Chapter - 1

INTRODUCTION
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Wind of liberalization in this world of speed has made life quite hectic and busy with daily schedule of work, its tension and worries, because of which the health status of a person suffers a lot in different dimensions.

Life would be simple if one's biological and psychological needs were automatically gratified. But there are many obstacles, both environmental and personal, that may interfere. Such obstacles make adjustment demands on the individual. To overcome these demands people have found various ways and means of relaxation, enjoyment, mode of earning money and many more.

Due to the open liberalization, there is a stratum of people who live life in a manner where there is entry of risk factors causing certain illnesses. There is also extreme diversity in the standard of living i.e. while the rich are getting richer and the middle class are becoming upwardly mobile, there is still prevalence of poverty, ignorance, illiteracy etc. These extremes have also played a vital role in the causation and spreading of certain dreaded diseases, without any cure, like Acquired Immune Deficiency Syndrome (AIDS), which is caused by a virus called Human Immuno Deficiency Virus (HIV).

It would probably never be known exactly when and where the virus first emerged, but what is clear is that, sometime in the middle of the 20th century, HIV infection in humans developed into the epidemic of a disease around the world that we now refer to as AIDS.

The dominant feature of this first period was silence, for the Human Immuno Deficiency virus was unknown and transmission was not accompanied by signs and symptoms salient enough to be noticed. While, rare sporadic case
reports of AIDS and sero-arheological studies have documented human infections with HIV prior to 1970, available data suggest that the current pandemic started in the mid to late 1970s. By 1980, HIV had spread to at least five continents (North America, South America, Europe, Africa and Australia). During this period of silence, spread was unchecked by awareness or any preventive action, as a result of which approximately 100,000 – 300,000 persons may have been infected.

Then the first indication of this new syndrome came in the summer of 1981, with reports from New York and Los Angeles, (U.S.A.), of a sudden unexplained outbreak of two rare diseases – Kaposi’s sarcoma and Pneumocystis Carinni Pneumonia. Young adults who were homosexuals or addicted to injected narcotics appear to have lost their immune competence, rendering them vulnerable to overwhelming and fatal infections with relatively avirulent microorganisms, as well as lymphoid and other malignancies. The condition was given the name AIDS.

In 1983, a team of French scientists led by Dr. Luc Montagnier and a team of American scientists from Pasteur Institute, Paris isolated retro from a West African person with persistent generalized lymphadenopathy associated virus (LAV). In 1984, Robert Gallo and colleagues from the National Institutes of Health, USA, reported isolation of retroviruses from AIDS patients and these were called human T-cell lymphotropic virus – III or HTLV – III.

Retroviruses HTLV – I and II had already been described earlier in association with human T cell leukemia. HTLV – III could be grown in continuous culture of T cell leukemia yielding sufficient antigen for serological tests. Other similar isolates were reported from AIDS cases under different
names. To resolve this nomenclature confusion the International Committee on Virus Nomenclature in 1986 decided on the generic name Human Immuno Deficiency virus (HIV) for these viruses.

1.1 HUMAN IMMUNO DEFICIENCY VIRUS (HIV):

HIV, the etiological agent of AIDS, belongs to the lentiviruses sub-group of the family retroviridae of which two are currently known as HIV-1 and HIV-2. Globally, vast majority of AIDS cases result from HIV-1 infection, whereas AIDS secondary to HIV-2 appears to be confined to a region in West Africa.

The critical events in HIV-1 disease are associated with infection of a subset of lymphocytes known as the T4 (helper), or CD4+ (Cluster Designated 4 Positive), lymphocytes. CD4+ cells play a central role in cell-mediated immunity and coordinate other critical immune events. Steady depletion of CD4 cell numbers through the course of HIV-1 disease leads to a catastrophic collapse of cell-mediated immunity, as well as deregulation. In turn, those events lead to death from overwhelming infections, neoplasms, or wasting syndrome.

1.2 MODE OF TRANSMISSION:

The mode of transmission include heterosexual and homosexual intercourse, vertical transmission from infected mother to foetus or newborn, and instrumental transmission which involves introduction of HIV contaminated fluids or material into the body by means of needles, blood products during various medical emergencies. Worldwide, the sexual mode of transmission is
the most important with homosexual accounting for the majority of cases in North America, Europe and the Antipodes. Heterosexual transmission being the most common in Africa, and both patterns in South America and Asia.

