Summary
Acquired Immunodeficiency Disease Syndrome (AIDS), which is a chronic life-threatening condition, refers to the collection of syndromes and infections, resulting from specific damage to the immune system caused by human immunodeficiency virus (HIV) in human beings (NIH, 2007).

The first case of HIV was detected on 5th June 1981 in America. Global summary of AIDS epidemics 2010 reported that 34 million people, including 30.1 million adults (with 16.8 million women) and 3.4 million children below the age of 15 years, are living with HIV all over the world. People who are newly infected with HIV are 2.7 million including 2.3 million adults. Total 1.8 million deaths have been reported due to AIDS all over the world, out of which, 1.5 millions were adults and 2,50,000 children below the age of 15 years.

At the beginning of 1986, no case of HIV or AIDS was reported in India (Ghose, 1986), but now, the picture of HIV in India is equally worse. The first case of HIV was detected in 1986, and until now, it is gradually increasing (NACO, 2006). In 2006, 5.6 million people living with HIV in India were reported (UNAIDS, 2006), in 2008, it was estimated to be 2.31 million (UNAIDS, 2008), 2.4 million in 2009 (UNAIDS, 2010), and now, the estimated number of people living with HIV/AIDS in India is 20.89 lakh (NACO, 2012). At the beginning of 1990s, the infection rate continued to rise (UNAIDS, 2010), and until then, HIV had spread extensively throughout the country and rapidly expanding its paws across the world.

This ghastly disease not only attacks immune system but also develops physiological, psychiatric and psychological problems in HIV/AIDS patients. People with advanced HIV infection are vulnerable to infections and malignancies known as opportunistic infections. Opportunistic infections, such as weight loss, chronic diarrhea fever, Tuberculosis, etc., are common in people with AIDS (Holmes, Losina, Walensky, Yazdan-Panah and Freedberg, 2003). These symptoms may be mild
in early stages of AIDS but may become progressively severe. Human immunodeficiency virus infection in a family is associated with multiple losses (Bharat, 1996; Ankrah, 1993). The psychological factors not only lead to psychological and psychiatric disorders but also affect the brain by directing neural damage and by opportunistic infections of the brain occurring due to immunosuppression (Anders, Guerra and Tomiyasu, 1986; Gray, Gherardi and Scaravilli, 1988). Neurologists described several central nervous system (CNS) syndromes. The other nervous system complications that occur as a result of the disease or the drugs used to treat it include pain, seizures, shingles, spinal cord problems, fever, lack of coordination, painful swallowing, loss of vision, destruction of brain tissue and coma. The impact of these factors on AIDS often leads to psychiatric symptoms, such as anxiety, depression and even confessional states (Chandra and Ravi, 1995; Lyketsos, Hutton and Fishman, 1996; Perry, 1990). High prevalence rates of suicide have been reported among HIV infected patients (Cournos, Empfield and Horwath, 1991; Grassi, 1996; Pugh, O'Donnell and Catalan, 1993; Weinharat and Carey, 1995). Major depression in HIV infected population is seen 5.8% and similar to that seen in other chronic medical conditions (Perkins, Stein and Golden, 1994). The prevalence of mania has been found to increase in patients with AIDS when compared with general population (Holahan and Moos, 1987; Kieburtz, Zettelmaier and Ketonen, 1991). The prevalence rate of psychosis is 0.1 to 5 per cent and is most often found in late stages of illness (Sewell, Jeste, Atkinson, Heaton, Hesselink, Wiley, Thal, Chandler, Grant and HNRC Group, 1994).

