CHAPTER-I

INTENSITY OF HIV/AIDS AND ITS SOCIO-ECONOMIC IMPLICATION IN INDIA AND SOUTH AFRICA
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1.1 Introduction

Human Immunodeficiency Virus (HIV), which causes Acquired Immuno-Deficiency Syndrome (AIDS), has become the greatest devastating disease than any other disease humankind has ever known. Twenty-two years after the first clinical evidence of HIV/AIDS was reported, the disease has neither been tamed nor any effective medicines been developed, it has rather overgrown and has brought the epidemic into a global proportion, as more than 60 million people have been infected by this virus. The fearful aspect of the disease is that, about half of the infected victims are in the most productive age group of 15-24 years; and the number is growing day by day. By the end of the year 2007, an estimated total of over more than 25 million people have already died of HIV/AIDS since 1981, around 33.2 million people in the world are currently living with HIV/AIDS, out of which about 12 million (that is 30 per cent) are young people. Globally an estimated 5 million people are infected by the virus annually, out of which more than half a million are children.¹

At present, the number of HIV/AIDS patients approaching deaths exceeds the number who has already succumbed to this fatal menace. Most of the countries in the world today are under the serious grip of HIV/AIDS epidemic and many more countries are becoming its prey day by day. HIV/AIDS thus becomes the fourth largest killer disease globally and is the leading cause of death in African Countries.²

According to the Joint United Nations Programme on HIV/AIDS (UNAIDS) and the World Health Organisation (WHO), the number of people living with HIV/AIDS by

² Ibid
the year 2004 was estimated at over 40 million in the world. Various other enumerations projected, that the HIV/AIDS will lessen the life expectancy to around 30 years in some of the Southern African Countries by the year 2010. Currently some 5.7 million are leaving with HIV/AIDS in the Republic of South Africa, whereas in India the HIV caseload is somewhere between 2 and 3.1 million.\(^3\) The rate at which people are infected with the virus in India and South Africa has dangerously been increasing. In fact, HIV/AIDS in South Africa is the fastest growing epidemic in the world.

It has been found and understood that the incidence of HIV/AIDS is most prominent along the national highways or expressway, hotels and motels, joints, red light areas, and the shady parks and locations, which are mostly concentrated in the Suburban as well as in and around the major cities or satellite towns of a country, from where it radiates to the rural or hinterland areas.

The victims of HIV/AIDS in the above situations are therefore, mostly and generally the poor, illiterate and economically weaker sections of the society. Despite its widespread reach, the epidemic is still in its early stage; the HIV/AIDS has markedly misbalanced and battered the growth and development of a country’s social and economic well-being. Since the problems of HIV/AIDS affect most aspect of peoples living, it therefore, raises many social, economic and cultural issues, which relates to human rights, ethics and law. HIV/AIDS is a reality in the world today, in such situation the absence of tabled law can become a matter of life and death, since most of the affected masses are people and communities, who have unequal access to social and economic right. The denial of basic rights limits people’s choice to defend their autonomy, to earn a viable livelihood and to protect themselves, leaving them more and more vulnerable to both the HIV/AIDS and the adverse impact of it.

The impact of HIV/AIDS are enormous; women, children, youth and, in many places, racial and ethnic groups, migrants and refugees, suffer from discrimination,

intolerance and prejudice. In a climate of discrimination, people are less likely to present themselves for voluntary HIV testing and are thereby unable to access treatment, care and support. This, in turn hinders the governmental and non-governmental effort to develop a target policies and programme implementations to fight the HIV/AIDS.

Around the world, enhanced physiological risk of HIV/AIDS infection to women is compounded by economic deprivation, lack of employment opportunities, poor access to education, training and proper information, and socio cultural norms and practices. For instance, in Sub-Saharan African Countries, prevalence of HIV/AIDS among teenage girls is 5 times higher than teenage boys. Most of these infections occur as a result of unprotected heterosexual intercourse. Anyway, women’s low economic and social status limits their power to negotiate the use of preventive measures such as condom, discuss fidelity with their partner, or leave risky relationships. Such disempowerment increases their vulnerability to the HIV/AIDS and eventually become life-threatening, even if women were educated about the HIV/AIDS; their economic dependence on men lives most of them feeling helpless to negotiate safe sex.4

Besides women, youths are one other aspects of vulnerable lot because of the freedom they enjoy and most of them do not know whether they are infected. According to the UNAIDS reports 2004, of the total of about 40 million people with HIV/AIDS worldwide, at least one-third are youth aged between 10-24 years, every day 16 thousand new infected patients are added to these numbers, which include nearly 7 thousand young people.5

Women today make up nearly half of the adults living with HIV/AIDS worldwide. They are three times more vulnerable to HIV/AIDS infection then men, male to female HIV transmission during sex is about twice as likely to occur as female to male transmission. For many women in developing country, particularly the republic of South Africa and India, the “ABC” (Abstinence, Being Faithful and having fewer sexual

4 Ibid
partners and using a condom) approach to prevention of HIV/AIDS seems to be insufficient as the rate at which women and children (youth age 10 – 24) are infected by the HIV/AIDS pandemic. Millions of young people are becoming sexually active each day with no access to prevention services. In India the real numbers could be more dramatic than the official ones; in any case, HIV/AIDS carrying men are infecting their helpless wives, who in turn pass the disease on to their children. 6

The number of young people and women living with HIV/AIDS is increasing in every regions of the world, so does the injecting drug use, that contributes to an increasing large share of new HIV/AIDS infections, especially in countries like India and South Africa, HIV/AIDS epidemic must be taken cautiously and seriously, rather than a single epidemic. Different regions and even different countries are experiencing diverse epidemics: some still in the early stages; like Mongolia and Bhutan, while some in the advance stage; like, South Africa, Nigeria and Zimbabwe. To confront the disease, health policies around the world have begun to tailor out HIV/AIDS message into local realities and dynamics. Despite having all the information and knowledge about HIV/AIDS, it is yet to reverse the contagion. So the big question is how, in this information saturated age can do better to tackle the AIDS crisis. 7

The main challenge is to break down the barriers of denial. Sadly, for most of the people, HIV/AIDS is still the disease that affects other people. Denial of the epidemic has led to a gross mismanagement and inaction. Global statistics are frightening, but they are clearly not ultimate enough to protect a young person afraid to ask her partner to use a protective measure on a hot date, or protect a wife who will be beaten if she refuses sex or insist on using a condom, or even a lorry driver, who is more afraid and concerned about the traffic police then HIV/AIDS that he might acquire at the next truck stop. Governments and communities are not yet feeling the sufficient pressure to act, if indeed they do act, the priorities are not always right. AIDS campaigns have long focused on prevention and it should still be the main thrust of any campaign. But the solution lies not

7 Ibid.
only in providing enough condoms or clean needles, stigma and discrimination are other important facts that stands as a huge barriers in an endeavour to contain the menace, as well as in providing adequate care, support and treatment. It is frightening to note that more than 90 per cent of those infected do not even know that they are infected by the virus, and even those who do know that they have been infected by HIV/AIDS are sometimes too fearful to seek the counsellors help or treatment, coupled with this are the taboos about sex and drug use. Morality, cultural beliefs and cultural practices are the other barriers in tackling the HIV/AIDS issues. Media silence on HIV/AIDS can fuel complacency, the answer lies in serious and sustained public education efforts. And there is no better medium for this than the television, which roughly 40 per cent of the world’s population spends nearly a quarter of their waking hours in watching television and many more are tune into a radio set. Another very important medium available today is the internet, concern authorities must calibrate with some of the popular and most browsed websites to put a side advertisement or pop-up alerts on HIV/AIDS.\(^8\) Seemingly this kind of medium of enhancing awareness has been initiate in India in august 2007 as well as SMS (short message service) based text are being sent to public by National AIDS Control Organisation.\(^9\)

Media programming such as television, Radio and of course internet can create an enabling environment, where individuals are encouraged to explore ways of keeping themselves safe from HIV and changing behaviour as necessary. The United Nation has challenged the world’s top TV broadcaster to designate the fight against HIV/AIDS a corporate priority. And why not the tragic confluence of AIDS, famine and drought in parts of Africa threatens more human lives than the crisis in Iraq war did. This would mean a commitment at the highest level, which would translate into a powerful influence on programming in all spheres. Such a commitment was made in January 2004, at a meeting chaired by UN Secretary – General Kofi Annan, which was attended by several media leaders, including the head of Indian’s national TV channel, the Doordarshan, who

\(^8\) Ibid.

recognised that the global HIV/AIDS epidemic is a major international crisis that threatens not only the health and security of all nations, but their economic well-being as well, they committed to expanding public knowledge and understanding about the HIV/AIDS epidemic.\(^\text{10}\)

Hence, to generate an effective campaign tools to raise the HIV/AIDS awareness deep into the localities and regions, airtime can effectively be dedicated to public utilities. Specific educational or awareness driven programmes can be broadcasted; the British Broadcasting Corporation (BBC) and several other medias have combined programmes in a highly effective and creative way, featuring competitions and children's shows, arts programmes, concerts, documentaries. Moreover, news coverage can be capsuled\(^\text{11}\) and beefed up to ensure that HIV/AIDS stays on the political agenda both nationally and globally. By keeping the pandemic in the headlines, world leaders, government policies and responsible authorities would be encourage in accepting the seriousness of the crisis and could commit greater efforts and more resources to fight the epidemic.\(^\text{12}\)

HIV/AIDS can be injected to the mainstream programmes, because, more than 40 per cent of the top rated shows around the world are mini-series, sitcoms, soap operas, movies and telenovelas.\(^\text{13}\) If, for example, a well known character in a popular television series confronts HIV/AIDS as in Jassoos Vijay one of the popular detective TV serial in India, shown every Sunday night on Doordarshan,\(^\text{14}\) or the BBC's hits programme East Enders, this can have a dramatic effect on viewers or listeners who may not choose to watch a more benefiting, but less entertaining, programmes about the HIV/AIDS. In several regions, television dramas have been used to bring HIV/AIDS campaign to a far wider scale audience than a traditional health promotion event such as 'mela' in India could do. However, traditional events can be modified to suit the local setup for

\(^{10}\) Tharoor, Shashi (2004)., n.6.

\(^{11}\) It means to put into a short or concise form; reduce in volume.

\(^{12}\) Tharoor, Shashi (2004)., n.6.

\(^{13}\) Usually a television soap opera in or from a Latin American country, but it is used in detonating any short television programme.

generating awareness's. The series: *Ordinary People* in the People's Republic of China; and *Heart and Soul* a soap opera developed with the UN support in Sub-Saharan Africa\(^{15}\) are some of the successful media programmes.

1.1.1 Conceptual Framework

HIV/AIDS is a disease cause indeed by a simple virus, however, this is the most dreadful disease the world has ever known, it has affected millions across the world and has threaten the very foundation of human civilization and its race. Human concise and the knowledge could not halt this dreadful disease as of now. The contemporary world is concern more to halt this disease then to eradicate it from the face of the earth. The hob son’s choice is well taken as the paradigm to deal with this disease. In the light of the dynamics of HIV/AIDS, many different theoretical approaches to the understanding of HIV/AIDS and its management are understood.

The cause of HIV/AIDS in India and South Africa rest on two basic factors: biological factors; such as the high prevalence of Sexually Transmitted Diseases (STDs) and behavioral factors; such as unprotected sexual intercourse as well as multiple sexual partners. In India, HIV/AIDS are mostly transmitted through the infected blood transfusion, contaminated syringes, unhygienic handling of medical equipment’s and intravenous drug abuse, coupled with this are the lack of access to information, infrastructure and the very prevailing social norms. The main vectors of AIDS in India are traditionally the high-risk group that comprises, Commercial Sex Workers (CSW), highway and expressway truck drivers, intravenous drug users and the high end urban population, however, these situations are no more a stationary in a particular location or region, but are very vibrant and can be found in anywhere or any situation.