In North America there appears to be a slow shift in risk patterns. For example, Centers for Disease Control (CDC) reported that homosexual and bisexual transmission accounted for 61% of the first 100,000 cases of AIDS in the United States, while 20% of cases occurred in women or in injection drug users (IDUs). For the second 100,000 cases reported between 1989 and 1991, the proportion accounted for homosexual and bisexual men dropped to 55%, while the proportion of women and IDUs increased to 24%. Moreover, specially, about 5% of earlier AIDS cases seen to have been due to heterosexual transmission, while 7% of more recent AIDS cases in United States were so linked. With regard to women, 9% of the first 100,000 cases were female, which has risen to 12% in the second 100,000 cases. The proportion of cases in blacks increased from 27% to 31% and among Hispanics from 15% to 17%. The various data suggest that clinicians in the future will be treating increasing numbers of HIV infected persons who have acquired the disease through intravenous drug use or heterosexual transmission, and that the rates among women, Hispanics and blacks will continue to rise.

The spread of HIV within India is as diverse as the societal patterns within its different regions, states and metropolitan areas. Infact, India’s epidemic is made up of a number of epidemics, and in some places they occur within the same state. The epidemic varies from states with mainly heterosexual transmission of HIV to some states where injecting drug use is the main route of HIV transmission. Using of non-sterile injecting drug
equipments is the main risk factor for HIV infection in North-Eastern states of India.

1.3 CLINICAL CASE DEFINITION:

The CDC clinical case definition for HIV infection and AIDS are as follows:

**TABLE 1.3-(a): CDC 1993 Revised Classification System of HIV infection and expanded AIDS surveillance case definition for adolescents and adults.**

<table>
<thead>
<tr>
<th>CD4+ cell count categories</th>
<th>Clinical categories</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>A Asymptomatic or Lymphadenopathy</td>
</tr>
<tr>
<td>1. &gt;500/mm³</td>
<td>A - 1</td>
</tr>
<tr>
<td>2. 200-499/mm³</td>
<td>A - 1</td>
</tr>
<tr>
<td>3. &lt;200/mm³</td>
<td>A - 3</td>
</tr>
</tbody>
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Bold entry means CDC 1993 AIDS indicators condition (A-3, B-3, C-1, C-3).

- Category ‘A’ includes acute HIV infection, asymptomatic infection, and progressive generalized lymphadenopathy.
- Category ‘B’ includes conditions associated with HIV infection.
- Category ‘C’ conditions are those associated with severe immunodeficiency.

Category ‘A’ - Asymptomatic.

i) Persistent generalized lymphadenopathy (PGL).

ii) No symptoms.
Category ‘B’- Symptomatic non-AIDS condition.
   i) Oral candidiasis
   ii) Vulvo-vaginal candidiasis
   iii) Cervical dysplasia, moderate or severe.
   iv) Severe unexplained diarrhea, fever for one month
   v) Oral hairy leukoplakia
   vi) Herpes zoster (two distinct episodes or more than one site).
   vii) Idiopathic thrombocytopenic purpura
   viii) Pelvic inflammatory disease of severe type.

Category ‘C’- AIDS defining illness or infections.
   i) Pneumocystis Carinii Pneumonia (PCP)
   ii) Cryptosporidium
   iii) Tuberculosis
   iv) Coccidiomycosis
   v) Recurrent pneumonia in the past year (other than PCP)
   vi) Candidiasis (only pulmonary, esophageal, or bronchial)
   vii) Wasting syndrome – diarrhea with loss of more than 10% of body weight.
   viii) Cytomegalovirus (CMV)
   ix) Cryptococcus
   x) Kaposi’s sarcoma or lymphoma
1.4 LABORATORY DIAGNOSIS:

1.4.1 Immunological test:

The following parameter helps to establish the deficiency in HIV infection.

i) Total leukocyte and lymphocyte count to demonstrate leucopenia and lymphocyte count usually below 200/mm$^3$.

ii) T cell subset assays. Absolute CD4+ T cell count will be usually less than 200/ mm$^3$ T4:T8 cell ratio is reversed.

iii) Platelet count will show thrombocytopenia.

iv) Raised Ig ‘G’ and Ig ‘A’ levels.

v) Lymph node biopsy showing profound abnormalities.