It indicates that there is a need of psychiatric evaluation and management interventions for these clinical personality patterns, thus, the stress becomes multifold. The disease itself is a stress and the accompanying physiological/biological infections, psychological and psychiatric symptoms. The difficulties that cultivate due to side effects of medicines, the adherence problem and management of disease physically and physiologically- all indicate that coping is not so easy. To plan interventions and to teach effective coping strategies, there is a need to know that which of the coping strategies are better in case of HIV/AIDS patients.
The coping strategy means some specific efforts, both behavioural and psychological that the person uses to deal or manage the stressful events. It has been described in many ways. One popular way of coping is the concept suggested by Lazarus and Folkman (1984), which explains that coping means a *constantly changing cognitive and behavioural effort to manage, reduce, or tolerate external and/or internal demands that are appraised as taxing or exceeding resources of the person.* HIV/AIDS patients adopt a variety of coping. Lazarus and Folkman (1984) suggested two types of coping strategy.

**Problem focussed coping:** It is a coping style in which the individual faces the problem head on, *i.e.*, the person actively takes action to fix or resolve the problem. Problem focussed coping (PFC) is an action that has the goal of removing or circumventing the source of stress.

**Emotion focussed coping:** A coping style in which the individual tries to diminish his or her negative emotions resulting from stress by seeking out others who offer social support, using alcohol or other psychoactive drugs and distancing, using escape or avoidance.

Now, there is a growing awareness among health care professionals that maladaptive coping has been associated with poor adjustment with HIV/AIDS, whereas, positive coping leads to less symptoms and better quality of life (QOL) and SWB. Therefore, it is important to study whether the clinical personality patterns vary as a result of coping strategies adopted by different patients. It is an important question to know whether the HIV/AIDS patients differ in their ways of coping since such studies do not exist in literature. Similarly, there is a gap of knowledge about the existence of clinical patterns in personality due to adopting specific ways of coping, jointly on HIV/AIDS and separately on HIV and AIDS. Studying this would be a better step towards designing the effective interventions and strategies to deal with HIV/AIDS. Therefore, the present study was designed to investigate the following problem:

**To compare the clinical personality patterns among HIV and AIDS patients adopting emotion focussed and problem focussed ways of coping.**
Objectives
1. To look for the ways of coping among total HIV and AIDS patients
2. To compare the ways of coping among HIV patients with the ways of coping amongst AIDS patients
3. To understand the gender differences in the ways of coping amongst HIV and AIDS patients
4. To compare clinical personality patterns amongst HIV and AIDS patients adopting emotion focussed and problem focussed ways of coping
5. To find out gender differences in clinical personality patterns separately amongst HIV patients and AIDS patients using EFC and PFC

Hypotheses
1. The use of emotion focussed coping would be more as compared to problem focussed coping amongst HIV and AIDS patients.
2. The AIDS patients would have a higher level of EFC than HIV patients.
3. There would be no significant gender difference in the ways of coping amongst HIV and AIDS patients.
4. The HIV and AIDS patients adopting emotion-focussed ways of coping would be significantly higher on the clinical personality patterns than those adopting problem focussed ways of coping.
5. No significant gender difference in clinical personality patterns would be amongst HIV and AIDS patients adopting emotion focussed or problem focussed ways of coping.

Design: An Ex Post Facto Design was used.

Sample
The sample used in the present study consisted of 500 subjects, i.e., 250 HIV patients (125 male and 125 female) and 250 the AIDS patients (125 male and 125 female). The sample of HIV was drawn from the patients who were attending ICTC’s (Integrated Counseling and Testing Centre) and other centers of different civil hospitals of Haryana and Health University (PGIMS), Rohtak. The sample of AIDS patients was drawn from the patients seeking treatment in various ART (Antiretroviral Therapy) centres of Haryana. It was a convenient sample selection based on
availability and consent. The samples included only those patients who voluntarily bestowed their written consent. The patients selected for the study were of 25 to 50 years age with mean age 37.5 years, and the minimum level of education was above fourth standard. People belonged to different occupations and socio-economic status. Even in convenient sampling, the number of subjects was equated in terms of socio-economic status, rural and urban background and level of education.