In South Africa, soldiers and mine labourers were the basic vectors, which then got infused among the commercial sex workers and truck drivers, the intravenous drug

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users are emerging in a big way in South African cities. Hence, HIV/AIDS in South Africa is the most serious health problem that has groped all the sections of the society.16

But, whatever may be the casual factors and seriousness of the disease, the most and profound causes of HIV/AIDS not only in India and South Africa are the combined and compounded factors of inefficiency, lack of proper access to information and health care systems, socio-economic constrain such as, poverty, migrant labour, commercial sex worker, low status and under empowerment of women, illiteracy, lack of formal education, stigma and discrimination. These compounded factors leads to an unstoppable HIV incidence, particularly in the developing countries like South Africa and India.

1.1.1 Concept of Health and Disease

Health is that level of functional capability or metabolic efficiency both at micro (cellular) and macro (social) level. In the medical field, health is commonly defined as an organism’s ability to efficiently respond to challenges (stressors) and effectively restore and sustain a state of balance, called homeostasis.

World Health Organisation (WHO) defines health is a state of complete physical, mental and social well being and not merely the absence of disease or infirmity.17 The Constitution of WHO further elaborates and defines it as the enjoyment of the highest attainable standard of health ... as one of the fundamental rights of every human being. This ‘right to health,’ as it became expressed in an abbreviated version in many subsequent documents, includes the right to adequate food, water, clothing, housing, health care, education, security in the event of unemployment, sickness, disability, old age or lack of livelihood in circumstances beyond an individual’s control.

16 Benn, Hilary (2004)., n.14, and NACO (2004)., n.15.
Greater emphasis in the definition to equity and social justice was given when the Thirtieth World Health Assembly decided in 1977 that the main social targets of governments and WHO in the coming decades should be “the attainment of all citizens of the world by the year 2000 of a level of health that would permit them to lead socially and economically productive lives.”\footnote{World Health Organisation (1977), \textit{Resolution WHA40.43 - Technical Cooperation}, Geneva, May 1977.} This statement is important in that it specifies both what level of health is needed and what will be accomplished at that level.

In more recent years, this statement has been modified to include the ability to lead a “socially and economically productive life.”\footnote{World Health Organisation (1948), \textit{Constitution of World Health Organisation}, Geneva, [Online: web] Accessed 30 October 2006, URL: http://en.wikipedia.org/wiki/Health.}

The most important aspects of human existence today are its well being. Health is vital to the glory of human civilization; health means the general condition of the body and mind and the degree to which it is free from illness, or the state of well being. Health therefore means the condition of something that changes or develops. Health may be mentally sick or physically ill.

Disease means “An impairment of health or a condition of abnormal functioning” or the state of illness caused by infection or a failure of health rather than by an accident. HIV/AIDS is one such disease that torments human lives, both mentally and physically.

1.1.1.2 HIV/AIDS as a Disease

1.1.1.2.1 Endemic

Endemic refers to conditions that are regularly found and very common among a particular group or in a particular area. In a broad sense, endemic means ‘belonging’ or ‘native to’, ‘characteristic of,’ or ‘prevalent in’ a particular geographical, race, field, area, or environment; native to an area or scope. Endemic has two specific meanings: Endemism and Endemic.
Endemism means an organism being endemic which on the other hand means exclusively native to a place or biota. An infection is said to be endemic in a population, if that infection is maintained in the population without the need for any external inputs. In epidemiological sense it is regarded that HIV/AIDS is an endemic to African continent.\textsuperscript{20}

1.1.1.2 Pandemic

Pandemic is derived from a Greek word pan (all) demos (people), it is an epidemic that spreads across a large region example; a continent or even worldwide. Pandemic therefore refers to diseases that exist in almost all of an area or in almost all of a group of people, animals or plants. According to the World Health Organisation, a pandemic can start when three conditions have been met: firstly; the emergence of a disease new to the population, secondly; the agent infects humans, causing serious illness and lastly; the agent spreads easily and sustainably among humans.

A disease or condition is not a pandemic merely because it is widespread or kills many people, it must also be infectious. For example, cancer is responsible for many deaths but is not considered a pandemic because the disease is not infectious or contagious (although certain causes of some types of cancer might be).\textsuperscript{21}

Deriving by this meaning it has well been conceived that HIV/AIDS is a pandemic. Therefore Africa as an endemic to HIV/AIDS is no more an issue.


1.1.2 Geneses and the Evolution of HIV/AIDS

1.1.2.1 Africa as a Hot Spot of HIV/AIDS Origination

Human Immunodeficiency Virus (HIV), which causes Acquired Immuno-Deficiency Syndrome (AIDS) was first reported in the early 1980s, no one precisely knows where it came from or originated or the milieu that created its spread among the humans in the early 1980s. But the findings indicate that the HIV, probably existed in a latent form for a very long period and the host it lived is probably an animal and possibly it all happened in African continent. Hence Africa is believed to be the hot spot of HIV/AIDS origination.

1.1.2.2 The Beginning of HIV/AIDS in India

The first cases of HIV/AIDS in India were documented in the year 1986 in Chennai. Since then the disease has never looked back and has spread across the length and breadth of India, in fact, it has grown to an overwhelming epidemic proportion. India’s prime organisation; the National AIDS Control Organisation (NACO), estimates that the number of Indian’s living with HIV/AIDS shows a speedy progression from 2,00,000 in 1990 to between 2 and 3.1 million by the end of the year 2006.22

One-sixth of all the new AIDS cases in the World occur in India and out of that a whopping 30 per cent people who are tested positive are women.23

During a study at the National AIDS Research Institute (NARI) in Pune in the 1990s, regarding the women attending clinics for sexually transmitted infections. Scientist found that, other than sex workers, more than 90 per cent of the women had only one lifetime sexual partner and the sole risk factors for such women becoming HIV positive was through their husband.24

AIDS Prevention and Control Project (APAC) based in Chennai

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23 Suman Mehta, director of UNAIDS, Asia Pacific, Middle East and North Africa; specifying HIV/AIDS incidence among women in India.
say that, over 22 per cent (about 90 per cent of the women) of HIV positive persons in India are housewives with one sexual partner. The increasing prevalence of HIV among women is also leading to a rise in the mother to child transmission and paediatric HIV cases. Thus, the year 2004 world AIDS day theme was: “Women, Girls, and HIV/AIDS” with a tagline *Have you heard me today*; this theme infers equality for women in the effort to fight HIV/AIDS.\(^{25}\)

Likewise, in many researches and studies carried out in the country confirms that most of the women infected by HIV/AIDS were monogamous and marriage was the only risk factor. Men who visit sex workers or have sex with multiple partner or sex with other male or use intravenous drugs, contracts the HIV and in turn they passes on to their innocent wives. A recent study carried out in Chennai by Y.R. Gaitonde Centre for AIDS Research and Education (YRG CARE) and the US based researches indicate that drinking increase the chances of men indulging in a risky sexual behaviour. Women on the other hand do not see themselves as being at risk of getting HIV from their husband.

Hence, even if women become more aware of the possibility of contracting HIV/AIDS from their husband, their options for avoiding or minimising that risk could be limited. For one thing there is the pressure of tradition that require women to bear children after marriage, on the other hand there is a divine social norms, where husband is a godly figure, the divine norms and the pressure to bear children are so intense in India that, even if a women realise about the risk of contracting HIV, she rather choose to bear a child. As a result, three quarter of Indian women are infected by HIV/AIDS within a few years of their marriage.\(^{26}\)

HIV/AIDS prevention measures, such as abstinence, mutual monogamy (or at least reducing casual sex), use of condoms, and avoidance of high risk practices require effective communication between husband and wife. But sex and sexuality are not usually frankly discussed by married couples in India. The social norms in India are set in

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such a way that men are always dominant and women subservient, such social norms makes discussion and negotiation related to sex difficult. Moreover, women's lack of access to and control over education, employment and decision making makes it difficult for them to negotiate conditions of sexual intercourse, such as condom use. According to the United Nations Population Fund (UNFP), though condom use has increased in India over a recent decade, but, barely more than 3 per cent of sexually active people reluctantly use condoms. That too, they do so to avoid contraception rather than protection against HIV and other sexually transmitted infections. According to NACO, more than 60 per cent of the people know that condom prevents HIV transmission, but only 5 per cent use condoms regularly. People are nervous about going into shop to ask for a pack of condoms.27

The problems Indian women faces are many a time similar in many other countries. There is a continuous search for methods to protect women from HIV/AIDS infections during sex, without requiring the cooperation of their male partners. Considerable research is going into the development of microbicides that could be applied as a gel, film, sponge, lubricant and suppository. Researchers are also looking at other options, such as the diaphragm and the female condoms. But no single method seems to be suitable in all situations, hence, women needs choice and an empowerment.28

The intervention programmes to stop the spread of HIV/AIDS in India have tended to focus on high-risk communities, ignoring monogamous women who are at risk through unprotected sex with infected spouses.29 There is a complete failure to link HIV/AIDS in women to the larger issue of their access to reproductive health care. Sexually transmitted infections, for instance, greatly increase the chances of women getting and transmitting HIV. But the HIV/AIDS programmes of the governmental as well as non-governmental and some reputed private donor tend to function as an isolated system. A good and well-equipped infrastructure for primary health care, which can

27 Staff reporter (2004), n.23.
28 Raj, N. Gopal (2004), n.22.
29 Ibid.
educate and help people, is essential for stopping the further spread of HIV/AIDS epidemic in India. India’s HIV infection rates are now similar to that in Africa about 12 years ago. In those 12 years, the epidemic has exploded in Africa, and India stands on the brink of a disaster wave that would send HIV infections sweeping through the general population. At a time when HIV infection rates among women are rising rapidly, because they are powerless to say ‘No’ to sex if their infected husband insist. Hence a more integrated approach to reproductive health and sexual and reproductive right is what Indian women are in need of the hour. A well-structured legal policy on HIV/AIDS with effective awareness campaign is required to sensitise the ordinary people about the emanating danger, especially the young people, and change their behavioral approach towards sex.

The choice is now clear and stark: India can either be home of the world’s largest and most devastating AIDS epidemic, or with the support of the rest of the world, it can become the best example of how this virus can be defeated.\textsuperscript{30}

The most awesome and worrisome part of the HIV/AIDS scenario in India is that the epidemic has dangerously poised to shoot out of the control, as has happened with tragic consequences in Africa. The BBC World service has strictly warn India that if strategic measures were not taken timely, it would lead to as many as 50 million HIV/AIDS cases in the coming years, almost equivalent to the total population of the United Kingdom. The United States National Intelligence Council warned India that the number of people getting infected by the Virus could grow to anything between 20 million to 25 million by the year 2010. But NACO, point out that, there estimates showed an increases of only 5,30,000 HIV infections in 2003 compared to 6,10,000 infections in 2002, means there is no significant upsurge in the number of new infections, but in fact, the rate of growth of HIV/AIDS has registered a slowing down trend. However, Richard Feachem, executive director of the Global Fund to fight AIDS, Tuberculosis and Malaria, declared in September 2004 in New Delhi: \textit{HIV/AIDS epidemic}

\textsuperscript{30} Ibid., Bill Gates, the Microsoft chief’s remark on HIV/AIDS situation in India.
in India is extremely grave. It is a ticking time bomb. The epidemic is rising rapidly and could soon get out of control unless the response is scaled up massively.\textsuperscript{11}

Perhaps the single most important question concerning national prevalence trends is whether the epidemic will pass a ‘tipping points’ or not was discussed in a report on India that was published in 2003 by the AIDS policy Research Centre at the University of California in San Francisco (UCSF), USA. This tipping point represents the transition from an epidemic that is largely thought to be confined to high-risk groups to one that has spread into the hitherto unsuspected regions and the general population. Once this transition has continued to occur, the chances are that the epidemic would be far more difficult to tame and the gravity of devastation and miseries will be far greater than what one can think about it at the moment.\textsuperscript{12}

1.1.2.3 The Beginning of HIV/AIDS in South Africa

HIV/AIDS epidemic in South Africa emerged in the year 1982, however the later research findings point out that the virus was very much present in South Africa during the 1970's. Since then it went through a various ifs and buts. By the end of the year 1990 the dominant form of HIV transmission was heterosexual community that had overtaken the homosexual and bisexual pattern in South Africa. Presently, HIV/AIDS can be found among all the sections of South African Community, it is now no more a disease that is being sheltered about, but are open and ready to take on anybody. The unending civil wars and the return of soldiers, migrant labours, highways and the urbanizations have created a dominos effect in propelling the massive spread of HIV/AIDS in South Africa. The demographic landscape of South Africa has been changed beyond recognition. Hence, HIV/AIDS scenario in South Africa is one of the greatest in the world today.