1.4.2 Specific test for HIV infection:

Serological test for anti-HIV antibodies are of two types, screening and confirmatory tests. Screening tests possess high sensitivity, have a broadly reactive spectrum, are simple to perform and can be automated for handling numbers of samples at a time. They are not highly specific and may give a few false positive results. The most widely used screening test is ELISA.

1.4.2-A Enzyme Linked Immuno Sorbent Assay (ELISA):

ELISA is a simple and relatively inexpensive test. But false positive reactions are not uncommon, particularly with sera containing the rheumatoid factors, anti-lymphocyte or other auto antibodies.
Modifications of ELISA in which the antibody in test serum either competes with enzyme conjugated anti-HIV antibody, or it’s captured by anti-human immunoglobulin onto solid phase are more specific. Immunometric assays are highly sensitive and specific.

1.4.2-B Western blot test:

The confirmatory test commonly employed is the Western blot test, which is a very useful test. But the interpretation remains subjective and demands considerable experience. Intermediate results are not uncommon. In such cases the western blot may be repeated a month later.

A positive result in any one screening test may not be accepted without confirmation. It was the practice to use for confirmation, the western blot test, which was considered the gold standard.

However, as the test is cumbersome, costly and not readily available, the practice now is to perform either two different types of ELISA or an ELISA without any of the rapid tests. A serum positive in both test is considered positive. When in doubt, retesting should be done after one to two months, which may be beneficial.

1.5 TREATMENT OF HIV/AIDS:

AIDS has no cure till date. The advent of antiretroviral (ARV) drugs in 1980s began revolution in the management of HIV/AIDS. ARV treatment seeks to suppress viral replication, which leads to restoration of immune system. The goal is to halt the disease progression and let one stay healthier thereby
improving Quality Of Life (QOL). The drugs used to treat HIV infections is called ARV because they fight HIV, which is a type of “retrovirus”.

There are four types of FDA approved ARV medications used to treat HIV/AIDS:

i) Nucleoside Reverse Transcriptase Inhibitors (NRTIs)

ii) Non-Nucleoside Reverse Transcriptase Inhibitors (NNRTIs)

iii) Protease Inhibitors (PIs)

iv) Fusion Inhibitors (FIs)

The aim of these therapy is to suppress the viral load (amount of HIV in sample of blood), to restore or preserve the immune function, to improve QOL and reduce morbidity.

Further, it needs to be mentioned that till date there is no approved vaccine to protect against HIV. However, scientists are working hard to develop a vaccine to prevent HIV. International AIDS Vaccine Initiative (IAVI) assumes that HIV vaccine could substantially alter the cause of AIDS pandemic and reduce the number of people newly infected. A vaccine that could reduce number of infection by 20% to 80% would produce enormous health and economic benefits and could help to dramatically curtail the pandemic.

1.6 EPIDEMIOLOGY:

1.6.1 World scenario:

At the end of 1993, more than 340,000 cases of AIDS were reported (including more than 185,000 deaths), and an estimated 1 million people were
infected in the United States. The ratio of men to women who are infected are estimated to be 8 to 10, but the numbers of infected women is growing four times faster than the number of infected men. At the end of 1993, the World Health Organization (W.H.O.) estimated that, worldwide, 2.5 million adults and 1 million children had AIDS, and about 10 million people were infected with HIV. Although estimates of future cases have varied widely, it has appeared likely that by 1995, there will be more than 500,000 cases of AIDS in the United States and more than 5 million world wide. Based on current trends, estimates of the number of the persons likely to be infected by the later years to come have range from 40 million to over 100 million. The magnitude of the problem is therefore highly significant, especially in the third world countries. With a population of over 1 billion, the HIV epidemics in India will have a major impact on overall spread of HIV in Asia and the Pacific and indeed world wide.

In India about 2/3rd of the reported HIV infections have been in six of the country’s 28 states mainly in industrialized South and West and in the North-East tip. On average HIV prevalence in these states is 4-5 times higher than in other Indian states. The highest prevalence states are found in the Mumbai-Karnataka corridor, the Nagpur area of Maharastra, the Nammakkal district of Tamil Nadu, Coastal Andhra Pradesh, and parts of Manipur and Nagaland in North-Eastern region of India (NACO, 2005; World Bank, 2005).

