIDS/ HIV prevention strategies. Long lasting and optimal success of policies and/or programs will best be achieved where national Governments and program planners build link with NGK's and CBOS, and encourage participation and interaction between government and those organizations. *(W.H.O. : 1992)*

To further channelize the prevention strategy drawn out of national policies, a consolidated effort is required to be made towards STD and condom care. Certain approaches to STD and condom care have been identified, which will help us to implement the policies on specific issues.

Effective approaches to AIDS/HIV prevention through STD care and Condom Promotion

1. Interventions that combine education, condom promotion, early detection and treatment of STD have been shown to reduce STD and HIV transmission.

2. The quality of STD care is critically important and it encompasses appropriate clinical management, but confidential, respectful, non-stigmatizing treatment, counselling, partner referral and community education.

3. STD services that are integrated into primary health care, maternal and child health, family planning and community services and are based on comprehensive management in one visit at the first point of contact with the health system, are likely to be more accessible, reassuring and non-stigmatizing for women.

4. 'Condom' promotion and distribution, particularly for army personnel is not done religiously. Condom's social marketing (in which condoms are sold usually at subsidized prices, through the private and informal sectors) and community based condoms distribution (in which condoms are distributed by community workers) increase condom availability, demand and utilization. For the community under study, the proposed policy has been discussed.

5. 'Condom' should be promoted and distributed through as many public and private channels as possible in order to ensure their availability to as large a proportion of the total population including through medical channels of army, as far as possible. In addition, it is important to ensure that condoms must reach and are strictly used by those most vulnerable to STD and HIV

infection. Reducing epidemiological vulnerability to STD and HIV, it should take priority over cost recovery, as some STD/HIV vulnerable individuals and communities can not afford to pay for condoms.

6. Both social marketing and community based condom distribution can be specifically designed and tailored to serve women more effectively. Women need to be taken into confidence giving due weightage to their values, beliefs, social customs and economic status.

7. The success of both social marketing of condom and community based condom distribution depends on several factors, including audience participation in message design and development, careful training of distributors, frequent mass media reinforcement and careful audience segmentation.

8. 'Condoms' should be promoted not simply as a means of preventing STD, but as part of confident, self assured and positive lifestyle. In particular 'condoms' should never be promoted in anyway that stigmatize any segment of society in particular.

Having gone through the methods of prevention of this disease, it is evident that there is apparently no cure of this disease. Therefore, it is the prevention strategy that can save a society from the onslaught of this disease. The recommended AIDS preventive strategies therefore need to be manoeuvred even as a test case in the case of Indian army.

CHAPTER SIX

SUMMARY CONCLUSION AND RECOMMENDATIONS

Communication is considered as one of the major keys to the processes of social and cultural change. Though communication facilities have been expanded enormously in the present day world, it has not been fully explored towards the development of community health so far. To achieve this, an effective health education program is required to be evolved and implemented at National level. Communication for health education is thus an essential area and which needs special attention. A well-planned health education program could disseminate appropriate health messages to all the receivers through a coordinated communication policy. The health messages passed to the target audience may help growing awareness about health and diseases. In this study, AIDS/HIV infection has been considered as the disease of concern. This aims at dissemination of knowledge about this particular disease to grow adequate awareness among army personnel and to formulate a policy at organizational level regarding its prevention.

With the advent of modern communication system the overall concern about health has simultaneously increased at every level all over the world. Yet the knowledge, attitude and perception of certain composite social groups/communities like Army in this matter, asked for immediate changes. Their concern and acquisition of knowledge through health education system about the diseases like AIDS/HIV requires to be streamlined. Knowledge obtained about this disease may change the attitude of an individual encouraging him to adopt healthy practices in order to keep him free from any infection of such disease. The awareness grown over a period through enhancement of specific knowledge may act as a pervading force in reducing the overall rate of infection from this fatal and ghastly disease. This study was perceived quite essential at a juncture when the level

of awareness about AIDS had already been examined among Navy and Air Force personnel and the Army population though is the largest in size, was some how kept aside from any such enquiry.

The Indian society is composed of a queer variety of population with diverse socio cultural habits. Its Army population is nothing but a miniature replica of such a large and heterogeneous society. It is believed that any sociological study on Army population has direct cross sectional view of the entire society. The subject of AIDS/HIV infection of Army population has been perceived as a topic of sociological enquiry to elicit some baseline data on awareness of the population concerned. The study also aims at policy revisions to make them conscious about its prevention.

Since army is a diverse but articulated community, for dissemination of any message pertaining to health and diseases there is a need for an well-integrated program approach at every level. As far as AIDS is concerned, the army as a community is considered to belong to "high risk" category. Therefore, communication for health education with reference to this community gets special significance. It is believed that communication of health related messages is as essential as "Diffusion of Agricultural Innovations" *(Rogers : 1981)* required for augmenting productivity.

The identification of HIV and AIDS as a fatal disease has opened a new field of study particularly in the sector of health education and communication. In the present study, the investigator being a member of the army community, was interested to investigate about the level of knowledge of this community on AIDS/HIV infection. He explores the rate at which the health education has been enhancing their level of awareness about this particular lethal disease. In this study, the case of a particular army unit has been presented. It brings out the details of day to day life of such a population, which are generally not known to civilians and officially not communicated to others.

When the way of life of concerned population has been examined, an attempt has been made to understand their communication behaviour in order to evaluate the exposure to media world related to health education. In chapter three the communication behaviour of the selected population has been discussed in detail.

