SUMMARY OF THE REVISIONS CARRIED OUT ON THE MAIN DISSERTATION "COMMUNICATION FOR HEALTH EDUCATION KNOWLEDGE AND PERCEPTION OF ARMY PERSONNEL ABOUT AIDS AND HIV INFECTION" AS PER REQUIREMENT OF THE EXAMINER

Q 1. The author focuses on modes of Health Communication, but is also the question of cultural perception of epidemiology, the body, sexuality. It seems odd to enquire about AIDS without thinking about ideas of how diseases are contracted and treated-I would like to see a lot more analysis of cultural constructions of health in terms of Sociological Theory. What is significant here is that it would help explain some apparent inconsistencies in knowledge, e.g., why are folks 'misinformed' about certain aspects and accurate on others? Very important to look at the theory here.

A1. The whole work has further been deliberated upon. The cultural construction of the problem was not focussed earlier. This has now been categorically analyzed, describing the cultural perception of the epidemiology and etiology of the disease in relation to 'body and sexuality'. The causes and consequences of AIDS/HIV infection have been discussed in details, citing valued opinions of renowned social scientists and other experts (page 29 to 30 refers)

Treatment of AIDS has now gradually been invented which has been narrated with available medical descriptions and references. How cultural construction of health affects communities and in the long run the society, has been exhaustively discussed by *Anthony Giddens, Paula Treichler, Grossberg* and *Nelson* in their respective books as quoted sequentially. The insights of such social scientists have been cited, exemplified and analyzed in the light of cultural construction of health. Sociological interpretation of the problem has been highlighted (page 27 to 28 refers).

As observed by the Examiner, the inconsistencies of knowledge about AIDS/HIV infection, are not based on one single reason, which can be pointed out and rectified. This has innumerable causes out of which the major few have been explained below:

(a). The level of education of the group of population under study is in variance which has been tabulated in the main study. The inconsistency of knowledge about AIDS/HIV infection among the study population is due to (i) man to man variation, (ii) due to variation in their cultural construction about 'sex and sexuality', (iii) due to difference in method of dissemination of information about AIDS/HIV infection to such people.

Among officers who are found to be highly educated are found to be aware of the epidemiology of the disease correctly. Since their knowledge is specific attitude and practices are also found to be exact. So when there is dissimilarity in their level of education, their ability to perceive about any problem in general and about this disease in particular is inconsistent. AIDS is still is termed as a new disease and is mainly a sexually transmitted disease. The social taboo on matters of sex and its knowledge, compels a normal educated person to remain away from the exposure of such subject even if some one is keen to disseminate knowledge about it The educated group out of this population i.e. officers are found to be more advanced in comparison to Junior Leaders and Other ranks for obvious reasons. So there is an inherent educational inconsistency in such organization which however can be got over through consistent health education module consisting of the explanation about this ghastly disease.

(b) As explained in the thesis, there is a gross variation of standard of literacy in India. It is between state to state, between male and female and between rural and urban population. Thus their reaction to questions on various problems / points are also different. Even if a subject like AIDS/HIV infection is discussed through a standardized module to all, the over all assimilation and perception about the disseminated subject will not be the same.

(c) The knowledge about sex and sexuality of people of various states differs grossly reflecting their pattern of behaviour in the context of this disease.

In the main thesis however, the exact cause of such inconsistent manifestation of perception about AIDS/HIV has been analyzed through empirical study.

Q 2. A related and extremely important issue is cultural constructions of sexuality and also 'masculinity'. The author contends that "men" (as if universally, biologically) need 'sexual releases' on a regular basis and hence turn to prostitution – he needs to analyze the ways in which male and female sexuality are constructed here, the ways in which this has to do with a particular patriarchal construction of male sexuality in terms of impressible urges/heterosexual release / access to women (what about masturbation, for example? There is a particular clubbing together of male army personnel and truck drivers with slum dwellers' behaviour. What is the connection ?). So there is a need to be a lot of analysis of assumptions about masculinity-Please refer to the literature.