It would be easy to underestimate the challenge of HIV/AIDS in India. India has large population and population density, lower literacy level and consequently lower levels of awareness. And HIV/AIDS is one of the most challenging public health problem ever faced by the country (UNPAN, 2003).
It needs to be mentioned that HIV/AIDS is still largely concentrated in the at-risk population including commercial sex workers, who had the highest prevalence (14.0%).

Kothari and Goyal (1999), from Jaipur, reported that 40% of the study population was related to transport services. But the surveillance data suggests that the epidemic is moving beyond these groups in some regions and into the general population. It is also moving from urban to rural districts (USAID, 2003). In some parts of India, particularly the states reporting higher prevalence, the tipping point is long past.

1.6.2 AIDS in North-East states of India:

1.6.2-(a) Assam:

As on February, 2007, HIV infection in Assam has mounted to 1780. Consequently, the AIDS cases are numbered at 436 in males and 142 in females.

1.6.2-(b) Arunachal Pradesh:

The state of Arunachal Pradesh is still represented with negative status.

1.6.2-(c) Manipur:

Manipur, being one of the hard-hit states of India, was one of the first state to be affected by HIV/AIDS and was one of the first to be considered to have highest prevalence. The first AIDS case in the state was detected in February, 1989. The epidemic began among groups with a high risk of infection, particularly injecting drug users, which is among the highest in India. Till June, 2006 an estimated 2,946 people are living with HIV/AIDS.
1.6.2-(d) Mizoram:

In the state of Mizoram which has a population of less than a million, the epidemic took off quickly mounting to 106 in numbers till June, 2006.

1.6.2-(e) Meghalaya:

Meghalaya has a total number of 8 sero-positive persons till June, 2006.

1.6.2-(f) Nagaland:

A total number of 736 sero positive persons have been reported to NACO from the state of Nagaland as on June, 2006. Although the number may be still more, considering the fact that a few cases always remain unreported because of some or other reasons.

1.6.2-(g) Tripura:

Tripura being one of the least affected among the North-Eastern states showed five sero-positive persons only till June, 2006 (NACO, 2006).

Since the beginning, HIV/AIDS epidemic has had an enormous impact on the world. HIV diseases have been viewed as a psycho-social problem, as complex psychological and social issues arise for those infected with HIV virus. The complexity of problems confronting people with AIDS and the psychological fear it produces, sets this disease apart from virtually every other contemporary public health problem. Its onset affects every aspects of a client life. It causes serious problems for those with whom the client has personal, intimate, familial and occupational ties.

Moreover, because of the stigma and discrimination experienced by many of those with HIV, they walk through maladjustment and psychological disturbances (Cohen and Syme, 1985). It is a known fact that HIV disease remains incurable although treatments are available for specific opportunistic
infections (OI's) and other diseases associated with HIV/AIDS. Hence, it is noted that when individuals know that they have HIV infection or disease, they may suffer great psycho-social and psychological stress through fear of rejection, social stigma, disease progression and the uncertainties associated with future management of people living with HIV/AIDS (PLWHA).

However, a client is confronted with the fact that as yet there is no treatment for immune deficiency itself. Hence, the disease, and its sequel are overwhelmingly debilitating. The transition from being an active, physically fit and vigorous person to being a debilitated symptom wracked, possibly dying person, (often over the course of only a few months and years) requires massive adjustment in all spheres of life (Grace, H.Christ, Loris, S. Weiner, 2001).

Further, persons with AIDS are suddenly faced with the issue of contagion. They must worry about the transmission of the infection to others, protecting self from related infections, dealing with lovers, family members, friends and colleagues. Because the public is at best ambivalent about this disease, infected persons are denied some of the psychological benefits of the sick role that other seriously ill persons receive. Instead, they are socially rejected and have great difficulty in obtaining benefits, employment and care. The client also has no certain answer for many of their questions.