The knowledge about the disease is the basic and important factor around which the study revolves. Knowledge of army personnel about AIDS/HIV directly evidences their awareness about the said disease. That also reflects their perception and attitude towards AIDS/HIV infections. Those are very important inputs to suggest them what to follow as correct practices.

Every human being is a susceptible host for infection with HIV, but individuals of high risk behaviour (like multiple sex partners, intravenous drug users, STD patients) who, as part of their life style or profession, may come in contact with blood and body fluids of infected persons, have more vulnerability. The patients getting multiple transfusion of blood and blood products, are at greater risk of acquiring HIV infection. For many years since now there was no vaccine available in open market, which could raise the immune status against the HIV infection till recently. Thus there was no prevention of AIDS except by practising safe behaviour, observing blood safety measures and adopting other infection control precautions.

The Indian army is socially a closed community. Here the personnel maintain a distinct way of life in a strict organizational environment and culture. Army men generally follow a well-regulated life governed with strong discipline. They are a mobile community by profession who largely stay in barracks and are accustomed to encounter with different hazardous environmental conditions. On the whole being a migratory community and being mostly confined to a restricted barrack life, they are often considered as more susceptible to sexually transmitted diseases including HIV and AIDS.

As per latest information (5 Apr '97) there are many victims of AIDS among the army personnel. By regiments and corps the distributions of detected AIDS cases are as follows : Engineers – 34, Infantry (Foot soldiers) – 166, Army Medical Corps – 99, Armoured corps (Tank Regiments) – 38, Signals – 58, Electrical Mechanical Engineers – 19, Artillery – 31, Army Service Corps – 18, Defence Security Corps – 99, Remount veterinary Corps – 98 and Army education Corps – 95. *(Demi official letter of Army HQ forwarded to all military command HQs dated 5 April 1997).*

Taking into consideration the current scenario of spread of AIDS among the Army personnel, the present study was carried out with the following objectives :–

(a) The role and effectiveness of mass communication system in disseminating information about AIDS and HIV infections among army personnel. (b) Knowledge and perceptions of concerned population about this lethal disease, (c) Their attitude towards AIDS and HIV infection and its preventive measures. (d) Social conditioning and other possible factors responsible to make them more susceptible to AIDS and HIV infection and somewhat indifferent to media messages on AIDS and HIV, (e) The most preferred or appropriate system of information necessary to make the concerned people properly aware about the said disease complex, (f) Along with information, with related measures are needed in social, cultural and professional fronts of the army personnel to counter AIDS and HIV infection; the necessary package program awaited and expected from organizational ends in this regard.

The Population

The present study was carried out among 201 Indian Army personnel posted at Sukhna near Siliguri, West Bengal, India. Out of 850 army personnel including officers, junior leaders and jawans of an army unit though a bigger number volunteered, 201 were selected randomly for interview and they constituted the ultimate unit of study. They were interviewed with a structured (pre-tested) interview schedule. That was further supplemented by group discussions and participant observation. It was pre tested means, these questionnaire was administered on other individuals to ensure its acceptability to the audience and also to verify its technical feasibility checking reaction of each. It was confirmed whether these questions were too open or other wise whether there was any requirement of some deletions or additions before it were administered to the actual sample. It was also to ensure whether it would create any emotional reaction on its population adversely.

These were pre tested on some other individual almost of similar age, educational and social

back grounds. The feed back enabled the author to redesign it and reproduce it in a form as it would be acceptable to the sample group selected for the survey.

Health is an important subject of concern of any army organisation. The Department of Health, an integral part of Army Medical Corps, is responsible to edit policies on health which is applicable for a soldier from the day he physically reports to the unit/training establishment until he retires from service. The Station Health Organisation of any military station regularly carries out immunization programs, spraying of DDT and insecticides in cantonment area, running of health education classes on various subjects. Through health education classes, the SHO imparts lessons on various infectious and cyclic diseases also. It enables them to take timely preventive measures against such diseases at individual level. As AIDS is one of the syndromes of major concern of all unit commanders at present day scenario, awareness of each army man about AIDS also calls for special attention. It needs educating such population about this particular disease, its symptoms, causes and preventive measures through a consolidated training capsule. Such special training event is required to be integrated with routine training programs of all units in the army.

The respondents in this study were mostly belonging to the age group 20-48 years. The majority of the jawans had education up to secondary standard of school or little above. The officers were however graduates and post graduates. The number of graduates among junior leaders was not very significant. There was only one postgraduate out of 16 interviewed junior leaders. Among the officers, 63 per cent were found married and 31 per cent unmarried. The corresponding proportion of junior leaders was 96 per cent and 4 per cent respectively and for jawans, it was 75 per cent and 22 per cent. The junior leaders are those who joined the Army as jawans and later are promoted to the rank of supervisors departmentally. So most of them belong to the higher age group than officers and jawans, and thus are mostly married by individual status. Studying their religious back-ground, 88 per cent army officers, 100 per cent junior leaders and 71 per cent jawans were found to be Hindus. Numerically the Muslim, Sikh and Christian army personnel were in minority.

The type of response received from three categories of respondents was not the same. It was largely dependent on their level of education, degree of exposure and individual interest to know more about AIDS and HIV infection. It has been observed that highest proportion of officers knew better about AIDS. However, among the junior leaders and jawans, the level of awareness about AIDS was relatively low. All the officers except one, gave answers to the questionnaire canvassed to them sincerely.