HIV/AIDS therefore has entered the South African consciousness as an incomprehensible calamity; it has wrecked the economic and social stability of South

\textsuperscript{11} Ibid.

\textsuperscript{12} Ibid.
Africa, and has taken a terrible human toll with pain, miseries and fear. South Africa today stands on the brink of the devastation cause by HIV/AIDS.

1.1.3 Theories of HIV/AIDS Evolution

When AIDS officially began in 1981, it was called gay plague, and the public were told that the main cause and roots of gay plague was homosexuality, drugs and anal sex. The first cases were all young, predominantly white, and previously healthy homosexual men from around Manhattan who were dying mysteriously from what is called ‘gay pneumonia’ and ‘gay cancer’ in the form of Kaposi’s sarcoma. The association with homosexuality was so remarkable that the disease was initially termed GRID (Gay Related Immune Deficiency). To this day, gays are blamed for spreading AIDS in United States.33

During the late 1970s a Polish Jew doctor Wolf Szmuness, was given the task to initiate the Hepatitis-B vaccine experiment in Manhattan. Three months after the experiment began, the first cases of AIDS were reported to the Centers for Disease Control (CDC), and it appeared among the young gay men in Manhattan in 1979. Six months later in 1980 it was noted in San Francisco and in June 1981 AIDS became an official epidemic in United States. Was those gay men given an experimental vaccines contaminated with the AIDS virus is a big question buried in the medical history? The medical authorities of USA where however reluctant to answer such questions, but it is known in the world that sometimes the government agencies does carry out unethical and covert medical experimentation.34


34 Ibid.
1.1.3.1 Origin of AIDS in Africa

It has been strongly believed that HIV might have been wrongly introduced into millions of Africans in the late 1970s during the smallpox vaccine eradication programmes sponsored by the World Health Organisation. It is known that animal and human cells harbor all sorts of viruses, including viruses not yet discovered, and animal tissue cell cultures are often used in the manufacture of viral vaccines. Therefore, the possibility of vaccine contamination with an animal virus is a constant danger in the manufacture of vaccines. Researchers and experts further argue that there are today millions of African infected by HIV. Such a large number could never have been infected by the simple act of a monkey virus jumping over to infect one African in the late 1970s. If that were the case, then USA must have a millions of AIDS cases today. Hence the logical explanation and conclusion for the millions of Africans infected by AIDS is therefore attributed to that of vaccines used in the World Health Organisation’s mass inoculation programmes of 1970 which might have been contaminated by the virus. Hence the questions arises that, was the contamination accidental or deliberate. On May 11, 1987 The London Times, one of the world’s most respected newspapers, published a front page story entitled ‘Smallpox vaccine triggered AIDS virus.’ The story suggests that African AIDS is a direct outgrowth of the WHO’s smallpox eradication program. The smallpox vaccine allegedly awakened a dormant AIDS virus infection in the black population.35

The link between the WHO program and the epidemic is an interesting and important hypothesis. I cannot say that it actually happened, but I have been saying for some years that the use of live vaccines such as that used for smallpox can activate a dormant infection such as HIV (the AIDS virus).36

The Times story is one of the most important stories ever printed on the AIDS epidemic; yet the story was killed and never appeared in any major newspaper or magazine in the world.


36 Remark of Robert Gallo, the co-discoverer of HIV, regarding the linkages between WHO’s vaccination programme in Africa and the simultaneous detection of HIV.
1.1.3.2 The Super Germ Theory

A decade before the first cases of AIDS appeared, Dr. Donald M. MacArthur, the then spokesman for the U.S. Department of Defense, told a congressional hearing that a super germ would be developed as part of experimental bio-warfare program in U.S. Department of Defense. This genetically engineered germ would be very different from any previous microbe known to mankind. The agent would be a highly effective killing agent because the immune system would be powerless against this super microbe.

1.1.3.3 The Green Monkey Theory

Prominent cancer virologists and government epidemiologists in USA have theorised that HIV originated in African green monkeys. The virus from monkey was a jumped species and entered among the black Africans. It then migrated to Haiti and Manhattan in late 1970s. Experts say that once the virus entered among the black heterosexual population, it rapidly spread to millions of other blacks masses because of transfusions with HIV infected blood, dirty needles, promiscuity and genital ulcers.

Though there is a general acceptance that the HIV originated from monkeys and the rain forest of the world, but there is no strong scientific evidence to prove that HIV/AIDS originated in African continent. The truth is that when the first AIDS cases were uncovered in 1979 in United States, simultaneously AIDS was discovered in Africa. However, no stored African tissue from the 1970s tested positive for HIV, and scientists have a hard time explaining how a black heterosexual epidemic centered in Africa could have quickly transformed itself into a white homosexual epidemic in Manhattan.37

The green monkeys or vervet monkeys as they are known are medium sized primates from the family of old world monkeys. There are around six species currently

37 Ibid.
recognised, although some classify all of them as one single species with six subspecies. Either way, they make up the entirety of the genus Chlorocebus.\textsuperscript{38}

These monkeys are found only in sub-Saharan Africa; their range extends from Senegal and Ethiopia down to the Republic of South Africa. A small population, which travelled with enslaved Africans as pets, is found in the Caribbean, especially on the islands of Barbodos and Saint Kitts, and a colony also exists in Boward County in Florida.\textsuperscript{39}

The Green Monkey theory was developed as an indication that HIV indeed evolved from the African continent, it was based on the findings that the locals of the tropical west Africans hunts these Monkeys along with Sooty Mangabeys and Chimpanzee for food, hide and traditional medicines. It was during such regular hunting encounter, that a monkey had bitten or they came in contact with the hot blood of these Monkeys, that's how as per this theory the simian version of the virus known as Simian immunodeficiency virus (SIV) was pass to humans.

Hence, these mare findings have been appropriated to be the source of AIDS, which over a period of time came to be known as HIV in the 1980s and henceforth known as HIV/AIDS. Thus the origin of HIV is now generally attributed to SIV from African primates. SIV is a retrovirus that is found in numerous strains in primates. The specific strains infecting humans are HIV-1 and HIV-2, the viruses that causes AIDS. HIV-1 is closely related to the chimpanzee strain of SIV, designated as SIVcpz. HIV-2 is most closely related to Sooty Mangabeys, designated as SIVsm, the SIV strain that primarily infects Sooty Mangabeys, while SIV monkey strains are transmitted sexually and usually do not cause AIDS in their natural hosts, even if it infects the hosts carrying a large viral loads. SIV strains may cause an AIDS like immune deficiency known as SAIDS (Simian Acquired Immuno-Deficiency Syndrome) if they cross species boundaries. For example, SIVagm, the SIV strain from African Green Monkeys causes

\textsuperscript{39} ibid.
SAIDS in Rhesus Macaques. Unlike African Green Monkeys, Rhesus monkeys are native to Asia and do not carry their own strain of SIV.\textsuperscript{40}

SIV was first discovered in 1985, among captive Rhesus macaques suffering from SAIDS. This observation was made shortly after HIV-1 had been isolated as the cause of AIDS and led to the discovery of the HIV-2 strains in West Africa that same year. HIV-2 is more similar to SIV strains than to HIV-1, suggesting the simian origin of HIV. Further studies indicated that HIV-2 is derived from the SIVsm strain found in sooty mangabeys whereas HIV-1, the predominant virus found in humans, is derived from SIV strains infecting chimpanzees that is SIVcpz. The monkey SIV strains do not infect humans and HIV-1 does not infect monkeys. In 2004, this tropism was explained by different variants of the protein designated as TRIM5\textalpha\textsuperscript{41} in humans and monkeys. This intracellular protein recognises the capsid of various retroviruses and blocks their reproduction. To better study HIV/AIDS in animal models, researchers have created various HIV/SIV chimeras, viruses whose genome partly comes from HIV and partly from SIV. These are often referred to as SHIV (Simian Human Immuno-Deficiency Virus).

Molecular analysis of virus genetic data, performed by Bette Korber and the supercomputer Nirvana at the Los Alamos National Laboratory in New Mexico in the 1990s, indicated that HIV had jumped species from a chimp to a human in Africa around the year 1930.\textsuperscript{42}

\textsuperscript{40} Cantwell, n.32.

\textsuperscript{41} TRIM stands for Tripartite Motif. TRIM5\textalpha, also written as TRIM5alpha or TRIM5-alpha, is a name of a protein which is found in the cells of most primates. TRIM5\textalpha represents a novel and important innate immune defense against retroviruses

1.1.3.4 The Cold War Theory

Not all scientists believe the official monkey story, although it is rare to find people who express this view publicly. One persistent underground rumor is that AIDS is biological warfare. Proponents of the AIDS conspiracy theory believe that AIDS has nothing to do with green monkeys, homosexuality, drug addiction, genital ulcerations, anal sex or promiscuity, but that it has to do with scientists experimenting on blacks and gays: in short, AIDS is genocide. Most African-Americans have heard the story that HIV has nothing to do with homophobia or promiscuity, but that it has to do with scientists experimenting on blacks and gays: in short, AIDS is genocide. Most African-Americans have heard the story that HIV is a manufactured virus genetically-engineered to kill off the black race. 30 per cent of New York City blacks polled by The New York Times (October 29, 1990) actually believe AIDS is an ethno specific biological weapon designed in a laboratory to infect black people.43

The cold war theory of HIV/AIDS evolution is a simple theory, which becomes a major discussion among the Americans and the erstwhile Soviet Union think-tank in the 1980s. In the fall of 1986 the Soviets shocked the world by claiming that HIV was secretly developed at Fort Detrick, the U.S. Army's biological warfare unit. Although the claim was dismissed as infectious propaganda, Russian scientists had worked hand in hand with biological warfare scientists in the transfer of viruses and virus infected tissue into various non-human primates (monkeys, apes, chimps) during the 1970s before AIDS appeared. With improved international relationships, the Russian accusation vanished.44

The cold war theory was therefore developed as a sheer suspicion between the two super power that the deadly virus was a human creation, and was created somewhere in the laboratories of Russia and America. This theory later on came to be a damp squib and is now a debunked theory.