Therefore, they have to adjust with more ambiguity and lack of information than do persons with other diseases. It is a fact that adjustment is highly affected by poor health. Hence, it is presumed that adjustment after HIV infection will certainly be affected as this dreaded disease till date is without cure. As a result it intensifies already existing illnesses making it
difficult to live a life with HIV/AIDS. Therefore, after infection there is a vigorous demand for life style modification or change that may in turn bring undue distress on the individual. Since, the HIV disease bears pre-existing stigma associated with sexual behavior and illegal drug activity as well as fatality and viewing individual as transmitter of the virus (Herek and Glunt, 1988; Prejor et al. 1999), the perception of all these leads a person to extreme state of psychological disturbances. Positive HIV persons also perceives that they are reduced in others minds from a whole and usual person to a tainted discounted one (Goffman, 1963). Thus, the stigma may become psychologically even more destructive than the disease itself leading a person to various psychological states such as denial, anger, confusion, crisis, anxiety, guilt, sadness, depression etc. leading to maladjustment, psychological distress, negative self-perception and many more.

1.7 ADJUSTMENT:

Adjustment is a process by which an individual attempts to cope with, master, and transcend the challenges of life by utilizing a variety of techniques and strategies. The field of adjustment has a unique and particularly relevant domain in psychology.

The concept of adaptation originated in biology and was a corner stone in Darwin’s (1859) theory of evolution. There, however, it referred to the biological structures and processes that facilitated the survival of species. The key biological law was “natural selection” or simply put “survival of fittest”. Thus, in the evolution of species on earth many types of organisms perished
(became extinct) because they could not adapt successfully to demands of living, while others survived and multiplied because they could adapt.

The biological concept of this adaptation has been borrowed and changed somewhat by the psychologist and renamed as "adjustment" to emphasize the individual's struggle to get along or survive in his or her social and physical environment. The trouble with this word is that over the years it has come to signify making oneself fit to the demands of external world, when actually adjustment consists of two kinds of processes: fitting oneself into given circumstances and changing the circumstances to fit one's need.

"Adjustment" remains a highly serviceable word in psychology, and although its roots lie in biology, in psychology it concerns the many ways in which an individual, as distinguished from the species or group, manages his or her affairs.

Adjustment represents a "functional" perspective for viewing and understanding human and animal behavior. That is, behavior has the function of mastering demands made upon a person by the environment and human and animal behavior can be understood as an adjustment to such demands.

In the psychological study of adjustment we usually focus on two kinds of demands. One is primarily internal, arising from the biological make-up of the person. The other kind of basic demand is external, i.e. it arises from external physical and social environments.

In speaking of environmental demands and resources, adjustment appears to be essentially a matter of problem solving. The person must discover the characteristics of his or her environment and how it can be dealt with in
living. Such learning begins at the moment of birth and remains a continuous process throughout life.

However, if adjustment were simply problem solving, it would entail only intellectual processes such as perception, learning, memory, and acquisition of skills for getting along and effectively utilizing environmental resources and opportunities. In adjusting activity, strong emotions, particularly the stress emotions such as anger, fear, anxiety, guilt and shame are also generated. Therefore, in addition to problem solving, adjustive activities can involve the product of stress, including ineffective solution of problems of living, seemingly irrational and disturbed patterns of behavior, subjective distress, and bodily disease. To understand effective and ineffective adjustment we must therefore, give attention to the stresses of living, the conditions that bring stress about and their consequences. Stress has a very special importance in adjustment because it implies a change from simple problem solving to a situation having emotional overtones. Strong emotional situations often result in seemingly irrational rather than effective ways of coping with adaptive problems.

Stress does not of course, always produce maladjusted behavior. Sometimes it mobilizes usually strong and effective modes of adjustment, motivated by the importance of what is happening for the person's welfare. However, stress also can be traumatic, that is, destructive for effective adjustment. When a person is overwhelmed by demands because he or she cannot find suitable means to cope with the problem, impairment in the person's adjustive functioning rather than growth is likely to take place. Apart from producing bodily disease, this is one of the costs of stress, which can
damage adjustive effectiveness for two main reasons. First, stress emotions are very demanding of the person’s attention. As such they serve as distractions that interfere with productive thinking and skilled behavior. Second, the stress emotions, or rather the conditions that brings them about, mobilize desperate and often unrealistic efforts to get the individual out of jeopardy.

Maladjusted behavior in the face of life stresses then is often the result of attempts to regulate distressing emotions by means of avoidance for defense mechanisms such as denial. These mechanisms are motivated in part by the wish to prevent confrontation with a harmful or threatening event and to regulate the distress produced by thinking about it. The behavior is maladjusted because it prevents the individual from taking effective steps to master the problem.