As communication for health education is the key concern on which the study on knowledge and perception of army personnel about AIDS and HIV infection has been carried out, the sight has always been focussed on the facts that in India, media facilities have expanded enormously over the years especially since independence. Technically radio signals cover almost the whole country and Television reaches 70 per cent or more of the areas. There are 1334 dailies of about 20 thousand newspapers. The combined circulation of press crossed the 50 million copies marked in 1980. These act as a tool of propagation of health related messages to the population of all categories living in diverse regions of the country. *(IRS : 1992)*

Data on media exposure reveal that Television is the most popular mass medium amongst the army Personnel and 85 per cent of them watch it at night. About 77 per cent also listen to radio in their convenient time. Almost all the officers read newspapers regularly. Among the junior leaders, 75 per cent of them are regular readers of newspapers, whereas only 15 per cent of jawans were occasional readers. The appropriate system of information as liked by the respondents to make them aware about AIDS/HIV has also been recorded from all three categories of service people.

Knowledgeability about AIDS and HIV infection

Among the army personnel, their level of general awareness about AIDS and HIV infection is fair but low in terms of specific knowledge. As the officers are better educated and exposed to mass media they are found relatively more knowledgeable about AIDS than the junior leaders and jawans.

The main sources of HIV infection and its major routes of transmission are known to most of the respondents. The full forms of both the abbreviated terms AIDS and HIV are not known to many of them. The indepth knowledge about the disease complex is inadequate and incomplete to many. Some officers who are quite knowledgeable are found to be somewhat apprehensive about, the ill effects of the disease called AIDS.

A large percentage of the army personnel are aware of the basic fact that AIDS is a fatal disease and their concern about this particular disease appears to be somewhat satisfactory. Since AIDS is a sexually transmitted disease, some of them expressed that they would not have any extra marital sex relations in life and shall remain faithful to one sex partner only. A low percentage of army men know it well that the disease is incurable and can cause disaster of a society. Majority of them is found keen to know from experts specifically about the symptoms of AIDS and its various preventive measures so that they can easily follow those without becoming victims of AIDS in future.

As far as the specific knowledge is concerned, the study shows that about 70 per cent of the army men are not well aware of all the symptoms of AIDS. There are some erroneous ideas about this particular disease among many of army men. The incomplete and inaccurate knowledge and perception about AIDS and HIV infection perhaps indicate the limited credibility of the existing communication and information system to make the army population sufficiently aware about AIDS. However, almost all the respondents know it well that AIDS is a dangerous disease and therefore an adequate knowledge about it and its prevention is most essential than any medical care and treatment of simple clinical nature.

About one fourth of the respondents are aware that as far as individual human agents for transmission of AIDS are concerned, the professional sex workers, blood donors and foreigners belong to 'high risk' category. A sizeable section believes that homosexuals and army men (soldiers) are also possible carriers of AIDS and thus they fall in the 'high risk' category. So they showed

keenness to make the periodic blood testing to be made compulsory for the army men enabling the authority in detecting infection of HIV positive cases in time. They further advocated for serological test of the incumbents before their recruitment in the army contingent or on any other necessary occasions and circumstances which has now been taken up for consideration at the Government level.

On the question of prevention of AIDS, majority of the respondents feel that one could avoid promiscuity and remain satisfied with one sex partner only. They are aware that visiting of red light areas and initiating any unprotected sexual intercourse is risky. Therefore any type of sexual indulgence on the part of armymen needs to be protected against infection of AIDS. Such restriction requires to be imposed not to deprive them from personal freedom but to safeguard them against infection from AIDS. Use of condom during copulation reduces the risk of getting infected from HIV and it is known to a large number (90 per cent) of army personnel. Almost all the respondents have recorded their disapproval against sharing of needle with others and approval in the use of disposable syringes whenever necessary.

A sizeable percentage of armymen came out with incomplete knowledge about routes of transmission of AIDS. There are certain reservations among them about donation and transfusion of blood in required cases. However, more than half of the army population believe that there is no harm in sharing a room with an AIDS victim and the cups and plates used by the victim do not get contaminated with the virus. They are also aware of the fact that there is no chance of getting infected with HIV through casual physical contact with an AIDS patient. The incomplete knowledge of army personnel as studied, amounts to incomplete health education imparted to them. The method adopted to disseminate health related issues to them may be incomplete due to many reasons. It may be due to lack of appropriate communication system, the methodology of dissemination, the sender receiver group relationship, the interest created in the subject itself or others. So instead of concluding on this issue as above, it will be more appropriate to ensure a full proof health education

system which should be regularly reviewed. The less knowledge or half baked knowledge gives rise to negative perception. This can always be improved upon.

Generally, every second respondent believes that a comprehensive knowledge about the disease and an overall awareness are the ways in preventing from infection of AIDS. The cognition and associated behavioural changes have been identified as the best possible way to keep oneself free from the infection of AIDS and HIV. The army men firmly believe that with the advancement of knowledge about this disease there would be corresponding changes in the behaviour of army people conducive to prevention of AIDS. They also asked for inclusion of sex related lessons in the curriculum of health education especially meant for army personnel and making communication for health education more transparent and easily accessible.

Some of the army personnel strongly felt that, if knowledge about AIDS/HIV could be disseminated through available communication channels that would help them to grow awareness easily and quickly. Many of them recommended that visual devices need to be incorporated in communicating health related messages in order to make a direct impact on the minds of the target population. Better knowledge and perception about HIV and AIDS may ensure changes in attitude and certain practices of the concerned population. For instance majority of army personnel of today, believe that 'Condom' is not only an accepted method of contraception but also a preventive measure against sexually transmitted diseases including AIDS/HIV infection. However, still there are some of them who have reservations against using of condom because they think that it hampers sexual pleasure and its climax. Sometimes its use is also not liked by the female sex partner. Those feelings, realizations and attitudes against using 'condom' need to be discussed thoroughly taking the people into confidence and educating them about the methods of implementing 'safe sex' which is an essential lesson in preventing AIDS/HIV. In many cases male dominance, discorage the use of 'condom' and female partners are unable to force the issue. This point has been discussed in details.