Tools used

The tests used in the study are as follows:

- Ways of coping (revised) questionnaire as suggested by Folkman and Lazarus (1988)
- Clinical scale of Personality Assessment Inventory as suggested by Morey (1991)

Procedure

After selecting proper tools for the study, Ways of coping tool was got translated in Hindi. Translated version of Personality Assessment Inventory was already available. After finalizing the tools, sample of HIV and AIDS patients was drawn from the patients who were attending the ICTC’s and various ART (Anti-retroviral Therapy) centers of Haryana. A written and formal consent was taken from every participant. The subjects were contacted individually to establish a rapport, and after establishment of rapport, they were given ways of coping questionnaire and personality assessment inventory. After providing proper instructions, all the scales were got filled. Firstly, the scoring for ways of coping (R) was done according to the manual. The subjects high on problem focussed and emotion focussed coping were segregated based on Q1 and Q3 values. Those who had a mean equal to or higher than Q3 on one way of coping and lesser than Q1 on other way of coping were selected as high on the strategy on which they had a mean higher than Q3 values. In this way, out of total 500 subjects, only 63 were found to adopt problem-focussed coping and 87 were found to adopt emotion-focussed coping. For these 150 subjects, the scoring of personality assessment inventory was done according to the manual, and the mean, SD’s and ‘t’ values were calculated to meet the different objectives. Analysis of WAYS-R was done both extent and frequencies wise. For that, the Chi-Squares and
‘t’ values were calculated. The scores of both ways of coping questionnaire and personality assessment inventory were analyzed.

Results and Discussion

The first objective was to assess the ways of coping amongst total HIV and AIDS patients. Two indicators were used. First was the amount or the extent of each coping strategy used, i.e., the mean score on coping style and second was the number of subjects high on any coping strategy. To measure the extent, the scores of all the subjects on PFC were taken up and ‘t’ test was employed for total samples and separately for HIV and AIDS patients. All the three ‘t’ values were significantly higher for EFC. This means that all the HIV/AIDS patients and separately HIV and AIDS patients were using EFC more than the PFC to cope with their life stresses.

The other way of analysis was done to know about number or frequency of the subjects using EFC and PFC in a significantly higher way. For this analysis, the $Q_1$ and $Q_3$ on PFC and EFC scores were computed. Those having a mean equal to or higher than $Q_3$ were taken as the subjects being high on that way of coping, and $Q_1$ was used as an indicator of being low on that way of coping. Now, the subject, who was having a mean higher on one and lower on other, was taken as a subject being higher on that particular way of coping, thus, the frequencies were calculated and for further analysis, Chi-Square test was applied.

The frequency of the subjects in the total samples using emotion-focussed coping was significantly more as compared to the frequency of subjects using problem-focussed coping. The same trend was observed separately in HIV and AIDS patients, but here, the frequency of the subjects using EFC and PFC did not differ.

Therefore, the hypothesis has been proved extent wise but was not proved when the frequency wise analysis was done. The earlier studies indicate the PFC is a better way of coping. It is therefore suggested that the PFC should be a major focus of interventions designed for HIV and AIDS patients.

The results also indicate that the subjects used all types of coping strategy. Out of 500 patients, only 63 subjects adopted problem solving coping strategy and 87
subjects adopted emotion focussed coping. Rest of the 350 subjects adopted a mixed pattern of coping strategies.

The second objective was to compare the ways of coping among HIV patients with the ways of coping amongst AIDS patients. It was hypothesized that the AIDS patients would have a higher level of EFC than the HIV patients. For that, the scores of two groups on EFC were analyzed. Similar trend was followed in case of PFC. The obtained ‘t’ scores clearly indicated no significant difference in HIV and AIDS patients in adopting EFC, but so far problem-focussed coping is concerned, the scores of HIV patients were significantly higher than the scores of AIDS patients. Hence, the hypothesis has not been proved. It indicates that the AIDS patients were lower on both EFC and PFC, although the difference was significant only for PFC. It seems that AIDS patients did not cope too actively. It is suggested that AIDS need to be concentrated more because these results reveal that AIDS is so threatening that people are not able to cope well.