1.8 PSYCHOLOGICAL DISTRESS:

Distress in the simplest and most general sense, occurs when there are demands on the person which tax or exceeds his adjustive resources. Certain environmental conditions are noxious to the tissues of the body or to the normal integrated functions of these tissues. These are physical stressors, including extreme cold, heat, the invasion of microorganisms, and physical injuries, to mention a few examples. Certain environmental or social conditions, on the other hand, may also be damaging in the present or in the future. These are called as psycho-social stressors. With respect to physical stressors, the defenses of the body must be mobilized to overcome the physical harm, as in the changes required to heal wounds or to maintain a critical balance in the internal environment. In case of psycho-social stressors, individuals sense
danger or recognize damage and must act to protect themselves against the danger to overcome the damage.

Stress is not simply "out there" in the environment, though it may originate there. Stress depends not only on external conditions, but also on the vulnerabilities of the individual and the adequacy of his or her system of defenses—in the psychological or physiological makeup of the person some conditions are recognized as universal stressors.

Many environmental situations however are not stressful for everyone, the reaction depending on the kind of person we are. For example, being evaluated in an important examination, being rejected or disapproved by someone we regard highly or love, or anticipating major surgery are more stressful to some than for others. Moreover, people react to the same stressor in diverse ways. Some individuals appears comparatively undisturbed and act in an effective fashion in spite of everything. In contrast, others become disorganized, dazed, and panicky, generally displaying the signs of severe emotional distress. For these former persons, the situation cannot be easily defined as a stressor. Conversely, situations which seem benign to most persons may severely disturb other individuals. For this latter group only, the situation can be viewed as a stressful stimulus.

1.8.1 Factors influencing severity of stress:

The severity of stress is gauged by the degree of disruption in the human system that will occur if the individual fails to cope with the adjustive demand. The actual degree of disruption that occurs depends partly on the characteristics of the adjustive demand, partly on the individual, and partly on
the cultural and situational context in which the stress occur. On a biological level, for example, the severity of stress created by invading virus depends partly on the strength and number of invaders, partly on the organism's ability to resist and destroy them, and partly on available medical resources for helping the body's defenses. On a psychological level, the severity of stress depends not only on the nature of the stress and the individual's resources—both personal and situational, but also on how the stress is perceived and evaluated.

The person's perception of the problem, the degree of threat it entails, and available resources for meeting it, all influence the severity of stressful situations. Thus, when these situations persist they take the way to psychological distress, which disturbs the person as a whole.

1.8.1-(a) Perception of the problem:

One factor that is often crucial in determining the severity of stress is the individual's own evaluation of the stress situation. This point is particularly important in understanding abnormal behavior. As outsiders, we may see no stresses in a person's life situation serve enough to result in serious depression, yet to the individual, the situation may be intolerable. We always react not simply to the situation but to the situation as we evaluate it especially in relation to our ability to cope with it.

1.8.1-(b) Degree of threat:

Threat is the anticipation of harm. Stress situations threaten the adequacy and worth of self—such as loss of social status, failure in one's
chosen occupation, or desires incompatible with one's self concept and self ideal-involve a strong element of threat. In general, any situation we see as threatening is much more stressful than one we see as presenting a difficult but manageable problem.

1.8.1-(c) Stress tolerance of the individual:

The severity of a given stress depends too on, resources for withstanding stress in general and that stress in particular. If a person is marginally adjusted, the slightest frustration or pressure may be highly stressful. The term stress tolerance or frustration tolerance refers to one's ability to withstand stress without having integrated functioning seriously impaired. Both biologically and psychologically, people vary greatly in general vulnerability to stress as well as in the types to which they are most vulnerable. Emergencies, disappointments, and other problems that one person can take in his or her stride may prove in incapacitating to another. Sometimes early traumatic experiences leave the individual especially vulnerable to a certain kind of stress.

Stress is a fact of life, and reactions to stress are one way in which needed competencies are developed. Stress can be damaging, whenever it is too severe for a person's coping resources, or if he believes it is, or acts as if it were. Severe stress can exact high cost in terms of lowered efficiency, the depletion of adaptive resources, wear and tear on the system, and in extreme cases, disintegration and death.