A few of them expressed that they have no hesitation to live with their AIDS infected spouses. However, they certainly prefer to avoid maintaining sexual relationship with such infected life partners. According to few of them such an unfortunate individual should not be divorced or deserted. Rather they should be treated with medical care, personal affection and sympathy. Only a low percentage of personnel are found valiant enough to continue copulation with his AIDS infected wife as usual, by using 'condom' and other devices of ensuring 'safe sex'. More than three fourth of the respondents expressed no reservation in maintaining normal social relationship with those kinsmen and friends even if such kinsmen were found to be victims of AIDS/HIV.

What needs to be done

In the light of above discussion and taking the emerging points into consideration the following steps may be adopted for army population to counter AIDS/HIV infection.

Education of Women

In the sample population of present study, the women were not included. Notwithstanding this education of the wives of army personnel about AIDS is considered equally essential. The level of education of Indian women differs grossly from that of men. Special health education program to enlighten women about AIDS is required to enhance their knowledge and perception about this particular disease. Taking into consideration barriers of language, level of literacy and culture, appropriate educative programs need to be formulated. Lectures, film shows and dramas on AIDS related matters may be organised in Family Welfare meetings and Ladies clubs. The wives of army personnel can play an effective role in motivating their husbands to adopt "safe sex" and make them more aware following preventive measures on AIDS and HIV infection. It will not be out of context to mention that unlike others, the army wives are better exposed about all social problems. There is no discriminatory behaviour with female folk in the army. Rather there is more respect and honour shown to the ladies in the army irrespective of the rank of their husbands, than they get outside.

Timing of TV Telecast

As the National policy on TV, Health Education programs may be telecast during prime time and particularly in the evening which has been identified by the army personnel as the most convenient time for TV watching. Efforts are needed to telecast programs on AIDS in such a way with which it could reach the maximum viewers in their preferred times. The utility of such telecast needs to be evaluated understood solely in terms of social gain and not for commercial profit alone.

Use of other Media

Other important media like radio, lecture demonstrations, folk performances may be used effectively to propagate knowledge about AIDS/HIV. As one of the effective means of communication these incur less cost as compared to electronic media. Periodical lectures on AIDS may be arranged in different languages to reach all personnel belonging to different linguistic groups. The present system of lectures in the unit needs to be strengthened and redesigned. There is a need to organize visual displays and video shows on AIDS so that the viewers could know exactly what ghastly are the effects of this disease on human being and how does it appear as at full blown stage. Experts should demonstrate the prognosis of this disease with suitable illustrations. The photographs of AIDS affected persons could be shown to the army staff in details so that they understand the horrors of the disease and keep themselves abstained from any act leading to its infection.

Content of Education Campaigns

Sincere efforts are required to educate the army people about possible modes of spread of AIDS and on prevalent methods of prevention. There is a need to rectify certain misconceptions about AIDS/HIV. It is essential to remove unnecessary fear and apprepension about this particular disease. The causes of misconception in the minds of soldiers should be removed through exact and appropriate knowledge. Once the required education is imparted with an authentic program, the perception developed will be exact and correct, practices will be adopted as regards the disease. It

is the exactness of knowledge with accuracy of education system without any misleading statements which is relevant and appropriate at this stage.

Control of STD

Further infection from Sexually Transmitted Diseases need to be controlled to prevent spread of another pandemic i.e. HIV and AIDS infection by strengthening approximately 504 existing public STD clinics with specialized training in diagnosis and management called Training Syndrome management. Motivation can also play a major role towards controlling STDs. It can be controlled by educating troops about the method of using 'condom'. The shyness of any nature should be removed from the minds through proper counselling regarding use of 'condom' and making the condoms easily available to them. They require to be encouraged to use 'condom' religiously before having sexual copulation. It should be practised as a matter of routine in unit life.

Health Lectures

Most army men understand that sex education is essential and could start from the age of adolescence. Special lectures on sex related health matters, which the armymen can attend voluntarily, may be arranged more frequently. The aim of such lectures would be, to disseminate correct messages in order to bring expected behavioural change. In the units, periodic lectures by Medical Officers (MOs) are required to be rich enough so that those may attract more listeners and yield better response from them. Such lectures need to be addressed in such interesting and meaningful way that it could draw attention of all the participants. The absentees of any such lecture may be offered further chance to attend it by repeating the lecture program. As discussed earliear visual displays of AIDS cases may be made available to strengthen such lecture programs along with other training kits through which perception about the disease can be developed.

This virus and its typical characteristics, the routes of transmission and many other additional inputs relating to such disease complex need to be made known to them. While learning about this

disease, they must know that it is a fatal disease and is caused by a virus. HIV can survive in a dead body also. Therefore, the handling of such a dead body requires to be done under proper protection leaving no chance of transmission of virus. While addressing the army men about this disease, health lectures must give some idea about the methods of disinfecting an AIDS patient. Such measures need to be adopted by army personnel in hospitals or units. A team of unit personnel should be trained to follow disinfection of AIDS patient as a matter of drill.