43 Cantwell, n.32.
44 Ibid.
1.2 Intensity of HIV/AIDS

1.2.1 Intensity of HIV/AIDS in India

HIV/AIDS in India was initially and traditionally limited among the high-risk groups, such as sex workers and their clients, those with sexually transmitted infections, intravenous drug users and professional blood donors. However, the incidence of HIV/AIDS in India today is no longer confined to these groups, it has rather infused among all the sections of the society, and it is rapidly advancing in the rural areas and into the general population. NACO’s official estimates reports that the number of Indian living with HIV show a progression from 1.75 million in 1994 to 5.1 million by the end of the year 2004.\(^\text{45}\)

India today has the world second largest number of HIV/AIDS cases, nearly 1,000 adults Indians are succumbing to HIV/AIDS every day, and the toll is estimated to be 2.5-3 millions since its outbreak in 1986. Presently 5 to 7 per cent adult Indian is infected by HIV/AIDS in India. The NACO has identified ten centres in the six high prevalence states; they are Mumbai, Kolhapur and Pune in Maharashtra, Hyderabad in Andhra Pradesh, Churachanpur in Manipur, Kohima in Nagaland and Chennai in Tamil Nadu. It has been reported that, during the last decade, the number of Indian infected by the virus is doubling in every 18-24 months. At the end of the year 2003, India has 5.1 million HIV-positive cases, the highest after the Republic of South Africa. Hence, on an average some 3,500 Indians are contracting the deadly virus every day. A World Bank report tables that, if an adequate measures were not taken timely, than it is feared that by 2005 some 30.5 million people in India will be HIV/AIDS patient, far outstripping the entire continent of Africa. It has been estimated that by the year 2010, India would be having some 20-25 million HIV/AIDS cases. According to NACO, the figure for the same year (that is 2010) is estimated at 9 million. In India, AIDS has already beaten tuberculosis as the leading cause of premature death.

\(^{45}\) Raj, N. Gopal (2004), n.22.
The intensity of HIV/AIDS is so enormous that it has spread to hitherto unknown regions and has deeply penetrated to the general Indian population effecting all the sections of the society. HIV/AIDS has so much infused that we can see the virus prevalent in the single monogamous women and children. And they are mostly infected by men through their irresponsible sexual behaviour, but at the end it is the women who suffer the most and are left with shame and stigma.\(^6\) Life is a big paradox. How else one would explain the fact that a majority of Indian women for whom sex before marriage does not exist and do not inject drugs are becoming HIV positive. Nearly half of those who are infected with HIV around the world are women. Women now account for more than one quarter of the new infections in India. About 90 per cent of those who tested positive at antenatal clinics are in single, long-term relationship. If the behaviour of women is not to blame, as a matter of fact, women's biological make up is such that the risk of becoming infected during an unprotected sex is far greater in woman than in men. During the sexual intercourse without condom, transmission of HIV from an infected man to a woman is two to four times more likely than transmission in the opposite direction.\(^7\) Moreover, the presence of STD's makes the matter worse, because STD's are hard to detect in women owing to internal symptoms. The risk factor for young girls is even greater. The lining of the neck of the womb is not fully developed in young girls. It is again her biological make up that many a time facilitates that she transmits the infection to her newborn. But biology is just only one side of the story. The actual villain is well looking no further, it is the husband.\(^8\)

Letting the epidemic spread to the general masses are those who inject drugs, men who have sex with men and those who have sex with women but come home to be the faithful partners. It is been reported that about 57 per cent men having sex with men are married in India. In their earnest pursuit to be injected, many men seem to leave nothing to chance; they doubly expose themselves to the virus. And their modus operandi is

\(^{6}\) Staff Reporter (2004), n.23.

\(^{7}\) Prasad, R (2004), "When the man brings home the virus", The Hindu, New Delhi: 2 December 2004.

\(^{8}\) Ibid.
simple; injecting drugs and having sex with commercial sex worker or sex with other men. Commercial sex workers also contribute their mite. A significant number of sex workers themselves inject drugs. If men are naturally endowed to be less likely to be infected unlike women, the practice of anal sex between men turns the odd against them. They are eight times more vulnerable compared to other men and have a mind-boggling 60 per cent more chance of catching other sexually transmitted diseases.49

If we gauge the HIV/AIDS intensity of India from the viewpoint of Asia pacific region, then India alone accounts for over 5.1 million of the 7 million people living with HIV in the Asia–Pacific region, where some 5,00,000 people die of AIDS every year. India, the second most populous country has absorbed a tenfold increase in HIV infection in the last 10 years (that is from 1994-2000).50

HIV/AIDS epidemic as of now is a serious crisis and a growing challenge throughout the world, according to UNAIDS, 2003 global reports on HIV/AIDS, by the end of December 2004, nearly 34-46 million people including over 2.5 million children were infected by HIV/AIDS since the start of the epidemic, the death toll by the end of the same year has been a shocking 2.5 million adults and 5,00,000 children’s under 15 years, since the outbreak of the epidemic.51

In India HIV/AIDS epidemic typically affects people between the age group of 15-50 years, 28 per cent of the population in India is aged between 10 and 24 years and over 50 per cent of all the new HIV infections happens among this group.52

India’s HIV/AIDS epidemic is less dramatic and visible than Africa’s misery, what with its low country average of around 1 per cent HIV infection rate in the adult population. The low country average conceals India’s HIV hot spot, where the impact of

49 Ibid.
51 Ibid.
the virus is just a few years away from being felt with the devastating consequences. Adult HIV prevalence in some of the states like Andhra Pradesh, Tamil Nadu, Maharashtra, Manipur and Nagaland are close to 2 per cent, more than the national rate of 1 per cent. The reports of Asian Development Bank (ADB) and the UNAIDS predicts that, as a consequence of HIV/AIDS, one in eight hospital beds in these states would be required for the HIV related illness in India by the end of the year 2004, that is, nearly five times the national average. As per the same reports, by the year-end 2004, four per cent of the adult Indian population would be infected by HIV/AIDS in those highly prevalent states in India.  

The executive director of the Geneva based Global Fund to fight AIDS, TB and Malaria, Richard Feachem, Made a statement in September 2004 in New Delhi;

The HIV epidemic is fast spreading in India the same way as it did in Africa. India might even have the world’s largest number of HIV infected people, contrary to the official figures that places India second only to Africa.

However, the government refutes such report and says that the number of HIV infected people in India is no doubt increasing, but this does not necessarily mean that India would follow Africa in epidemic terms. Officials further elaborates that the UNAIDS reports itself had estimated that, even though India has a similar prevalence rate of HIV which South Africa had in the 1990, the current rate of prevalence of HIV among adults in South Africa ranged from 18.5 per cent to 24.9 per cent, while it remained between 0.5 per cent to 1.5 per cent in India. The differences in the trajectories of the epidemic were revealed by some other studies also, which showed that the current prevalence rates in pregnant women in South Africa were about 10 times higher than in India.  

The national average of HIV incidence in India is 0.88 per cent (that is 0.5 per cent to 1.5 per cent), but for the sake of statistic estimation, the government put the round

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53 Ibid.
figures of national average at 1 per cent.\textsuperscript{55} But, whatever may be the reports or statistic enumeration, it is no denying the facts that India has a shocking HIV prevalence. Though the incidence rate is much lower than South Africa, yet the rate at which HIV is advancing in the general Indian population, it is to be noted and taken seriously, with strict alertness.

India’s HIV/AIDS cases is highly diverse, some states have almost no HIV infection, while some other states have reached adult HIV prevalence rates of 2 per cent and more. See figures 1.1: labeled 1.1a, 1.1b and 1.1c, this figure shows the state wise distribution of AIDS cases reported during 1986 to 2004 period.

**Figure 1.1a**

**AIDS cases in India, 1986 – 2004**

**Source:** National AIDS Control Organisation (NACO)
Figure 1.1b
AIDS cases in India, 1986 – 2004

Source: National AIDS Control Organisation (NACO)
The states that show high prevalence of AIDS cases are Tamil Nadu, Maharashtra, Andhra Pradesh, Gujarat, Manipur and West Bengal. These states usually report high rates of AIDS cases. Whereas, the state like Arunachal Pradesh and The Union Territory of Lakshadweep recorded nil. But this figure is most likely to be an underestimate. Data from the sentinel surveillance system further suggest that there is an urban rural dimension to the HIV/AIDS infection in India. According to NACO report 2001, The HIV infection among women attending antenatal clinics in the seven prominent metro
cities in India showed that HIV infections has crossed 2 per cent in Mumbai, more than 1 per cent in Hyderabad, Bangalore, Chennai and is below 1 per cent in Calcutta, Ahmadabad and Delhi. Comparison of HIV infection rates of the metro with rural population clearly indicates that HIV infection in India is more in urban areas compared with the rural population. However, this could reflect limited surveillance in rural area. Time series data are needed to conclude whether or not there has been a narrowing or widening trend in rural urban HIV infection incidence rate.56

The Major mode of HIV transmission in India is through heterosexual conduct; over four-fifth of the infections were by this route. HIV infection through blood transfusion, prenatal transmission and homosexual contract is low in India; this is comprehensibly been summarize with the help of diagrammatic representation, see figure 1.2.

Figure 1.2: Mode of HIV transmission in India

Source: National AIDS Control Organisation (NACO)

As per NACOs 2001 reports, the most common strain of HIV found in India is HIV-1 (There are two major types of AIDS Viruses known, HIV-1 and HIV-2). HIV-1 is the responsible for over nine-tenth of AIDS cases in India. Nearly 46.5 per cent of the AIDS cases in India are in the age group of 30-44 years, followed by 40.8 per cent between the age group of 15-29 years. The age-sex category of AIDS cases up to April 2001 in India is represented through pie chart, see figure 1.3.
Figure 1.3: Age-Sex Category of AIDS case up to April 2001

Source: National AIDS Control Organisation (NACO)

The next HIV hotbeds are the IT industry and the call centre’s, the Indian ITES-BPO (IT enabled services and business process outsourcing) industry are fast becoming the centres of HIV infections. Most of the call centre employees are sexually reactive young people in the age group of 18-30 years, they are relatively independent and wealthy too, they live alone and away from their family, their work schedule too are at odd hour making the situation conclusive to indulge in carefree sex.57

It is an area that urgently needs to be looked at. We assume that young people in the IT industry are educated and well-informed about HIV/AIDS, but all it takes is a drink at a bar and some impulsive behaviour to get HIV.58

The miseries and suffering caused by HIV/AIDS are immeasurable and inconsolable, it affects everyone. The socio economic gains made by the country since independence are being reverse by the HIV/AIDS, victims are traumatised and left to their fate, relationship and families are ripped apart and discriminations flared up, moreover once an individual contracts HIV/AIDS, he or she becomes vulnerable and are expose to a whole lot of new problems and difficulties, such as opportunistic disease, stigma, discrimination etc. It negatively hits a country’s economic and social health, HIV/AIDS has the power to hold back a country’s progress. More than 30 million Rupees has been spent by the government during the past 15 years to tame the dreaded disease, as well as the government has a massive plan to introduced Prevention of Parents to Child Transmission (PPTCT) in all the 23,000 primary health centres in the country, and has also propose to increase some 3,000 Voluntary Counselling and Testing centre (VCTC), besides, the government has scaled up to install above 13,000 condom vending machine in all the prominent places across the country. Hence, the expenditure and cost borne by the government on the prevention and treatment of HIV/AIDS is certainly going to make a big hole in the country’s economic wall.