Distress leads to lowering of adaptive efficacy on a physical level, severe stress may result in alterations that impair the body's ability to fight off
invading viruses. On a psychological level, perception of threat brings a narrowing of the perceptual field and increased rigidity of cognitive processes, so that it becomes difficult or impossible for the individual to see the situation from a different perspective or to perceive the range of alternatives actually available.

Stress is wear and tear on the system. Probably most of us experiences that, even after a very stressful experience, rest can completely restore us.

1.9 PERCEPTION:

Perception is a highly integrated process, one in which the basic processes—selection, organization and interpretation occurs is an interrelated fashion in most instances. Perception is not only active but, more accurately interactive. It is influenced on one side by the sensory input and on the other side by memories and thoughts about the incoming stimulation. Many cognitive psychologists today speak of information processing, stressing that several sequential and interactive mental operation are involved in the way that we come to understand the world.

Perception is most appropriately defined in terms of experiences that stem directly from sensory stimulation. Apart from involvement of other sensory inputs, many interactions are verbal in nature. Persons interact by exchanging knowledge, judgments and feelings expressed in language terms.

Perception abides by general laws, yet it is at the same time a highly individualized phenomenon. It is the apparent contradiction that makes the study of perception relevant both from a general, psychological, as well as from differential point of view.
The distinguishing features of the individualized aspect of perception are as follows.

We view perception as an event in time rather than as an instantaneous reaction to outside stimulation. We also consider perception as an event, the root of which are to be found beyond the restricted confines of awareness, often closely intertwined with the observer's private world of memories and emotional experiences.

Perception is not a momentary final product, but a process extended in time and culminating in conscious representation and meaning. The fact that in everyday functioning meaning is assigned to perceptual inputs virtually obscures the realization of the temporarily extended character of human perception.

Traditionally perception was concerned with the problem of correspondence between the nature of the physical world and the character of perceptual experience. The basic task of perceptual studies was to define the properties of experience or response on one hand, and the properties of stimulation on the other, and to specify the correspondence between these two sets of variables.

1.9.1 Personality factors to perception:

Throughout the centuries, personality has been regarded as a practical force in determining success or failure in life. Personality has been thought to play a vital role in perception or perceptual phenomena. The importance of personality increases as social life becomes more complex. The personality pattern is composed of traits or specific qualities of behavior, which
characterizes the individual’s unique adjustment to life as shown in his behavior and perception.

The ‘core’ or ‘centre of gravity’ of personality pattern is the individual's concept of himself as a person as related to the world in which he lives. The quality of his behavior, expressed in the way he adjusts to people and things in his environment, is related to and, to a large extent, determined by his self-concept or self-perception.

1.9.2 Concept of self:

James (1890) called the core of the personality pattern, which provides its unity, the “self’. A person’s self is the sum total of “all that he can call his”

In recent decades what a person “can call his” has been spelled out in more definite and specific terms. It has been referred to as his “attitude towards self”, as those perceptions, beliefs, feelings, attitudes, and values which the individual views as “part or characteristic of himself” as the “organization of qualities the individual attributes to himself”, and as a system of central meaning he has about “himself and his relation to the world about him.”

Allport (1961) has described self in this way: The self is something of which we are immediately aware. We think of it as the warm, central, private region of our life. As such it plays a crucial part in our consciousness (a concept broader than self), in our personality, and in our organism. Thus, it is some kind of core in our being.
The self-concept or how Subsequently, how broad and all inclusive the concept of self is has been emphasized by Jersild (1965). The self, as it finally evolves is made up of all that goes into a person's experiences of his individual existence. It is a person's "inner world". It is a composite of a person's thought and feelings, strivings and hopes, fears and fantasies. His view of what he is, what he has been, what he might become, and his attitude pertaining to his worth.

One perceives one's self influences the quality of a person's behavior and his methods of adjustment to life situations. As Lewin has pointed out, it gives, "consistency of the personality."

1.9.3 Components of self-concept:

The concept of self has three major components. The perceptual, the conceptual and the attitudinal.

The perception component is the image the person has of the appearance of his body and of the impression he makes on others. The perception component is often called the physical self-concept.

The conceptual components is the person's conception of his distinctive characteristics, his abilities and disabilities, his background and origins and his future. It is often called the "psychological self-concept" and is composed of such life-adjustment qualities as honesty, self-confidence, independence, courage, and their opposites.