Mode of Health Education

Since army is an organized community, group discussions on health related matters can be formulated and executed as part of their daily training program. Active participation in such discussions is more likely to fulfil the information need of the concerned population. It may further help in the matter of explanation and legitimization of the messages conveyed on the spot. That is more essential in the situation when mass media campaigns do not cater for individual doubts and queries. There is a need to tap and explore the medium of interpersonal communication, most intelligently in order to convey the specific messages to target population.

Empirical Research

More empirical sociological research relating to health management in army units is considered essential. That may help to institute a full proof health education system in the light of findings and recommendations made by some of the studies. The research needs to be carried out on social and behavioural aspects of the army personnel by comprehending their health care methods and practices holistically.

Other Aspects

There are few other aspects, which are found nonetheless important in the context of promotion of health education and prevention of AIDS among the army population. ELISA test must be made compulsory for all army men as a matter of policy. Before ELISA test is carried out, it should be made known to them that the word ELISA stands for Enzyme Linked Immune Sorbent Assembly

Test. It is not a test of virus but it accounts for the antibodies in any blood sample. It is also not a full proof method and time taken for this is long. After imparting this basic knowledge, they would be required to go through such a test before recruitment, immediately after their transfer to new units and during monthly routine medical examinations. Army contingents forming part of UN forces and visiting various foreign countries must go through ELISA test before their departure and after return from such countries to check whether any HIV infection is caused to any person due to such move and exposure.

Army is a large organization with its huge manpower. There is a need to establish a cell which could function centrally at Army Headquarters under the direct guidance of the Director General Medical Services, comprising of a group of expert Medical Officers, Social Scientists and few volunteer officers of various arms and services. Such a cell could exclusively look after prevention of AIDS and HIV in the army community. It could also keep a special vigil on the border areas through various deputed teams. Army population are found to be more exposed to civilians in border areas than they are in cantonments. In the border areas, the soldiers are more susceptive to sexual involvement because here they get free chance to mix with the local civilians of local villages because of their nature of jobs like patrolling, flag marching etc. They remain without families which augments the desire more. These can lead to develop the propensity towards sexual indulgence with the local villagers, while being posted at such remote and isolated areas very easily. The chances are fair to compromise with values and ethics under these circumstance where such people live and function.

To ensure strict prevention strategy, blood samples of inhabitants of such inhospitable villages located along the international borders should be obtained by the army doctors and it should be screened for HIV test. An updated record of such blood tests should also be maintained jointly by civil authorities of these border villages and by the army doctors. Such step should be taken with close coordination of civil medical authorities which are essential to ensure prevention against the fundamental aspect of transmission of this disease.

Information, Education and Communication (IEC) package could be developed as a scheme to enhance the level of awareness about AIDS/HIV infection. The habit of visiting sex workers by army men may be regulated with persuation to adopt 'safe sex'. Apart from these, army authorities are required to provide adequate family quarters allowing married army men to stay with their wives and children at the stations where ever they are posted, as the same is followed by a para military forces like Assam Rifles in extreme borders of North East provinces.

As sexually transmitted diseases (STDs) fairly prevail in the army community, there is a need to introduce certain stringent measures so that the possibility of the soldiers of getting infected with sexually transmitted diseases could be minimized. At organizational level it can be achieved as policy implementation because army unit life is governed by a well knit administrative system. So the sexually transmitted disease can be prevented and controlled through regular counselling of soldiers by the army doctors and non medical officers in command of units and subunits addressing them in monthly *'sammelans'* (the assembly) as a matter of routine.

The findings of present study led the author to conclude that there is a need to develop a holistic design for health education of the army personnel. Commanders and other senior army officials must keep themselves aware and updated with the prevailing health policies and keep implementing those as essential component of command. An autonomous AIDS prevention cell needs to be established at Army Head Quarters level consisting of medical officers, social scientists and volunteer officers of other arms. Such AIDS control cell will remain responsible for quick dissemination of AIDS related information imparting accurate knowledge to grow awareness among the army personnel about this particular disease through army web site. It will also edit policies regarding disposal of HIV positive cases and AIDS patients in the army. Such policy should include necessary measures for the families of those already infected.

There is a need to educate the army population about the prevention of this disease which will

act better than its cure. Practical application of such policy, a compact health education strategy requires to be adopted at the organization level.

As at the conclusive stage, recommendations are made to over come the intricate problems of AIDS/HIV infection for which such research is undertaken. As found the disease AIDS/HIV is considered to be a pandemic disease, which can engulf the mass of population and if adequate steps are not taken in time the army population can be one such victim. Some recommendations are made, which can be analyzed at all levels and adopted suitably for the benefit of the organization as a whole.

Some Recommendations

1. Health education in the army should be oriented towards growth of awareness about AIDS and HIV infection.

2. There should be more transparency between the officers and the troops as regards health education related with 'sex and sexuality'.

3. Major policy revision regarding entitlements of accommodation for married personnel should be executed as early as possible.

4. As part of Health Education, subjects on AIDS should be compulsorily included in curriculum of basic Army training courses.

5. Orders regarding education and prevention on AIDS/HIV infection should be thorough, understandable by all and encouraging to implement. It should be both as an inspiration and cautionary word to all.

6. Fund allotment for provision of ELISA test should be liberal.

7. There should be an AIDS control cell organized at the Army Headquarters incorporating required number of Medical Officers expert on virology, Social Scientists, volunteer Officers familier with Behavioural Science, to develop and run AIDS awareness programs in the Army. Both at static and field formation levels, this cell should function as a part of the establishment. Such AIDS Control cell should include, in its program mental health education of soldiers enabling them to understand epidemiology and etilogy of the disease to grow awareness about AIDS/HIV.