At individual level, an HIV/AIDS victim suffers from stigma and discrimination, the cases in point is the two HIV positive child, ‘Bency and Benson’ from Kerala, whose parents died of AIDS and are being supported by their grandmother, who herself lives on a meagre widows pension. These children were denied school admission, faced humiliation and were in near social ostracism, they had to run from pillar to post and have been through an awkward ordeal, however; due to state intervention, NGO’s voices and media affect has brought them a sigh of relief.59 But not all HIV victims are lucky

58 The chairman of the Global Business Coalition on HIV/AIDS (GBC), Sir Mark Moody Stuart, says about the IT and call centre industry, which could become a potential hotbeds for HIV/AIDS. GBC is a partnership of global business against HIV/AIDS, and cooperates with the CII (Confederation of Indian Industries) for its HIV/AIDS work in India.

like Bency and Benson. Many a time HIV/AIDS victims are driven to commit suicide or are killed or banished from the society. Recently, a widow, suspected to have been HIV/AIDS carrier was burned alive in Orissa.\textsuperscript{60} In another case an HIV/AIDS man committed suicide in Pondicherry’s famous JIPMER Hospital.\textsuperscript{61}

Likewise; there are many similar cases that happen throughout India. The social stigma and discrimination are so serious in India that many a time the innocent victims are either ostracised or burn or killed. The helpless and unfortunate victim of AIDS infection or suspicion faces such violence and stigma in their day-to-day life. Social ostracism and maltreatment by the family and community members are often face by the HIV/AIDS victims in India. Unable to face the stigma and discrimination, coupled with emotion, regret and solitary, many victims take the extreme step. Hence, in general, a lot more is needed to understand the dynamism of HIV/AIDS problems in India. In sum a far less is known about it.\textsuperscript{62}

1.2.1.1. Intensity in Urban Area

1.2.1.1.1. Urban Women

Women are at the greatest risk, especially the younger women, who are among the most vulnerable lot. According to N\textsuperscript{AC}O, the number of women infected by HIV/AIDS is steadily rising: one in every four AIDS cases reported is a women, N\textsuperscript{AC}O figures for the total AIDS cases in the country till August 2004, shows that only about 22 per cent of the cases in the age group of 30 years and above are women, but they make up a substantial 37 per cent of the cases in the sexuality active age group of 15 – 29 years.\textsuperscript{63} The reports from the United Nations Children’s Fund (UNICEF), the joint United Nations


\textsuperscript{62} Ibid.

Programme on HIV/AIDS (UNAIDS) and the World Health Organisation (WHO), suggests that in 2001 over 60 per cent of HIV positive cases in India were young Indian women in the age group of 15 – 24 years.

If the women fall victim in this ever increasing numbers of HIV/AIDS, then it would propel the epidemic dangerously towards the ‘tipping point’. The tragedy is that it is marriage, not promiscuity or other high-risk behaviour, which makes the vast majority of Indian women susceptible to HIV/AIDS. 80 per cent of the Indian women infected with HIV have only a single partner, points, Dr. Suniti Solomon, founder director of Y.R.G. Centre for AIDS Research and Education (YRG - CARE), Chennai. 64

1.2.1.1.2 Urban Men

HIV/AIDS intensity among urban Indian men are steadily rising, the booming economic growth, carefree behavioural attitude have contributed in enhancing the growth of HIV/AIDS in Indian cities. Weekend revelries and the easy access to drugs have made it more conducive for HIV annihilation.

1.2.1.1.3 Urban Child and Youth

The situation of HIV/AIDS, as noted among the urban women is as same from the mode of its incidence among both the urban girl and boy child (see under 1.2.1.1.1), most of the HIV incidence have been noted to have contracted or pass through mother, which is referred as Mother to Child Transmission (MCT). Many a time children’s are infected because of medical negligence and unhygienic handling of medical equipments during child birth.

64 Raj, N. Gopal (2004), n.22.
1.2.1.2 Intensity in Rural Area

1.2.1.2.1 Rural Women

Rural women are particularly more vulnerable to the infection as they have less access to health care and information on HIV/AIDS. NACO’s estimates of HIV/AIDS prevalence in India in 2003 showed that, village women also form the same proportion as their city sister’s form of the HIV infected people in urban areas. This is an ominous portend considering that three quarter of India lives in its villages.

1.2.1.2.2 Rural Men

In India there is a heavy internal migration from rural to urban areas. Better livelihood, better educational facilities and better business prospects have driven the rural masses from rural areas to various Indian metros. The most prominent migrations are the unskilled and semi-skilled labour as well as seasonal job-hunters.

In the metros these migratory masses face cultural shock, homesick and solitary, that makes them to seek emotional healings, which on the other hand leads them to red light areas, drug joints and other informal activities. Hence such behavioural situation makes most of them unknowingly contract HIV/AIDS. They then pass onto their families and kins once they are home. This seems to be one of the main modes of HIV transmission in rural areas. Presently in India the HIV/AIDS incidence in rural areas are growing at dangerous pace.

1.2.1.2.3 Rural Child and Youth

Rural child are primarily infected by their mothers and secondly by medical negligence and unhygienic medical equipment used at the time of their birth, rural children’s are at greater risk due to poor access to health and medical service’s then urban children.
1.2.1.3 Intensity among Other Groups

1.2.1.3.1 Highway Drivers

There are more than 5 million driver and handy worker (helpers), who spend months away from their families, plying to and fro on one of the world largest network of road. 90 per cent of these long-distance drivers hold a national permit. They drive across from Manipur to Gujarat and from Kashmir to Kerala. On their journey they pick up women from Dhabas (roadside hotels/ motels) use them and leave them at some different motels in their next stop, these women were then picked up by other lane drivers, helpers and local youth. This unsuspecting simple lifestyle leads to an unprecedented spread of STDs and HIV infections across the country. But due to governmental and non-governmental intervention, the prevention and campaign project directed at truck drivers and their associates have begun to show impressive results in the recent years.65

1.2.1.3.2 Commercial Sex Workers (CSW)

Many Indian states treat the sex trade mildly; however, it is not legally sanctioned or approved. Activities such as, soliciting and brothels are penalised. Women in India take up this trade due to economic pressure, marital breakup, as well as many a time they are forced or confine to take the job. Mumbai has the largest brothel base sex industry in India, followed by Kolkata’s Sonagachi. It is reported that over 70 per cent of sex workers in these regions were detected HIV positive. In order to keep their client all entertained, the female sex workers are continuously shifted and exchanged between the brothels of Mumbai, Kolkata, Chennai and Delhi. The exchange system also takes place internationally, this network of exchange and mobility acts as a perfect HIV vectors.66

The prevention and awareness campaign are difficult to reach amongst the sex workers in brothels, because they are strictly controlled by pimps, moneylenders,
procurers, panders and madams. In recent years, Sonagachi in Kolkata have indicated some positive outcomes of the awareness and prevention drive.\textsuperscript{67}

\textbf{1.2.1.3.3 Injecting Drug Users (IDUs)}

These high-risk groups were the first to have been paralysed by HIV/AIDS in most of the Asian Countries. In India, these groups are mostly confined to North-East region. HIV among these groups was first reported in Manipur. Injecting drug use is fast becoming a major problem in the urban areas of Mumbai, Chennai and Delhi. The HIV prevalence among this group is more than 80 per cent. Though India has no rampage drug culture, but the practice is often found in the roadsides, parks, market places and in high-profile parties. Drugs are chiefly and safely procured in the Indian streets, needles and syringes are easily bought from chemist shop without any valid prescription. The sharing of needles and other instrument is common and widespread among India’s IDUs. There are neither stringent government policies nor strong intervention measures as well as there is no proper regulation in India. Hence an appropriate strategies and measures are urgently required in India.\textsuperscript{68}

\textbf{1.2.1.3.4 Soldiers}

HIV/AIDS incidence have become a prominent issue in Indian defence, it is looming large, especially among the ground armed forces who are serving in India’s North-Eastern states of Manipur, Nagaland and Assam. They are potentially a vital vectors and transmitter as army personnel’s are regularly transferred and shuffled from one state to another state, for example, after posting at Manipur for 3 – 4 months, some of them are suddenly transferred to Jammu and Kashmir or Gujarat.

Many Indian soldiers are also serving as a part of UN army in Africa and other conflict regions of the world, though UN army follows a strict health measurement for their soldiers but many of them lands up contracting the virus. HIV/AIDS is an extra UN

\textsuperscript{67} Ibid.

\textsuperscript{68} AVERT (2004)., n.63.
bonus Indian soldiers bring when they come home. Hence these are the mode of HIV/AIDS incidence reported in India’s defence camp.

1.2.1.3.5 Migrant Labours

Migrant labours and workers are one of the potential medium of HIV transmission in India. The National Sample Survey (NSS) 2003 reported that, there were over 264 million mobile Indian workers in 2003. Most of the labourers and semi-skilled workers live in urban slums in unhygienic conditions. Their extended period of isolation from families and due to culture and language barrier coupled with low levels of literacy makes them highly vulnerable to STDs and HIV/AIDS.69 See also under 1.2.1.1.2.2.

1.2.2 Intensity of HIV/AIDS in South Africa

HIV/AIDS in South Africa is the fastest growing epidemic in the world since 1990’s. It has over 7 million HIV cases, the largest in the world. It is estimated that there were approximately 1,65,000 people living with HIV/AIDS and 1,20,000 deaths by the year ending 1998. Projections further indicated that by 2002 a quarter of a million South African will die of AIDS each year, and that this figure will rise to more than a million by 2008. Average life expectancy is expected to fall from approximately 60 years to 40 years between 1998 and 2008. It is already at 45 years as per 2004 report.

KwaZulu Natal is clearly the province worst affected by the HIV/AIDS epidemic, with the highest rates of HIV prevalence, and the lowest life expectancy. Other severely affected provinces are Gauteng, Free State, Mpumalanga and North West. Differences in life expectancies between the provinces are partly due to differences in the socio-economic profiles of the populations in the different provinces, but are also largely a

reflection of the differences in the rates of HIV prevalence and consequent AIDS mortality.\textsuperscript{70}

The intensity of HIV/AIDS in South Africa is far grimmer than anywhere in the world. Though the latest UNAIDS reports released in New York in May 2006, Put India as the leading country in HIV/AIDS, but it is no denying the fact given the track records of South Africa's muddleness in the HIV statistics and the confusion and missed opportunities stemming right from South Africa's cabinet and the office of the department of Health.\textsuperscript{71} Moreover, the overall rate of adult infections in India is just 0.9 per cent in comparison to south Africa's huge 18.8 per cent, hence the magnitude and the intensity of HIV/AIDS in both India and south Africa differs tremendously from the very point of its methodology, culture, regions and the population base. Currently, there are approximately over 7.5 million south African's infected by the HIV/AIDS, 1,600 people are infected every day, which translate the number into 5,50,000 every year.

South Africa today stands on the brink of a chaos and confusion. HIV/AIDS has killed millions of South African's and wrecked its economy, political and social system. The intensity of HIV/AIDS in South Africa is evident from the recent estimates which pictures that, of all the people living with HIV/AIDS in the world, 6 out of every 10 men, 8 out of every 10 women, and 5 out of every 10 children lives in southern Africa.\textsuperscript{72}

The intensity and the problems of HIV/AIDS in South Africa are well verse; HIV/AIDS has now severely targeted the women and children in South Africa, after it had annihilated the South African homosexual community, as well as the defence forces, transportation systems. Hospitals in South Africa are flooded with HIV patients. It has made difficult for the South Africans to predict their future.


HIV/AIDS infects an estimated 33 million people in the world, most of them (that is about 75 per cent) lives in poor Sub-Saharan Africa (South Africa included), which totals up to about 26 million, 3.2 million are the people newly infected by HIV/AIDS in the Sub-Saharan Africa out of 5 million in the world. South Africa today has an infection rate of around 10 per cent.

In rural South Africa, migration is one of the factors that have contributed to the AIDS pandemic of South Africa. Various studies have shown that people who are more mobile, or who have recently changed residence, tend to be at higher risk of HIV infection than people in more stable living arrangements. In South Africa, people who had frequently changed their residence were three times higher at risk of infection than those who had not. It is not so much movement per se, but the social and economic conditions that characterise migration processes that put people at risk for HIV.

The role of migration in the spread of HIV in rural Africa has conventionally been seen as a function of men becoming infected while they are away from home, and infecting their wives or regular partners when they return. However, the precise way in which migration contributes to the spread of HIV and other STD’s in rural areas is complex and not well understood. Partly this is because few studies have considered both ends of the migration process, those who leave home as well as those who remain behind. Understanding both ends of the migration spectrum has important implications for the development and implementation of intervention programmes, especially if it is possible to establish the relative risk of infection among different groups of migrant and non-migrant men and women.