A2. In the original thesis, the cultural aspects of the subject was not highlighted. As per the points raised by the examiner the male and female sexuality and its construction have been exhaustively discussed in the revised dissertation. (Page 39 refers). The instinctual behaviour is some thing in-born and the desire to sexual release is an innate phenomenon. It is neither confined to male nor to female sex singularly. A cultural apprehension about 'masturbation' exists among many which has been explained in the text. However, this being a self-driven act of sexual release, there is an element of shyness before its practice. Though it is broadly known that when an army man has to survive for days under extreme climatic conditions and stressful circumstances, when the work and rest have hardly any gap, when he is on an Artillery Observation Post on a small little hump along the Himalayan Ranges, the act of 'masturbation' is an untold

pleasure which relieves him temporarily from fatigue, tension and agonies. Though it lasts for a short time, yet it creates some change of life.

It is within the pretext of this study to say that while discussing cultural construction of sexuality of a military person, 'masturbation' obviously plays a significant role. Though it has not been cross checked through interview schedule, it is an accepted fact of soldier's life.

As it has been discussed in the restructured thesis that the cultural construction of sexuality among the military personnel of Indian Army is typical and not comparable with the same communities in other countries which will be misleading the actual facts.

While discussing about various grades of risk quantification of susceptive groups as regards AIDS /HIV, the soldiers (as *Robson* also says) have been identified to be of 'high risk' category. The soldiers have appeared along with other 'high risk' personnel such as 'slum dwellers', drivers and it does not signify any status equation or clubbing as perceived. It is known that the type of social commitment of military personnel is unique and identical and there is no acceptable reason to club this particular community with slum dwellers, truck drivers in any context.

Q 3. I am also mystified by the treatment of "women". First surely there are women in various ranks of army-the author makes it seem like this an entirely male organization and the women merely serve as wives, contributing unpaid labour to the Army. Please read *Cynthia Enloe's book "Bananas, Beaches & Bases)* and its Chapter on Army wives. Secondly, see Enloe for description of the military's relationship to prostitution- analyze more here. Perhaps more serious is the claim that women need to be educated correctly about AIDS-certainly.

Some women need better education, but there seems to be overwhelming evidence that women often have little say in whether an how they should have sex. This is where cultural construction of masculinity comes in despite information

about condoms, men refuse to use them because of cultural construction of promiscuity and sexual pleasure. And thus AIDS spreads in women who may not even know of partners' promiscuity and against their wishes. So check research on this, through women NGOs in India and research on women and health.

A 3 . The author submits his study context to the learned examiner to say that unlike many armies in the world like *US, British, Israel* and others, Indian Army does not recruit women in ranks. It has a very negligible percentage of women officers as medicos and nurses. Since 1994, *Short Service Commission for women* has been introduced and a very fractional percentage of women have joined in officers' rank. So as construed by the examiner the Indian Army is a male organization except for few women as explained earlier. More over as per the scope of the study women has not been included in the population.

As per query raised it is submitted that it will not be contextual to say that women serve male folk in the Army. As wives of army men, they represent different social status associated with the status of their husbands, but certainly it is not counted against any service. As wives they are not servant to any one.

The study population of the author is only male community of India and there has been no examination of women population at any stage as mentioned earlier. As such it is not within the prerogative of the carried out study to draw conclusion on any aspect about woman community .

As per the expert comments of the examiner and kind guidance, the book *"The Bananas Beaches and Bases" by Cynthia Enloe* has been gone through but except for the description of the military's relationship to prostitution-nothing more can be contextually discussed by the author. The chapter on Army wives has been understood, knowledge established but in the work no mention is made for the simple reason that this study relates to the Indian Army only which is a male Army (page 54).

Since the desire of the examiner has been projected through the said query, necessary study has further been carried out and explanations enumerated in the revised thesis, without any modification to the aim and objective of the study.