8. Good effects of 'Condom' use in daily life should be made known to all. 'Condom' should be issued to all men as a part of daily kit. As motivation plays a major role in the Army, AIDS education should be a part of motivation program. The Young Officers of army units should be utilized for motivating troops who are of same age group. Age and related psychology of such Young Officers will be meaningful to pass messages through them.

9. The Indian Army holds many examples in the history to serve humanity. Being a disciplined, well organized and dedicated organization, it implements all National Policies in true letter and spirit. Therefore, it is not an over optimism to say that it is the Indian Army, which will achieve 100 percent awareness about AIDS/HIV infection creating and AIDS free organization in our society soon.

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COMMUNICATION FOR HEALTH EDUCATION KNOWLEDGE AND PERCEPTION OF ARMY PERSONNEL ABOUT AIDS & HIV INFECTION

Chief Investigator : **LT. COL B C BANERJEE**

Interview Schedule

SECTION – I

(Personal Background of the respondent)

1.	Civil Qualification	–	
	Rank/Grade	–	
	Years in present service	–	
	Native state	–	
	Basic salary	–	
2.	Age (in complete years)	–	
3.	Mother tongue	–	Read – Write – Speak
	Other languages known	–	
4.	Religion (specify)		
5.	Caste – (Specify)	–	Schedule Caste / Schedule Tribe Backward Class
6.	Marital status	–	Married/unmarried
7.	Type of marriage	–	Love/arranged
8.	Inter caste marriage/Endogamous	–	
9.	Age at marriage	–	
10.	No of children	–	
11.	Age of the spouse	–	Education of spouse
12.	Age of latest child	–	
13.	type of family	–	Nuclear/joint
14.	Size of the present household unit (No. of Family Members)	–	

15. Whether the respondent is living with the spouse and/or children or alone –

16. If alone then specify number of visits made to the family in a year –

17. Occupation of father –

18. Places of preceding posting (Mention State) –

19. How long posted in present contingent In North Bengal – Years

20. Transfer due on –

21. Type of living accommodation given/chosen – Married / Single

22. Hobby (if any) –

23. Ownership / possession of mass media –

    (a) Owing or subscribing –

    (b) Radio / Transistor –

    (c) News paper (specify) –

    (d) Magazines (Specify) –

    (e) Book (Name Major Books) –

24. Media Exposure, Frequency of Exposure, How often do you :

	(i) Never	(ii) Sometimes	(iii) Regular
(a) Watch TV, Video			
(b) Listen to radio			
(c) See movies			
(d) Read books			
(e) Read magazines			
(f) Read Journals			

25. What time, do you watch ? – Evening – Night – Anytime

    (a) TV, Video

    (b) Cinema Shows

    (c) Listen to radio

    (d) Read books

    (e) Read magazines

    (f) Read journals

SECTION – II

(Questions relating to way of life of Army personnel)

26. In a military unit do you have a disciplined Life aways ? Yes / No / Don't know

27. Do you have physical training and games Program daily to keep you physically fit. Yes / No

28. What is the type of job you do ? (i) Physical (ii) Chair bound

29. There is medical routine examinations and regular (as due) immunization program to keep a soldier free from infections and develop immunity. Yes / No / Don't know

30. Ration and other consumable are available in cheap price Yes / No / Don't know

31. How is your personal family relationship with other members of the unit ? Senior, Junior and colleagues of the same rank ?
    (i) conflicting ?
    (ii) Intimate
    (iii) Restricted
    (iv) Non existent

    (a) Senior –
    (b) Junior –
    (c) Colleagues –

32. In a unit and in family quarters what social Life do you lead, – Yes / No

    (a) Interaction pattern is regulated more by Status/rank position in the organisation.
    (b) Meet all personnel from various status every moment and can socially interact with them.
    (c) Visit each others family
        (i) Never –

(ii) Regularly –

(iii) Occasionally –

(iv) Almost non-existent –

(d) Unit life gives beautiful social mosaic Yes/No/ Don't Know

(i) Through cultural heterogeneity

(ii) It is rather an organized community

(iii) Life in small society.

(iv) Social life in camp is absolutely lonely

(v) In addition, dull because of its heterogeneity.

(vi) There is healthy community consciousness in the Army.

33. How many times you had to stay separated from your Family in your service life ? Never / Several times A few times / Not applicable

34. Do you ever like to stay separated for employment reasons ? Yes / No

35. Do have restrictions to go out ? Yes / No

36. Prolonged separation from family members and restrictions to go out develops adverse effect in the mind of a soldier. Is it correct ? Yes / No / Don't know

37. Do you assemble regularly for chit-chat-or gossip at your leisure ? Yes / No

38. What type of mass communication system is more prevalent in army camp life ? Yes / No / Don't know

(a) Inter personal channels

(b) Contacts

(c) Connections through verbal communication

(d) Daily briefing in roll call

(e) TV in Recreation Room

(f) News papers periodicals in the unit Information Room.