The determinants of epidemic in South Africa includes behavioural factors such as; unprotected sexual intercourse and multiple sexual partners, and biological factors such as; the high prevalence of sexually transmittable diseases. The underlying causes

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include both social and economic factors such as poverty, migrant labour, commercial sex workers, and the low status of women, illiteracy, and the lack of formal education, stigma and discrimination. Closely linked to HIV/AIDS epidemic in South Africa is tuberculosis, which is propelled by HIV infection and it is also the most frequent cause of death among the people living with HIV/AIDS. Approximately 40–50 per cent of TB patients in South Africa are infected with HIV. In some places in South Africa, the HIV prevalence among TB patients has been recorded over 70 per cent.

The high prevalence of HIV/AIDS in South Africa poses a major challenge for both government and civil society groups, who are doing their utmost to curb the spread of the disease and help those affected by it.

An estimated six million South Africans are expected to die of AIDS related diseases over the next 10 years. Based on the Department of Health’s national antenatal survey, involving anonymous testing of pregnant women at the state health facilities, an estimated 4.5 million South Africans were living with HIV in the year 2000. 5 Million South Africans, or 11 per cent of the total population of 46 million, are infected with HIV, the Actuarial Society of South Africa (ASSA) an NGO said in a report released on World AIDS Day, 1 December 2004. The figure is slightly lower than the Department of Health’s latest estimate of 5.6 million HIV positive South Africans. In its survey of women attending public antenatal clinics for 2003, the department found that while HIV/AIDS prevalence rates among South African teenagers had been declining since 1999, the general infection rate in the country remained critical.75

Much of the reporting on HIV/AIDS in South Africa is centered on the fact that President Thabo Mbeki has in the past questioned the link between HIV and AIDS. Far less has been said about the tremendous efforts being mounted year after year around the country by local, provincial and national government agencies, as well as myriad non-governmental organisations, to combat AIDS by creating awareness around the disease,

promoting behavioural change and providing medical, social and economic assistance to those affected or infected by the epidemic.\textsuperscript{76}

1.2.2.1 Intensity of HIV among Women

Women and children are by far the most affected ones in South Africa. The statistics from DOHs (Department of Health’s) annual national HIV seroprevalence surveys of women attending antenatal clinics from 1994 – 2004 provides lucid estimates of HIV prevalence and the trends over a period of time in South Africa. See figure 1.4.

\textsuperscript{76} Ibid.
The prevalence trend shows that, till 1998, South Africa had one of the fastest expanding HIV epidemics in the world, since from 1998 the prevalence rate is growing more slowly. Based on its sample of more than 16,000 women attending antenatal clinics across all 9 provinces of South Africa, the South African Department of Health study estimates that 29.5 per cent of pregnant women were living with HIV/AIDS by the year ending 2004. The province which recorded the highest HIV rates was Kwazulu Natal,
Gauteng and Mpumalanga. Among teenage girls, the rate decline during the year 1998 to 2002 and has since risen only slightly.\textsuperscript{77}

The finding from antenatal clinics and its estimates cannot be applied directly to men, newborn babies, children, provinces and various groups of south Africa, because the rate and the intensity of infection varies enormously among these categories. However, the estimation based on the antenatal data being carried out by South Africa’s department of Health Study in 2004 indicated that, about 6.29 million South Africans were living with HIV at the end of 2004, including 3.3 million women and 1,04,863 babies. To produce these figures, the study assumed that pregnant women accurately represented all women aged between 15-49 years. The study found out that about 85 per cent of men are likely to infect women and 30 per cent of babies born to infected mother will themselves have HIV/AIDS, ignoring any reduction due to preventive action.\textsuperscript{78}

Young women aged 20 to 30 has the highest prevalence rate, and the young women aged fewer than 20 has the highest percentage increase compared with other age groups. Hence by the end of the year 2004, young women have the highest prevalence of AIDS in South Africa. This situation is more serious and intense among the black youths, who also fall under the category of economically poor sections of the society. In fact women make up nearly half of the 37.2 million adults living with HIV/AIDS in Sub-Saharan Africa, the proportion rises to over 60 per cent, as per the 2004 UN report.\textsuperscript{79}

HIV and AIDS therefore have a devastating effect on young people in South Africa. In many developing countries, up to two-thirds of all new infections are found among the age group of 15 to 24 years. Overall calculation estimates that about half of the global HIV infections have been reported among the people under 25 years old,

\textsuperscript{77} Government of South Africa (2004), n.67.


which translate to about 60 per cent of HIV/AIDS infections among females by the age of 20 years. Thus the hopes and lives of many generations, the breadwinners, the livelihood providers and parents of the future, are in jeopardy. The talented and industrious citizen, who could build a better world and shape the destinies of the countries they live in, faces tragically early death as a result of HIV infection.\footnote{Horton, Richard (2000), "Mbeki defiant about South African HIV/AIDS strategy", \textit{A review of Mbeki's speech at Opening Ceremony for Durban International AIDS Conference}, \textit{Lancet} 2000; 356: 225-232, [Online: web] Accessed on 5 January 2007, URL: http://www.actupny.org/}

In every region of the world, HIV/AIDS in women are rising, in South Africa; three-quarters of all the youth between the age group of 15 to 24 years old who are living with HIV/AIDS happens to be the females. Young women are almost an endangered species in Southern Africa. Most of them do not have adequate access to education or jobs. They are often economically depended on men and do not have the bargaining power to resist sex or ask their husband or partner to use a condom. The worry some part of the problem is that young girls (that is teenage girls) are acquiring the virus at a very fast space and are imperceptible. AIDS advocates say that women are at the highest risk and teenage girls at the greatest.\footnote{Reuters (2004), n.73.}

The Actuarial Society of South Africa (ASSA) have seriously taken such unbalance findings, ASSA went onto highlight the need to strengthen the efforts and to respond timely, they also sought the critical need of the hour to target the young people if the epidemic is to be slowed down in the future. According to the report of ASSA, HIV/AIDS account for 44 per cent or 3,10,000 out of 7,01,000 deaths in South Africa in 2004. The report also puts South Africa’s current life expectancy at birth to about 50 years. Annual population growth in South Africa is about 0.8 per cent and set to fall to half that level by 2010, but is not expected to become negative. The report further stress that in the absence of antiretroviral therapy, HIV/AIDS deaths would rise to nearly half a million by the year 2010. However, due to the large extent of drug rollout and its availability, antiretroviral therapy is expected to keep this number somewhere between
2,90,000 (on the basis that if 90 per cent coverage is achieved within 9 years) to 4,50,000 (if only 20 per cent coverage is achieved).

South Africa’s Health minister Manto Tshabalala Msimang told the South African Parliament in November 2004 that the government’s HIV/AIDS drug rollout was gaining momentum and success because the number of South Africans receiving antiretroviral therapy at public facilities has grown to more than 19,500 in October 2004.

In 2003, South Africa’s Department of Health has distributed more than 302 million male and some 0.19 million female condoms. The percentage of public facilities providing prevention of mother to child transmission treatment has increased from 20 per cent in 2002 to 52 per cent in 2003. The number of people coming for voluntary counselling and testing in the public sector also increased from about 4,13,000 in 2002 and 2003 to 6,91,000 in 2003 and 2004. However, it has been reported that around half a million South Africans infected with the virus are currently in need of an antiretroviral therapy.

The recent report also indicates that HIV prevalence in South Africa is still the highest among women between 25 and 29 years of age, (that is about 29.7 per cent), and second highest among men between 30 and 34 years of age (that is around 26.4 per cent.82

In view of the high prevalence and incidence of HIV amongst pregnant women and women in the childbearing age group, it is appreciated and felt vital to integrate the family planning programme and HIV/AIDS services. Hence it is critical that the government targets these groups and strengthens the family planning programmes. This is important; given that one in five South African women of reproductive age are not using any contraceptive method. For those who use injectable contraceptives and contraceptive

pills, it is important to emphasise consistent use of condoms with regular and non-regular partners as long as they are not certain of their own, or their sexual partner’s HIV status.

1.2.2 Intensity of HIV among Men

According to the United Nation’s Joint Programme on HIV/AIDS (UNAIDS), national adult HIV prevalence in South Africa has risen to about 13 per cent in the last 5 years, higher than what it was possibly expected. The report published after the conference on men and AIDS organised in Pretoria, in June 2003, by the Regional AIDS Initiative of Southern Africa of Voluntary Services Overseas (RAISA/VSO) has also indicated the similar findings.83

One of the important underlying problems in South Africa is that, people are reluctant to talk about sex: parents never discuss about sex with their children; husbands do not talk about sex freely with their wives. Men generally feel uncomfortable discussing intimate matters. Hence, the common and widespread thread in South Africa is the pervasive silence surrounding male sexuality.

A regional survey by Southern Africa AIDS Information and Dissemination Service (SAFAIDS) concluded that, men need opportunities to explore and talk about their sexuality in non-threatening environments. In rural areas, they discuss inheritance and traditional beliefs, in towns, sugar daddies and domestic violence. Everywhere, they show that there are alternatives to the dominant macho identity.

Research studies throughout the African region shows that, men are socialised into a notion of masculinity as sexual prowess, risk taking behaviour and male dominance and superiority over women. At the same time, men perceive their privileged space in society is under threat from a variety of factors: such as rural migration; influence of western culture; mass media; and the growing recognition of women’s rights.

Many men are feeling a bit hopeless, like there's no place for them in the world, says Professor Graham Lindegge, of the School of Psychology at South Africa's Natal University. In a study of how masculinity is constructed in schools in KwaZulu Natal, Lindegge found that the conflict between traditional and contemporary gender roles generates a sense of displacement and futility among boys and men. The sense of loss and displacement undermines men's motivation for safe sex. What point would there be in preserving oneself and others for a society in which one has no place in the future? Lindegge asked. Many more similar findings occurred in a survey of risk taking behaviour among youths in Soweto, South Africa's largest township, where nearly half of young men are unemployed. If you have no job and no future, life becomes cheap, and sex a dangerous entertainment fuelled by boredom, alcohol and poverty, said Barbara Fisher, an academic with the University of Witwatersrand.

A survey carried out by the Promotion of Traditional Medicine Association of South Africa (PROMETRA) among traditional healers, chiefs and Zionist priests in nine provinces; found that men felt socially disoriented through loss of leadership position in the family and community. Men have become spectators, irresponsible and indifferent, according to social scientist Douglas Kabanda, who led the research. To modify and change this, PROMETRA taps into the traditional notion of men being responsible for their families. Cultural and traditional customs are maintained though in safe and best practice. Male circumcision, wife inheritance, scarification (decorative scarring) and polygamy can be managed responsibly if people know about HIV infection risks. Traditional practices make up male identity; to attack them is self-defeating. We need to find viable ways of keeping tradition while getting men involved against AIDS, Kabanda said.

Dry sex, which is popularly sought throughout Africa, where women put herbs and potions in the vagina to make it hot, tight and dry, provokes lesions that make HIV infection easier. Dry sex is prized by men. A wet vagina is not. The reason, according to Kabanda, is ignorance about the female body. When we explain what causes wetness, their

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84 Ibid.
eyes open. We discourage dry sex, he said. The wall of silence around Africa’s ultimate taboo, such as male rape and homosexuality is somehow diminishing.85

1.2.2.3 Intensity of HIV among Child and Youth

In South Africa most of the new HIV infections occur among youth and adolescents, the risk behaviours and HIV risk factors among young people living in a Black South African township is generally high. Reports say that around 68 per cent men and 56 per cent women have HIV related high-risk sexual behaviours. The HIV prevalence in South Africa among children between 2 and 10 years of age is about 10.8 per cent.