Included in attitudinal component are the feelings a person has about himself, his attitude, about his present status and future prospects, his feelings about his worthiness, his attitudes and perception of self-esteem, self-approach,
pride and shame. As the person reaches adulthood the additional component includes also the belief, convictions, values, ideals, aspirations and commitments which make up his philosophy of life.

1.9.4: Self perception:

It is an interesting area to know how a person forms an understanding of himself or herself as in individual.

Earlier in the history of psychology, it was thought that the self-concept develops through observing how other people behave towards us, we develop a "looking-glass self". This view as challenged by Daryl Bem about 30 years ago. He argued that, "We come to understand ourselves in the same way that we come to understand other people" through attributional processes.

In order to know ourselves, we have to interpret ambiguous internal signals by applying attributional processes to our behavior.

Bem's (1967) self-perception theory argued that we only have weak and ambiguous information about are internal states. In order to know how we feel or what we think about a social object, we have to interpret these ambiguous signals, and we do this by applying the cognitive processes of casual attribution, just as we do in understanding others. That is, our description of our own feelings or attitudes, at least in part depends on the attributions we make about our own behavior.

It is also a vital fact that self-concept is an organized collection of beliefs and self-perception about one's self. The self is a frame work that determines how we process information about ourselves, including our motives, emotional states, self evaluations, abilities and much else besides (Klein Lottus
& Burton, 1989; Van Hook and Higgins, 1988). Self-perception depends on attitude of self, which probably is the most important factor to categorize the self-esteem, which plays a vital role in perceiving self.

The self-perception tends to be least stable during the early years of life when rapid physical and mental changes are taking place.

The concept of self influences the quality of the person’s behavior and his characteristic reaction to people and to situation. Social discrimination affects the self concept in the same way as ethnic or religious discrimination. It is likely to have a great influence on self-perception during adolescence and adulthood than in childhood.

At every age, instability in the self-perception is greatest among those with strong negative attitudes toward self. This instability is reinforced, to some extent by rapid physical changes.

Personal and social adjustments are greatly influenced by the degree of stability of the self-perception. A stable self-perception even of negative type, gives the person a feeling of personal security. A true sense of identity can be developed only when the self-perception of a person is relatively stable. Unstable self-perception leads to poor personal and social adjustment.

Subsequently, it needs to be mentioned that the above discussed psychological reactions are also faced following the uncertainty and fatality underlying HIV/AIDS. The PLWHA not only fear about the future course of the disease but more importantly they fear over the potential reactions of others. Also, the individual is unable to accept it at an emotional level causing some of the acute manifestation of psychological pathology, which causes functional handicaps to the person suffering from HIV. Anxiety and depression
may specially lead an individual to withdraw himself from others and thus alter the nature of his relationship with others—with those whom he interacts daily and closely. Thus, individual’s adjustment to changed circumstances becomes deficient. Partly, such withdrawal is promoted by feelings of helplessness against the incurability and fatality as well as uncertainties of one’s own future.

Therefore, a psychological understanding of behavioral changes and how to ameliorate the psychological impact of HIV/AIDS is imperative. Such an understanding can assist in the efforts of combating the epidemic and promoting positive living in an optimal way, in overcoming psychological trauma and in preventing further transmission too (Joubert K., 2001).

Considering the importance of the factors mentioned above in understanding the psychological impact of HIV/AIDS and with a view to applying these facts to make life optimal for PLWHA this present study was undertaken.

1.10 HYPOTHESES:
1. There will be no difference in the level of general adjustment of persons belonging to age group 16 to 30 years and those belonging to age group 30 years and above.
2. There will be no difference in the level of general adjustment of males and females.
3. There will be no difference in the level of general adjustment of persons diagnosed with HIV/AIDS for one year or less and persons diagnosed for more than one year.
4. There will be no difference in the level of psychological distress of persons belonging to age group 16 to 30 years and those belonging to age group 30 years and above.

5. There will be no difference in the level of psychological distress of males and females.

6. There will be no difference in the level of psychological distress of persons diagnosed with HIV/AIDS for one year or less and persons diagnosed for more than one year.

7. There will be no difference in the self-perception of persons belonging to age group 16 to 30 years and those belonging to age group 30 years and above.

8. There will be no difference in the self-perception of males and females.

9. There will be no difference in the self-perception of persons diagnosed with HIV/AIDS for one year or less and persons diagnosed for more than one year.