(g) Any other (specify)

39. Through which channel the important social educative / health related messages are normally conveyed to you in your unit ? (Tick the correct one)

(a) Radio

(b) TV

(c) Periodical lecture by unit medical officers

(d) Lecture by own officers

(e) Lecture demonstration to ladies in ladies meet

(f) Special lectures

(g) Sainik Sammelans

(h) Any other (Specify)

40. What are your occupational hazards ?

(Tick correct one, may be more than one)

(a) Less pay

(b) Life risk

(c) Frequent movement

(d) Monotony in barrack life

(e) Over exposure to various climates and diseases

(f) Frequent and prolonged separation from family

(g) Restriction on many personal freedom

41. Do you drink ? Yes / No

(a) If 'Yes' after drinking how do you feel Sick / happy / bold / Desperate / withdrawn

(b) Does consumption of liquor make any additional feeling towards sex ? Yes / No / Don't realize

42. Everyone has worries, worries drive tension in mind.

How do you release tension / boredom / fatigue ? gossip with friends see movie / read pornography consume liquor enjoy sex with prostitute spend airmlessly

43. As a military personnel what (out of the following) entertains you most?

reading magazine thinking about family listening to good songs through radio / tape watching TV consuming liquor enjoying extra marital sex any other (specify)

44. What are the community recreational avenues open to you to take part ?

(a) TV at Unit Recreation room

(b) Video show

(c) Cinema at Defence cinema hall

(d) Indoor games like carom, Table Tennis, Cards etc.

(e) Sports competitions at various levels in the unit

(f) Recreational tours, picnics

(g) Drama/cultural program

45. Do you consider TV as an essential part of our life today ? Yes/No

46. Do you think TV program of educative nature can teach us important social messages and those are essential for military personnel ? Yes / No / Don't know

SECTION – III

(Questions relating to communication/media messages, exposure and knowledge, attitude and behaviour of the respondents about AIDS and HIV infection)

47. Have you heard about a disease called AIDS ? Yes/No

If 'Yes' from where did you first hear about this disease?

(Tick the right one)

(a) friends/colleagues

(b) TV

(c) News papers

(d) Radio

(e) Posters

(f) Leaflets/pamphlets

(g) Slides and film strips

(h) Physician/Doctor

(j) Senior Officer

(k) Seminars/Lectures

48. Since when you have heard about this disease ? How long ?

49. With AIDS there is one more word which is commonly heard as HIV (+)

Are these two words same ? Yes / No / Don't know

50. Do you know exact meaning of the term HIV and AIDS ? Yes/No

51. Is there any known AIDS infected person, in or outside the unit? Yes/No

(a) inside (b) outside Yes/No

52. Tick the correct answer :–

(a) AIDS is caused by virus (germ)

(b) It is a killer virus

(c) Person infected with HIV (+) is a carrier of AIDS virus.

(d) HIV (+) is a pre warning of AIDS

(e) There is no treatment of AIDS

(f) HIV (+) person can infect others

(g) Person with HIV(+) does not show any symptom of AIDS for a long time.

(h) An HIV (+) infected person becomes a formal AIDS patient when he reaches the full-blown stage.

(j) Only special blood test can detect HIV infection.

(k) The infected person requires regular medical assistance, counselling and follow up.

53. A person with AIDS has the following symptoms Correct/Incorrect

(a) Frequent vomiting

(b) Prolonged Diarrhoea

(c) Heavy bleeding during menstruation of women

(d) Repeated attacks of fever

(e) Deafness

(f) Extreme weight loss

(g) Swollen glands in the neck

(h) Joint pains

(j) The person dies in minor sickness because there is no defence mechanism in his body.

54. AIDS virus communicate through (Tick the right)

(a) Blood

(b) Saliva

(c) Sweat

(d) Breast milk

(f) Vaginal fluid

(g) Urine

(h) Tears

(j) Spit

(k) Bite of insect

(l) Utilized utensils

(m) Contaminated water

(n) Simple body contact

(o) Used garments

(p) Any other (specify)

55. AIDS may be transmitted/spread through

Correct / incorrect / Don't know

(a) Protected sexual intercourse

(b) Kissing
- Dry
- Oral

(c) Infected pregnant woman to foetus

(d) By using public toilets/sharing toilets

(e) sharing infected needle

(f) blood transfusion

(g) mosquito bite/bed bugs/other insects

(h) sharing shaving razors

(j) being sneezed by an infected person or face to face conversation

(k) sharing cups and plates

(l) sharing same room/bed

(m) embracing

(n) shaking hands

(o) casual contact

(p) through air

(q) swimming pool

56. Grade the following groups according to their chance of getting infected by AIDS as :

	(Tick the grade)		
	High risk	Low risk	No risk
(a) Men having sex with men			
(b) Men having sex with women			
(c) Women having sex with women			
(d) Prostitutes			
(e) Intravenous drug addicts			
(f) Doctors/nurses			
(g) Dentists			

		High risk	Low risk	No risk
(h)	Blood donors and recipients			
(j)	Foreigners			
(k)	Soldiers			
(l)	Truck drivers			
(m)	Slum dwellers			

57. Do you think AIDS is a problem in India ? Yes/No

58. If adequate preventive measures are not taken, do you think AIDS is likely to increase in India ? Yes/No/Don't Know

59. Will you undergo screening for AIDS ? Yes/No

60. Will you allow your family members to undergo screening for AIDS? Yes/No

61. Is there any arrangement for the same in your contingent ? Yes/No

62. Answer the following :– Yes/No

(a) Do you consider HIV (+) person as a guilty man.

(b) Police should put an AIDS patient in a lock up.

(c) An AIDS victim may be creation of circumstances and not by default.

(d) One should not be scared to interact socially with an AIDS victim.

(e) Any knowledge about AIDS is to be shared and communicated among family members irrespective of age and sex.

(f) Sex education in school classes will increase knowledge about the disease complex.

(g) One should not hesitate sharing room with an AIDS patient.