Though knowledge about HIV transmission is appreciable in South Africa as of now but there is evidence that misconceptions about AIDS persist, particularly myths related to HIV transmission. For young men, HIV risk factors were associated with fewer years of education, lower levels of AIDS related knowledge, condom attitudes, and Dagga (marijuana) use. Among young women, HIV risk factors were associated with beliefs that condoms get in the way of sex and rates of unprotected vaginal intercourse. Despite adequate general AIDS knowledge and risk sensitisation, South African youth demonstrated high rates of sexual practices that place them at risk for HIV infection. South Africa therefore needs an urgent behavioural interventions targeted to young South Africans living in the most economically disadvantaged areas.86

1.2.2.4 Intensity of HIV among Other Groups

HIV/AIDS incidence among other group such as: commercial sex workers; mine labourers and soldiers in South Africa are rampant. Soldiers were one of the basic carriers of HIV virus in South Africa. During South Africa’s freedom struggle, soldiers went

85 Ibid.
underground and at nightfall they surface out and often use to visits various mining labour camps.

1.3 The Economic Implication of HIV/AIDS in India

Keeping infected people alive and well, especially parents, so they can continue to live productive lives and take care of the next generation, is not only the compassionate thing to do, but it is also vital for a country’s long-term economic future.\(^{87}\)

The loss of invaluable human resources due to AIDS in India had seriously undermined India’s commendable economic progress. The impact shows the following indications of implications: an increase in absenteeism due to illness and bereavement; there is also an increase in labour turnover due to illness and death; moreover there is a strong fall in production due to absenteeism, labour inadequacy, loss of skills and experience workforce; coupled with an increase in expenditure on employees such as replacement and training; the impact on health care and social security cost are mounting each passing day and the reductions in profit levels are very high.

Though there is a limited data available but there are enough evidence to show the rising expenditure and cost incurred by Indian companies due to HIV/AIDS, for instance: the Singareni Collieries Company Limited in Andhra Pradesh (a high HIV prevalence state), incurred an amount of 6.5 million Rupees (US$142,719) in offering compensation to some 29 employees, whom where declared unfit to work by the company medical board due to AIDS related illnesses;\(^{88}\) the Employees State Insurance Corporation Scheme (ESIC) spent over 1.22 million Rupees (US$24,109) in providing ARV treatment to around 200 ESIC beneficiaries in the year 2003-2004; the Indian Railways and BEST (Brihanmumbai Electric Supply and Transport Undertaking Ltd, Mumbai,\(^{88}\)

\(^{87}\) Prof. Clive Bell, a World Bank Research Fellow, and the Professor of Economics at Heidelberg University, Germany.

have budgeted a substantial amount in providing ARV treatment to their employees, both have developed a comprehensive response to HIV/AIDS.

Looking at the current HIV/AIDS situation in India, and the emerging trends, it is clear that if businesses don’t act now, the cost of inaction will be far greater. Because prevention is the best, and is most cost effective, only if it is started timely and early. The business response to HIV/AIDS should not therefore wait until when the problems become obvious. Hence, the right time for a company to respond to HIV/AIDS is when it has not found any infected employees; some Indian companies have already developed a good response to HIV/AIDS.

1.4 The Economic Implication of HIV/AIDS in South Africa

The impact and the amplification of HIV/AIDS are severe and felt across the length and breathe of the rainbow country. It has shocked the social, political and economic system of South Africa. Reduction in life expectancy, soaring number of orphans, loss of human resources, shutting down of companies, rising cost of amenities, coupled with rising crime rates, abuses, discrimination have all endangered the very foundation of South Africa. The infiltration of HIV/AIDS into all the sections of South Africa is likely to intensify the struggle for political power to control the resources. HIV/AIDS can easily become a provincial destabiliser and a potential war starter.89

The whopping rise in medical cost, increasing orphans and the dependency ratio, rise in crimes, discrimination, ostracism and the abuses of women in all fronts have created a disturbing situation in South Africa. The psychological disturbances such as loneliness, depression and solitary, arising out of People Living with HIV/AIDS

(PLWHs) have frustrated the mind of young AIDS patient, who generally ends up committing crimes, such as: drugging; rape and dacoits. The impact of HIV/AIDS in South Africa’s security system is a big threat, the implications of which can be of dire consequences. Hence the implications of HIV/AIDS in South Africa are immeasurable.

The economic pressure resulting from the HIV/AIDS pandemic has therefore put the South African government’s economic policy popularly known as Growth, Employment and Redistribution (GEAR) into a full stop with confusions and chaos. South Africa has the highest number of AIDS cases in the world. Each day, 600 people die due to AIDS related illnesses. This has an enormous effect both socially and economically.

HIV/AIDS is most prominent among the most productive age groups. Therefore, the disease has had a great effect on the workplace, such as: staff illnesses; absentees; occupational health; safety; low morale and ultimately death. This in turn greatly and negatively affect the overall economic productivity and growth, it also largely strains the economy and affects the economic output due to staggering rise of medical care costs, drugs, and funeral expenses. AIDS also leaves many children parentless, these orphans must be taken care and provided health care facilities as well as availability of education and other facilities.

Government of South Africa has been working to control the epidemic and spends 15 per cent of government expenditures on health. As a result, the infection rate among young people in the age group of 20 year has remained stable over the past four years.90

South Africa may be one of Africa’s strongest economies, but the HIV pandemic has weakened the nation, taking a severe toll on its adult workforce. With one of the

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highest HIV prevalence rates on the planet, 20 per cent of South Africa’s population between the age group of 15 and 49 is an HIV positive.\textsuperscript{91}

A new World Bank research report warns that HIV/AIDS causes far greater long-term damage to national economies than previously assumed, by killing mostly young adults, robbing millions of children from the love of their parents, undermines the basis of economic growth over the long haul. This suggests that a country like South Africa could face progressive economic collapse within several generations unless it combats its AIDS epidemic more urgently.\textsuperscript{92}

1.4.1 Economic Effects of HIV/AIDS

1.4.1.1 Effects on Households

Individuals and their families are the first to bear the brunt of HIV/AIDS in the world. It begins as soon as a person in a household starts suffering from HIV/AIDS or HIV related diseases. If it happens to be the breadwinner of the family, the effects will magnify. Illness prevents the primary breadwinner from working, increases the amount of money the household spends on treatment and care, as well as it requires other household members to miss school or work in order to care for the patient. Death of the patient results in a permanent loss of income, either through lost wages and remittances, or through a decrease in agricultural labour supply. Households must also bear the costs of funerals and mourning, which in some settings are substantial. When children are withdrawn from school in order to save on educational expenses and increase the labour supply, the household suffers a severe loss of future earning potential.\textsuperscript{93}


1.4.1.2 Effects on Agriculture

Agriculture is the largest sector in most of the Southern African economies including the Republic of South Africa. It accounts for a large proportion of production and a majority of employment. Studies have shown that AIDS have adverse effects on agriculture, including loss of labour supply and remittance income. The loss of a few workers at the crucial periods of planting and harvesting significantly reduces the size of harvests. Moreover, loss of agricultural labour is likely to cause farmers to switch to less labour-intensive crops. That means switching from export crops to food crops. Thus, AIDS could affect the production of cash crops and, as a result, affect foreign exchange earnings. Production also suffers as the agricultural workers fall sick and require other co-workers to take time off to care for them as well as the agricultural timings are disrupted. \(^9^4\)

1.4.1.3 Effects on Firms

HIV/AIDS has severely disrupted the smooth operation of many firms in South Africa. The deaths of employees by AIDS affect the particular firm by increasing expenditures on health care, burial fees, and the training and recruitment of employees to replace those who are already dead or are taken ill. It also significantly reduces a firm's revenue generations because of absenteeism due to illness or attendance at funerals and time spent on training. Moreover, labour turnover can lead to a less experienced labour force that is less productive. A study conducted at a sugar mill in South Africa found that HIV positive employees incurred an average of 55 additional sick days during the last two years of their life. The study further elaborates the impact of HIV/AIDS on employee

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benefits, and corporate profits and found that the total costs of benefits rose from 7 percent of salaries in 1995 to 19 percent of salaries by 2005.\(^5\)

1.4.1.4 Macroeconomic Effects

The macroeconomic impact of HIV/AIDS is difficult to assess. Most studies say that estimates of the macroeconomic impacts are sensitive to assumptions about how AIDS affects savings and investment rates and whether it affects the best-educated employees more than the others. There are several mechanisms by which AIDS affects macroeconomic performance, such as, AIDS deaths lead directly to a reduction in the number of workers available, moreover less experienced workers are hired in place of those who died, leading to lower productivity. Shortages in workforce attract higher wages, which leads to higher domestic production costs, and a loss of international competitiveness. Savings and capital accumulation are significantly decline owing to greater health care expenditures and loss of worker income. This leads to slower employment creation in the formal sector, which is particularly capital intensive.\(^6\)

1.4.2 Loss of Invaluable Human Resources

The economic implications brought by HIV/AIDS are severe and shocking, the human resources are gradually eaten away by the HIV/AIDS as many fall its prey, the economic productivity are massively ruined as many of this resources are drain away. The cost and expenditure incurred on the treatment of people living with HIV/AIDS, and the prevention of its further spread has made a big dent in South Africa's economic well being. The permanent loss of human resources and the lower economic productivity are some of the major implications cause by the pandemic. The whooping medical cost


incurred for the treatment of AIDS victims as well as the investment incurred on them stands null and void, because the victims in questions eventually die. South Africa today is facing the dreaded consequences of HIV/AIDS, family structures are shattered, single parenthood are common and the orphan hood are the next reality that could be the future scenario of this country. Hence, South Africa is facing the unacceptable reality. The reality of mayhem cause by the pandemic is going to paint the South African history in red. 97

The world’s biggest killer and the greatest cause of ill health and suffering across the globe are listed almost at the end of the International Classification of Diseases. It is given the code Z59.5. 98

Poverty is the major assault on humanity. 99

Poverty is the main reason of vulnerability to diseases and over all poor health. Because of poverty vaccination of babies are neglected, clean water and sanitation are ignored, curative drugs and other treatments are unavailable and mothers die in childbirth. Poverty is also the underlying cause of reduced life expectancy, handicap, disability and starvation. Poverty is a major contributor to mental illness, stress, suicide, family disintegration and substance abuse. Every year in the developing world 12.2 million children under 5 years die, which could be prevented for just a few US cents per child. They die largely because of the prevailing indifferences in the world, but most of all and after all they are poor. Beneath the heartening facts about decreased mortality and increasing life expectancy, and many other undoubted health advances, lie unacceptable disparities in wealth. The gaps between rich and poor, between one population group and another, between ages, between regions, between different faith and between sexes, are continuously widening. For most people in the world today, every step of life, from

97 Bollinger, Lori and Stover, John (1999), n.92.
infancy to old age, is taken under the twin shadows of poverty and inequity, and under the double burden of suffering and disease. For many, the prospect of longer life may seem more like a punishment than a gift. The money that some developing countries importantly have to spend per person on health care over an entire year is just 4 US dollar, less than the amount of small change abundantly carried in the pockets and purses of many people in the developed countries.100

As per the 1999 calculation, a person in one of the least developed countries in the world has a life expectancy of 43 years, in comparison to 78 years in one of the most developed countries, a difference of more than a third of a century. This means a rich, healthy man can live twice as long as a poor, sick man. That inequity alone should stir the conscience of the world but in some of the poorest countries the life expectancy picture is getting worse. In some of the poor countries, life expectancy at birth is expected to decrease by the year 2000. In the richest countries life expectancy in the year 2000 has risen to 79 years in comparison to 42 years in some of the poorest countries. Thus the gap continues to widen between rich and poor, and by the year 2000 at least 45 countries are expected to have a life expectancy at birth of less than 60 years.101

1.4.3 Impact on Business and Trade Flows

HIV/AIDS is the greatest systemic threat to South Africa’s development, and it is reversing the decades of gains made in the development, HIV/AIDS has affected the South African economy through the illness and death of millions of productive members. The diversion of resources from saving, which are invested on the health care, have reduced South Africa’s economic growth rate. Foreign investments in South Africa are drying up slowly.102

As the pandemic devastates the South Africans, the rising cost of the disease is leading not only to higher insurances premiums with reduced benefits, but also to

100 Ibid.
101 Horton (2000), n.74.
102 Mills (2000), n.80.
questions about how best to balance the economic viability of the insurance industry with the government’s desire to improve access to financial services and create a bigger private social safety net.\textsuperscript{103}

1.5 The Social Implication of HIV/AIDS in India

People living with HIV/AIDS faces all odds in India, most of the people perceive AIDS is a disease of others and are contagious. Discrimination, stigma and denials are strong phenomenon, this prejudice have largely affected families, communities and can be seen occurring in both public and private workplaces, schools and hospitals. Because of HIV/AIDS related prejudices and discriminations, appropriate measures and policy framework remain under developed in India.