On Woman Health, series of works have been undertaken by NGOs in India. As one such NGO, *Monalisa Misra*, coordinator of "Positive Life in India" writes, "It is quite evident that this affliction is very closely related to structural gaps in our society. Not only is there gender inequality, but the women also have little or no access to health services. When microcredit has been effective elsewhere, there is no reason why it cannot come good here".

These NGOs have identified the specific goals to enhance the financial independence to women empowering them to assert their sexual rights. Sensitive loan policies have been implemented towards helping women.

The gender discrimination in India has been magnified with the problem of increasingly favourable sex ratio to males. This is in contrast with most of other countries, where the survival chances of females have improved with increasing economic growth and declining overall mortality. In India, excess female mortality persists up to the age of 30- a symptom of a bias against females. But there are wide disparities in fertility and mortality among various states in India and within states between rural and urban areas.

The result of various sociological studies carried out in India goes to prove that poverty underlies the poor health status of most of the Indian population and women represent a disproportionate share of the poor. Women's relatively low status (particularly in the North) and the risks associated with reproduction exacerbate what is already an unfavourable overall health situation.

Women have no freedom or choice to suggest use of condom to their husbands. There is possibility of being stigmatized by the male partner on such occasions. The

discrimination is so wide; it is visible in the society through action and does not need any special study. In the context of household resources such as food, access to healthcare, education as well as marriage, there is a distinct discrimination between male and female community in India.

The author has tried to put across the need for women education in Indian scenario and not of any other country of the globe. Though the studies suggest that there has been a significant improvement since independence in the field of uplifting women literacy in India, yet a large gap still remains unfilled. According to 1991 Census, only 39 percent of Indian females above the age of 7 years were literate compared to 64 percent males. So there is a need to educate women in India, to make them self-assertive and strong. More will be the literacy level, better will be the perception of life with developed socio-cultural views. Preference to son-child will vanish, which is the fundamental social discrimination sowed by females themselves at least in India.

When the female folk are educated and brought at par with male community or even over take them in many aspects, 'condom' promotion will need little effort and the cultural construction of promiscuity will undergo a sea change. Researches undertaken by a number of NGO organizations in India have brought out the fact that gender discrimination, stigmatization, low female literacy are the hereditary cultural legacy that are being upheld by Indian society. The earlier these evils are disintegrated, better achievements will be attained towards knowing what is AIDS / HIV and how we can guard against the same. It will be easy for women to read books written by *Cynthia Enloe, Susan Sontag* and *Paula Treichler* (as quoted earlier) to understand that how the unexplored potentiality of women has been neglected, unfocussed and not utilized to its optimum quality misleading the whole society. How far we can get over the problem of illiteracy and join the main stream towards development- is the question of the day.

Q 4. Need to fill out the research on AIDS-the author looks at medical and some sociological information, but needs to look more at research on cultural construction of AIDS and homosexuality; transmission is not the same among 'gay men' and lesbians (may have to do with permeability of anal vs. vaginal tracts, depending on kinds of sexual behaviour). Also since this is official, a dissertation submitted in 2001, there needs to be more information about AIDS/HIV cures of a sort, the new AIDS cocktails and politics of industrialized versus developing nations with regard to that.

A4. As an answer to this question, the Thesis has been thoroughly rewritten and restructured. In the process of restructuring, many modifications with additions and alterations have been made as regards cultural construction of AIDS, which is considered very much essential in this context. The author has again gone through a series of books, updated write ups in addition to what are referred by the examiner, most carefully and analyzed the disease as culturally constructed. The cures of a sort have been discussed in the light of new medicines invented and being administered (page 16-17).