(h) One should not involve in Homo or hetero sexuality.

(j) HIV screening of prospective spouses before marriage should be done.

(k) Pre marital sex is quite common and medically it is not harmful.

(l) After marriage better to be a faithful partner.

(m) A carrier of AIDS should avoid sexual contact with wife and others.

(n) A person who has been tested HIV (+) needs counselling not social boycotting.

63. Do you agree or disagree with the following observations : Agree/Disagree

(a) Sex hunger is more among army personnel

(b) Sex perversion is more among army personnel

(c) In a barrack life and without family, marital sex relation (pre or extra) is unavoidable.

(d) Some stray personnel visit prostitute (Red light areas) more frequently.

(e) Habit of drinks increases the urge for sexual pleasure among army men.

(f) Supply of subsidized hard drinks to army be stopped.

(g) There should be special approved brothel only meant for army personnel near each unit.

(h) Army personnel require more health/AIDS related education.

64. One uses 'Cond om' for (tick the correct)

(a) protection against pregnancy

(b) protection against AIDS

(c) protection against other venereal diseases

(d) to make sex more enjoyable

(e) easy available

(f) it is a cheap family planning device.

(g) Sex partner insists to use

65. The 'condom' is not used because (tick the right)

(a) Do not know how to use it

(b) It reduces sexual pleasure

(c) Creates vaginal disease

(d) Increases discomfort

(e) Sex partner does not like it

(f) Against religious belief

(g) Difficult to get it and dispose after use

(h) Other forms of contraceptive are used

(j) Hesitate to purchase it

66. What are your sexual preferences ? (tick as applicable)

(a) sex with females only

(b) sex with both males and females

(c) sex with males only

67. Do you fall in any of the following categories ?

(a) frequently visit prostitutes

(b) have sexual relations with others than own wife

(c) none of the above

68. After knowing about AIDS I will : (tick the right)

(a) Avoid donating blood

(b) Avoid social intercourse with HIV (+) infected persons

(c) Get myself and my wife immediately tested for HIV

(d) Use disposable syringes and needles

(e) Avoid touching bleeding persons without gloves

(f) Avoid going to quack dentists

(g) Avoid going to 'red light' areas.

(h) Ensure getting blood tested when blood is to be transfused to own kith and kin, friends and vice versa

(j) Avoid multiple sex partners

(k) Avoid transfusing unscreened blood donated by professional donors

(l) Avoid purchasing blood from private nursing homes

(m) Avoid mating without 'condom'.

69. What would you do if your wife is infected with HIV (+) : (tick as applicable)

(a) get yourself tested

(b) avoid pregnancy/intercourse

(c) avoid total sexual relations

(d) ask divorce or separation

(e) send her to natal home

(f) send her to 'Home' meant for social victims.

(g) seek regular medical assessment, counselling and following up.

70. What would you do if a close relative other than your

spouse is infected with AIDS? (tick as applicable)

(a) Continue normal relationship as before

(b) Talk to her but avoid touching her or eating with her

(c) Stop talking and other social intercourse with her

(d) Stop all contacts with her

71. What would you do when you are required to give blood sample to any laboratory for routine investigation? Yes/No/Don't Know

(a) Will you Check whether disposable syringe and needle are being used ?

(b) Will you let the blood be drawn without HIV screening?

(c) Will you attend all other testing but not HIV screening?

(d) If none available or granted, will you refuse blood sample?

72. Have you learnt anything about AIDS/HIV from the following communication channels/ media in the last one-year?

(a) Radio

(b) TV

(c) News Paper

(d) Posters

(e) Hoarding

(f) Magazines/Books

(g) Slide Show

(h) Pamphlets/Hand Bills

(j) Sainik Sammelan

(k) Ladies Meet

(l) Special Lectures

(m) Regular gossip centre in camp.

73. Regarding knowledge about AIDS what is the extent to which you are exposed to be benefited from your contacts with following persons :

Personnel	Nature of benefit in terms of information received
(a) Doctor	
(b) Nurse	
(c) Teacher	
(d) Family members	
(e) Senior officials	
(f) Senior officials	
(g) Relatives	
(h) Neighbours	
(j) NGO workers	
(k) Other (specify)	

74. Have you come across any publicity material and by the health workers/NGO/Govt. publicity mass communication department about AIDS? Yes/No

If 'Yes' specify the exact message context of the same.

75. In your judgement what communication channels could effectively disseminate information about AIDS among the army personnel (Name five channels/media in order of priority communication channel/media) – with reasons for preference.

Total time taken with the respondent

Date of interview.

AIDS CALENDAR

1981 – Epidemic of Pneumocytes carinie infection in Los Angeles, USA.

1981 – Epidemic of Kaposis Sarcoma in New York, USA.

1982 – Case definition produced for AIDS by Centre of Diseases Control, Atlanta.

1982 – Slim Disease encountered in RAKAI, Uganda.

1983 – Increase in Kaposis Sarcoma found Lusaka, Zambia.

1983 – Isolation of virus by Lue Montganier in France.

1985 – ELISA blood Test developed.

1986 – Dr Hafdan Mahler, the then Director WHO addrsses UN on AIDS.

1987 – WHO special program on AIDS formed (becoming a global program on AIDS in 1988)

1987 – HIV2 virus found in AIDS patients in West Africa.

1988 – First Global Meeting of Health Ministers on AIDS.

1990 – First conference on AIDS in Asia and the pacific held in Carolina, Australia.

1995 – 9,85,119 - AIDS cases reported from 164 countries.

(Source : WHO, January, 1995)