A study in a recent year, reports that, more than 45 per cent of Indians feel that people with AIDS must kill themselves, 40 per cent believed HIV people deserved their fate, 37 per cent said they will not associate with AIDS people and one fifth felt that AIDS is a justified punishment from God to those sinful and perverted people.\textsuperscript{104}

Negative attitude and discrimination against AIDS victims is a regular feature in hospitals and schools, which make them, remain silent in despair and fear. Women are generally treated badly in the families and communities; they are blamed for infecting their partners. The marginalised groups such as, commercial sex works, \textit{Hijras}\textsuperscript{105} and gay men are perceived to be the carrier of AIDS. They face stigmatisation not only of their HIV status, but also because of their being the members of socially excluded groups. The discrimination and prejudice is a strong feature in Indian society and a big HIV


\textsuperscript{105} It means transgender or eunuch in Hindi.
contributing factor, which affects largely the government and NGO's prevention efforts.\textsuperscript{106}

1.6 The Social Implication of HIV/AIDS in South Africa

1.6.1 Impact on Demographic Profile

The impacts of HIV/AIDS on the demographic pattern in South Africa are serious. There is declining trend in the number of people in the age group of 0 to 4 and 15 to 34 years old. The people primarily affected by the HIV are between the age group of 18-25 years because this is the time when they become sexually active. However, the transmission of HIV from mother to newborn baby cannot be ignored. Hence, it is in this sense that the number of people in the age group of 0-4 years and 15-34 years shows a declining trend. The intensity of HIV in this age group has potential consequences. The child mortality rates are dangerously showing a rising trend in the South Africa’s demographic pattern. HIV/AIDS impacts on sex ratio too are a cause of concern in South Africa. The gap between the number of male and female are widening day by day. In 1996 the number of females were more than the males in South Africa, which has been shown to be reversing today. These changes are going to have an irreparable regional and social affects. Life expectancy too is sharply reduced to around 45 years (also discussed under 1.4.1). Around 600 people die of AIDS related disease each day in South Africa (also discussed in 1.4), Economist say that the epidemic poses a significant threat to the future of South Africa, with average life expectancy estimated to be about 40 years.\textsuperscript{107}

\textsuperscript{106} AVERT (2006), n.100.

1.6.1.1 Imbalance Sex Ratio

The implications of HIV/AIDS is felt everywhere in South Africa today. On the sex composition, the odd is that the numbers of females are shrinking day by day. Which is having a drastic regional and social effect, HIV/AIDS has a direct bearing on the life expectancy in South Africa, young adults, children and infants are dying fast. Before the AIDS pandemic, South Africa had been enjoying a drop in mortality with the consequent increase in life expectancy. AIDS has insulted this progress.108

1.6.1.2 Problems of Orphanage and Old age

Recognising the important role of mothers in ensuring the health and well being of children, the number of maternal orphans is a key indicator. The most commonly used definition of orphan is children whose parents have died before the age of 15 years. However, orphans do not cease to have parenting needs on reaching 15 years or so. See figure 1.5 and 1.6 the trends in respect of maternal orphans under the age of 18 years (that is the children under the age of 18 who have lost a mother or both parents). At the start of the period there are fewer than 5,00,000 maternal orphans under the age of 18 years in South Africa, of which a few have lost their mothers as a result of AIDS. By 2004, the number of orphans has increased to over 1.2 million, and over 0.6 million of the total figure of 1.2 million have been orphaned as a result of AIDS. The number of non AIDS orphan’s falls steadily from 2004, but the number of AIDS orphans is set to continue to increase throughout the period as a result of the ongoing increase in the number of deaths due to HIV/AIDS and the HIV related diseases,109 see figure 1.5 and 1.6.


Figure 1.5:

Orphans under the age of 18 due to AIDS and non AIDS death in South Africa, 1994-2004.\(^{110}\)

Source: Actuarial Society of South Africa (ASSA)

\(^{110}\) Ibid
1.6.2 Discrimination and Prejudice

It is been reported that, nearly half of South Africans between 15 years of age and older think it is acceptable to marry a person with HIV, similar proportion of them do not have a problem having protected sex with an HIV positive person. These results suggest that South Africans are accepting HIV/AIDS as a reality. It is critical that service
providers capitalise on this window of opportunity to encourage disclosure of HIV status.\textsuperscript{111}

To understand the ways in which HIV/AIDS related stigma, prejudice and discrimination appear and the contexts in which they occur, it is of important to understand how they interact with pre-existing discrimination and prejudice associated with sexuality, gender, race, and poverty. See figure 1.7.

Figure 1.7: The link between HIV/AIDS and pre-existing sources of Discrimination and Prejudice

Source: Actuarial Society of South Africa (ASSA)

HIV/AIDS related discrimination also interacts with pre-existing fears about contagion and disease. Early AIDS metaphors such as: death; horror; punishment; guilt; shame and likewise have exacerbated these fears, reinforcing and legitimising stigmatisation and discrimination. The discriminations are most closely related to sexual stigma. This is because HIV is mainly sexually transmitted, in most areas of the world the epidemic initially affected populations whose sexual practices or identities are different from the general norm. The discrimination therefore appropriated and reinforced pre-existing sexual stigma associated with sexually transmitted diseases such as: homosexuality; promiscuity; prostitution; and sexual deviance. The belief that homosexuals are to blame for the epidemic or that homosexuals are the only group at risk of HIV is still common. Promiscuous sexual behaviour by women is also commonly believed to be responsible for the heterosexual epidemic, regardless of the epidemiological reality.112

1.6.2.1 Gender and AIDS

Although HIV/AIDS do not distinguish men and women, but its impact are felt differently. Researchers and analysts long held that over the course of an epidemic, both men and women would be equally infected by HIV. However, practically women are infected more than men and they are more vulnerable to HIV/AIDS. The ratio is about 1.2 to 1.3 infected women per infected man. This imbalance in the sex ratio may occur in part because women are more prone to infection than men. Research indicates that women are two to four times more vulnerable to HIV/AIDS than men, especially during the unprotected sexual intercourse, because of the larger surface areas exposed to contact. Likewise, women are also more vulnerable to other STDs, which greatly enhance the risk of HIV infection. STDs that bring on recognisable symptoms in men are often asymptomatic in women and, therefore, remain untreated. Whatever the exact dynamics,


HIV/AIDS related discrimination is also linked to gender related stigma. The impact of HIV/AIDS related discrimination on women reinforces pre-existing economic, educational, cultural, and social disadvantages and unequal access to information and services. Where heterosexual transmission is significant, the spread of HIV infection has been associated with female sexual behaviour that is not consistent with gender norms. For example, prostitution is widely perceived as non-normative female behaviour, and female sex workers are often identified as vectors of infection that put at risk their clients and their clients’ sexual partners. Equally, in many settings, men are blamed for heterosexual transmission, because of assumptions about male sexual behaviour, such as men’s preference or need for multiple sexual partners.\footnote{Ibid.}

\subsection*{1.6.2.2 Race and Ethnicity}

Racial and ethnic discrimination also interact with HIV/AIDS related discrimination and the epidemic has been characterised both by racist assumptions about “African sexuality” and by perceptions in the developing world of the West’s “immoral behaviour.” Racial and ethnic discrimination contribute to the marginalisation of minority population groups, increasing their vulnerability to HIV/AIDS, which in turn exacerbates stigmatisation and discrimination.\footnote{Parker, Richard and Aggleton, Peter (2002), n.107.}

\subsection*{1.6.2.3 Class}

The HIV/AIDS epidemic has developed during a period of rapid globalisation and growing polarisation between rich and poor. New forms of social exclusion associated with these global changes have reinforced pre-existing social inequalities and
stigmatisation of the poor, homeless, landless, and jobless. As a result, poverty increases vulnerability to HIV/AIDS, and HIV/AIDS exacerbates poverty.\textsuperscript{116}

HIV/AIDS discrimination and prejudice interacts with pre-existing discrimination and stigma associated with economic marginalisation. In some contexts, the epidemic has been characterised by assumptions about the rich, and HIV/AIDS has been associated with affluent lifestyles.\textsuperscript{117} The vicious circle of discrimination pertaining to HIV/AIDS, see figure 1.8.

\textbf{Figure 1.8:}

\textit{The vicious circle of Discrimination}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure1.8.png}
\caption{The vicious circle of Discrimination}
\end{figure}

\textit{Sources:} Actuarial Society of South Africa (ASSA)

In the figure 1.8, firstly; HIV/AIDS is associated with marginalised behaviours, and People Living with HIV/AIDS (PLHA) are stigmatised because they are assumed to be

\textsuperscript{116} \textit{Ibid.}
\textsuperscript{117} \textit{Ibid.}
from marginalised groups. Secondly; the already marginalised groups are further marginalised because they are assumed to have HIV/AIDS.

1.6.3 Psychological Impact

In South Africa, as in much of the world, millions of people suffer from depression and other mental disorders. For example, 10 per cent of all teenage deaths in South Africa are due to suicide, while nearly half of those diagnosed with HIV/AIDS suffer from depression or other emotional illnesses. Health experts say that such instances are especially tough in the rural areas, where there is a stigma surrounding mental illness, and many suffer in silence. But an organisation called South Africa Depression and Anxiety Group, which is fighting to educate the public on mental health issues, is using a simple technology to reach those who cannot read. They brought out an electronic book called talking books.118 This so called ‘talking books’ has many positive elements, it not only entertain and cater to those who cannot read. But unlike their Western counterparts, they also carry social messages about health care for both children and adults. By pressing one of 16 buttons on the cover, the listener can activate a 30 second audio message that follows the text of each page of the book. Often, the messages are recorded by celebrities.119

A book, called Understanding Mental Health, which is available in both English and the local Xhosa language. The purpose of this book is that it counters a once popular notion that blacks did not suffer from mental health problems, including depression. Other audio books deal with teenage depression or how to live with tuberculosis.120

Another is called Caring for Child-Headed Households. It’s funded by Africare and the President’s Emergency Plan for AIDS Relief (PEPFAR) programme of US government; it is basically geared and targeted at the children in South Africa’s Eastern

119 Ibid.
120 Ibid.
Cape who have lost their parents to AIDS. The text and audio explains the children’s’ rights, such as: how to approach government for support; how to go to school; and how to report abuse. About 10 per cent of all teen deaths mostly suicides in South Africa are linked to depression. South Africa has one of the world’s highest murder rates, up to 50 per day, one in four women are subject to rape and most of them are generally young women.\(^{121}\)

\(^{121}\) *Ibid.*