The process of transmission of HIV among homosexuals and lesbians are different. The physiological structures of rectum region and that of vaginal formation are different. The muscles and tissues of anus are delicate, fragile and more susceptive to damage and rupture, at the time of penile penetrations. The injuries caused due to any friction or pressure generated by the penis, canalize the virus simultaneously through such injured areas most easily from an infected partner. In case of lesbians, basically there is no penile penetration and the manifestation of sexual act is functionally different. The discharge of semen if any, may not seek entry into vaginal core region as easily as in case of penile penetration. So the chances of causing injury to the vaginal wall cells are almost non-existent and as such the scope of easy transmission of virus through blood, injured tissues, semen is also non existent.

Till referred by the examiner, the author had not come across the quoted books written by *Paula Treichler* and *Susan Sontag* .As such, these books referred have caused a great deal of advantage to him adding certain finer aspects in his work which makes it a complete accomplishment now. For the interest of the examiner/s, the author would like to mention in this context that these two books were not available anywhere in the country/library and had to be procured from respective publishers through protracted efforts spending good deal of time and it has been fruitful.

Susan Sontag in her book mentions, *" military metaphors contribute to the stigmatizing of certain illnesses and by extension, of those who are ill"*. Disease is not perceived in military life with pragmatism. The book is written with realization of a victim of crucial disease stigmatized with pessimism. It is not a presentation of concepts through a paper in informal style, rather it is a book written on AIDS which as per her, is not the name of illness at all. It is the name of a medical condition, whose consequences are a spectrum of illness, so called opportunistic infections or malignancies.

AIDS is tiny, about one sixteen thousandth the size of the head of a pin. Scouts of the body's immune system, large cells called macrophages sense the pressure of the diminutive foreigner and promptly alert the immune system.

Cancer makes cell proliferate, in AIDS, cells die. *(Sontag:1990)*

Paula Treichler on the other hand, brings out the explanation that AIDS is nothing but a coherent intellectual narrator. The syndrome has been viewed as a social and cultural problem. It has similarly a biological and biomedical epidemic face too. Much significantly and much to the utter astonishment to medical views of the author of the book, *How to have theory in an epidemic, cultural chronicles of AIDS*, focuses on the ways we come to understand the AIDS epidemic, its interaction with culture and language, the intellectual debates and political initiative that the epidemic has engendered, its function as a site for competing ideologies and sites of knowledge and its possibilities for guiding us towards a more humanity and enlightened future.

In this, the writer opines that AIDS arrived at a right time coinciding with a period of attention to language. It is a time when basic scientific research in molecular biology, virology and immunology could provide a foundation for an intensive research effort focussed on AIDS.

The writer's focus on AIDS and HIV infection in the Third World concerns more in this study which she explains in Chapter 3 of the book. The Third World epidemics are seen to be simple material disasters.

In a complete design of the book, the writer has left no stones unturned so far as the analysis of such disease is concerned. In the fourth chapter it discusses about media treatments of AIDS/HIV particularly on television network news programs.

The core of argument of the writer of this book is found in Chapter AIDS/HIV and the cultural construction of Reality. It is a diversion of prototype through out the study areas of this problem with association of intellectualism in construction of AIDS epidemic.

In this chapter AIDS is described as a social or cultural phenomenon or a cultural construction. It means that like any great event in a society or a crisis, AIDS significantly affects social life and symbolic expression. The anchoring problem of the disease is biomedical and it would be solved in a laboratory only *(Morriset: 1989,6)*

Having considered AIDS as a social problem, the crisis of the society does not diminish. The biomedical point of view speaks of the cocktails for AIDS treatment. Though some of the initial magic has worn off, drug company cocktails still retain something of the aura of an elixir among the proud citizens of the HIV positive community. Many people, most of them 'gay men', pregnant black women or drug addicts have now been prescribed these medicinal combinations as they sit stunned and inattentive in their doctor's offices, having just received their positive test results.

These medicinal cocktails have arisen just as the alcoholic cocktail is making a social comeback. The prescribed cocktails, though are not drinks but capsules combining various conventional nucleoside analogue drugs (DNA chain terminators such as AZT and its surrogates) together with varieties of newest official AIDS treatment, protease inhibitors. The inhibitors ostensibly target a particular class of enzymes by interrupting the assembly of viral proteins. This process is supposed to prevent " the virus that causes AIDS" from infecting new cells killing people.

The cocktails have been aggressively promoted not only by physicians through drug company literature. It has different effect on different individuals. Some people have been unable to endure cocktails or have succumbed to heart attacks after taking them.

For prolonged consumption, inhibitors may be toxic, though it is initially beneficial for some seriously ill people. Each of these drugs became the treatment of choice for a wide range of HIV positive people, its mass prescription was heralded with a flurry of claims and corresponding accounts of spectacular benefits. These phenomena diminished somewhat as large number of patients found they could not tolerate the drugs as side effects became more widely known, as independent tests failed to recover their health or after an initial rally died. Even so, the assertions and expectations surrounding each of the drugs have not disappeared but rather has been subsumed by claims for new combination of products.

Another characteristic of the cocktail has been stringent accompanying instructions regarding self-administration. It is also known that some patients take their cocktails at regular intervals during the day (the cocktail hour) and never miss a dose. The peculiarity is, if one single dose is missed, the virus takes opportunity and ensures that all previous doses taken are rendered ineffective.

Cocktails must be consumed repeatedly, repetitive regularity is no less important than consumption as an act of faith and obedience guaranteeing salvation.

The meticulous dosing schedule is not a new phenomenon. In the early days of AZT, the little blue and white capsules bearing silhouette of a unicorn came in a *Microconta Drug Timer*, a slick plastic box with a loud alarm that sounds like a truck backing up. (*Dr. Robert Gallo had likened getting HIV "to being hit by a truck"*). This device went off every four hours, day and night and recipients of the drug were never allowed to get good nights' sleep.

Consumers can be demanding and manufacturers are rushing to meet those demands. The new cocktails are New! Improved! Easier to take! Once one is on them, one must never stop on pain of death.

The cocktail is the prefect product as Oscar Wilds, said of cigarettes, it leaves one totally dissatisfied. The cocktail has become a positive lifestyle.

All medicines has a sacramental component and drug consumption, is almost always ritualistic. (www.virusmyth.aid dated 7th august,02).

Answers to Few Assorted Questions

Qa. Pls check more thoroughly for spellings and editing errors. Also need citations more consistently for many of the facts.

Aa. The spellings and typographical errors have been rechecked and duly corrected. The entire thesis has been restructured, reedited with inclusion the points as received from the examiner through various questions. All citations as referred have been gone through and inconsistencies as pointed out have been removed. The work has been reoriented. (Fresh copy of the dissertation as enclosed refers).

Qb. May want to be more specific about sociological ethics- Was participation voluntary? How was confidentiality ensured ? What employment or other power relations existed between interviewer and the interviewee?

Ab. It may be explained that the entire process of interview was voluntary and the conduct of such interview as stated below will justify the facts.

(a) To initiate the process of interview the investigator made a deliberate plan. To seek volunteers from any organization it is considered mandatory that the exact matter is required to be explained to the unit of population selected for any interview. The Investigator firstly called on the Commanding Officer of 33 Corps Operating Signal Regiment formally to discuss his perceived proposal regarding a study concerning his man power. It necessitated the latter's consent which was obtained. The investigator discussed with the Commanding officer the epidemiology of AIDS/HIV and then explained to him its contextual relationship with such study with necessary Training aids like slide/multimedia projectors, Video displays, audio quotations etc. The purpose of carrying out the survey amongst the population of a unit Signals of the Army, had a specific aim which was also explained to the Commanding Officer. It was brought out that as per the perception of the Investigator, a Signals unit of Indian Army being a technical unit was organized with personnel with more than one technical trades, which in case of any single caste Infantry battalion like a Gorkha Battalion or Assam Regiment may have only one or trade only. The personnel of a signals unit thus represent various states of India which would provide a well composed mixed population a replica of Indian over all sociological feature. The contents of such briefings by the Investigator was further carried forward by the commanding officer of 33 corps operating signal Regiment to his officers, junior Leaders(JCOs) and the Other ranks. In his briefing the basic information was conveyed along with the format of the interview. Queries if ~~any~~ any were clarified individually. It was considered necessary because such type of investigation was not held in past.

(b) The Commanding officer made it clear at this stage that the participation in the interview was **voluntary** for all ranks. Accordingly 850 personnel including all officers except one, all Junior Leaders and Other ranks volunteered to be interviewed. A list of such personnel was forwarded to the investigator subsequently. The Investigator finally selected 201 candidates for his scheduled interview.

(c) 'Confidentiality' was the prime factor of the interview from its beginning since it was on a sensitive and pandemic disease related to sexual behaviour of men under command. The following methods were adopted:-

(i) The Investigator's identity was concealed. Barring few officers no one knew him personally. The Investigator belonged to a unit which was located away and was not approachable easily.

(ii) The names of the candidates were not asked. It helped maintaining their individual identity to the investigator and the statements were without hesitation. The sensitive questions were attempted and answered openly.

(iii) Prototype interview system was avoided to generate more interest among all. The timings , places and patterns of interview between two individuals were staggered.

(iv) The answers to questions were recorded by the officers individually and were recorded by the investigator in case of Junior Leaders and Jawans. Such individual investigation was confidential.

(v) The conduct of interview was not on class room concept. It was spread over days most deliberately and no one was deprived from his daily duties. There was no indication of a formal conduct of such interview to any one. There was no scope to get influenced by gossip from those who were interviewed and those to be interviewed.

(d) There was no power relation involved in the complete process. The interviewer being a senior officer of the army hierarchy made sure that there was no influence imposed on any individual which may jeopardize the complete interview. To safe guard against any such influence he took the following course of action:-

(i) the interviewer was on long leave and was not attired in uniform to conceal the basic identity.

(ii) the interviewees were addressed as customary. No military jargon was used. The whole interview was exactly presented as an academic pursuit.

(iii) The subject being new it was explained most informally in a language best suited to an individual. The interviewer was like a friend of the organization, to help out the community against the disease.

(iv) The interviewer created an atmosphere of subject friendliness among the population which it self was informal and interactive. As the interview progressed, he found keen interest of the individual. The method of interview was such that each individual came out with positive response.

(v) Since there was no power influence and it was voluntary the attendance was 100 per cent and answers were as per their knowledge score with no distortion of facts.

(vi) The interview was data yielding educative and as per plan.

Qc Explain how and why there might be diverse rates of AIDS in India?

Ac. India is huge country in the world with its distinct diversity. It diversity in terms of geographical and sociological grounds is a well known fact. It has 25 states and 7 union territories with a large diverse population, language, food habits and cultural

composition. So there is a great degree of difference in their rate of literacy, per capita income, standard of living and many other sociological aspects. As a result of large variation in almost in all sociological phenomena, passage of one such unique module of information on AIDS/HIV infection uniformly to all its people may yet leave a gap which ultimately creates diversity of their knowledge score.

In the Indian Army, its population is the representation of all states and trough a uniform health education on AIDS/HIV infection the inherent diversity can be to some extent overcome. There is a great barrier of language between the states of North and those of south. Unless it is administered through a common language and to almost same literary group the variation will be visible.

Apart from all these there is a variation in cultural construction of sex and sexuality among various states in India. When the people of North Ease and East suffer from infection through contaminated needles, the infected ones from Bombay suffer from STDs.

However while conducting the study it has been experienced that it is only the Indian Army in India which in spite of all variation of sociological factors, some uniformity will be created to do good to the whole society one day. The diverse rates in India as commented, however will be narrowed through undertaken preventive program by the govt and NGOs, to prevent its further growth.

Qd. Under theories, " black immigrants"- do you mean African immigrants? From which part of Africa? In what century? Need to explain if you don't want sound racist!

Ad. The word 'Immigrant" as mentioned in the study signifies black immigrants who came from Africa to seek better life and rehabilitated themselves. The exact year of such immigration is not available.

Qe. Study: Who was tested? What segment of population? Can one make generalization of the state population based on that?

Ae. While studying the AIDS situation in India, the study report of NACO (National AIDS control Organization) of september,1995 and March, 2001 have been referred. The size of the population of each state as enumerated in table 4 of the dissertation shows that a very large sample size has been interviewed who represent almost all states of India. The larger is the state more is the number of people in the Army. It has a fair degree of over all demographic pattern of each state. So out of such representation of population of each state it is significant to draw a meaningful deduction as regards this disease because there can be no better way to conduct a survey of population of such a large country like India. Unlike any organization, Indian Army population is the true representation of the country. So the drawn out sample is the replication of the state population which has been verified through the actual study.

Qf. P32 & various other points. The Army population is not necessarily a random sample of the diversity of Indian religious & ethnicities- certain groups may be over represented because of historical/ economic reasons. Please describe the differences in demographics between the Armed Forces & the Indian population.

Af. As mentioned the Army population is not a random sample of India but it is a circumscribed community which is proportionately represented with the population of all 25 states and 7 union territories. On the basis of religion Hindus are statistically more and so is its representation in the army. At its formative stage, the representation of Punjab state was more but over a period of last few decades the basis of recruitment has been as per the population of each state. Historically marshal race concept no more exists in the Indian army and such concepts have been proved futile during the wars fought by the Indian Army. The population of India is more than 100 million approximately and that of the Indian Army is around 10 Lakhs. The difference between these two figures though are large, as an Army population, the size of this population is worth mentioning.

Qg. P58 How does one "detect' who has HIV, let alone AIDS? People may not even know themselves.

Ag. AIDS is a syndrome, its manifestation varies from person to person. Practically it is not possible to 'detect' an HIV positive person unless there are symptomatic manifestations of such persons displayed sufficiently. In case of a military unit , when a person is detected as HIV positive, he is kept under medical care. Therefore to verify practically visiting an HIV positive person the scope is limited. More over there may be very few who know exactly what is to be observed. However with adequate visual exposures of HIV positive cases while learning about the disease, eye for symptoms is likely to develop and then an HIV positive person can be 'detected.

Qh. P 84. " Voluntary" and " professional" blood donors are not mutually exclusive categories. What do you imply by " Voluntary"- spell out.

Ah. In India, there are two categories of blood donors one is 'Voluntary' and the other is 'Professional'. Voluntary blood donors are those who donate blood solely on humanitarian grounds. It is considered to be a noble act to save some ones life when in need of blood for which he/she can not probably pay. The donation is done through various 'Blood Donation' camps organized through out the year at every state. It does not have any laid out program and executed by local clubs/ voluntary organizations/NGOs. As the term suggests, the donor in turn does not expect any thing in return. It is an act of self sacrifice an act of self motivation as such it is called ' voluntary'.

On the other hand a "Professional Blood donors" are those who donate blood in exchange of money. Practically speaking blood in such cases are sold to some one who needs it. Such donors are generally found in all metro cities and other urban areas where facilities for blood transfusions exist. The act of professional blood donation is mostly limited to poor and needy group of population who need an easy earning out of this. It has been found that many blood samples out of such donors are contaminated with various diseases. Unless proper tests are carried out of these samples, it is not safe to

transfuse blood from 'professional blood donors'. In some urgent cases when blood of a rare group is not available and the same is urgently required to save some ones life the professional donors' are considered as an option. AIDS/HIV infection has in large number spread out in India through blood transfused from 'professional blood donors'.