Further, the difference between all the eight coping strategies amongst HIV and AIDS patients was also concentrated. In three subscales of PFC on confrontive coping and planful problem solving strategy, no significant difference was observed. So far the seeking social support was concerned, the HIV patients were seeking more social support as compared to AIDS patients and the difference was significant.

In EFC areas on distancing, self-controlling, escape avoidance and on positive reappraisal, there was no significant difference. Both, the HIV and AIDS patients were using these coping strategies at same level. So far the accepting responsibility was concerned, the difference was significant.

To conclude the results, two coping ways of seeking social support and accepting responsibilities had reduced significantly as the severity increased, showing a negative impact of more disability. Therefore, a special emphasis on teaching these strategies should be there in the interventions for AIDS.

The third objective of the study was to understand the gender differences in the ways of coping amongst HIV and AIDS patients. It was hypothesized that there would be no significant gender difference in the ways of coping amongst HIV and AIDS
patients. The hypothesis was based on the fact that the condition does not affect the men and the women differently. Further, the gender wise difference in HIV and AIDS patients adopting PFC and EFC was also studied firstly extent wise and then frequency wise. The analysis of total samples and only for HIV and AIDS groups was perused separately.

In total HIV/AIDS patients on PFC as well as on EFC extent wise, there was no significant gender difference. In separate analysis of HIV and AIDS patients also, the condition was same and the gender wise difference of using PFC and EFC was not significant, meaning that both, the males and the females of HIV/AIDS were using these coping strategies to similar extent. Therefore, the hypothesis has been proved extent wise.

Further, frequency wise analysis was done, and gender wise frequencies based on $Q_1$ and $Q_3$ values on PFC and EFC were computed. The results indicate that in total HIV and AIDS patients and also in separate groups of HIV and AIDS patients, no significant differences were observed. Hence, the hypothesis has been proved extent wise as well as frequency wise.

Analysis of gender differences in all the eight coping styles indicating that all the males and the females of HIV/AIDS were using all coping strategies to same extent and no any significant difference was there. It indicates that there is no need of designing separate interventions for different genders for teaching more appropriate ways of coping.

A major purpose of the study was to compare clinical personality patterns amongst HIV and AIDS patients adopting emotion focussed and problem focussed ways of coping. It was hypothesized that the HIV and AIDS patients adopting emotion-focussed ways of coping would significantly be higher on clinical personality patterns than those adopting problem focussed ways of coping. There are studies indicating that different coping strategies may influence the patients differently in managing the disease and mental health of the patient. Therefore, the impact of two coping strategies on HIV and AIDS patients was important to measure, in which
condition, the total HIV and AIDS patients develop more-neurotic tendencies. For this, the total HIV and AIDS patients using EFC and PFC were compared, and it was found that total HIV and AIDS patients adopted PFC had a lower mean value on clinical patterns than the patients adopted EFC, on all the eleven subscales. The obtained ‘t’ values on 9 of the 11 subscales were significantly higher. Only two exceptions, i.e., alcohol problems and drug problems had no significant difference. The results overall indicate that the patients adopted EFC were more prone to develop clinical personality patterns than those adopted PFC. Hence, the hypothesis has been proved for total samples.

Now, the clinical personality patterns were studied separately amongst HIV patients adopting PFC and EFC. It was found that the means of HIV patients on clinical patterns adopting EFC were much higher than the means of HIV patients adopting PFC. The ‘t’ values for eleven clinical subscales were highly significant. The results clearly indicate that the HIV patients adopting emotion-focussed coping were more prone to develop clinical patterns than the patients adopting problem-focussed coping. The scores of AIDS patients depict an entirely different picture, where no significant difference was found in all the 11 subscales. The AIDS patients either using PFC or EFC had approximately same level of clinical personality patterns.

As the disease progresses, the immune system decreases. There might be a difference in the separate group of HIV and AIDS patients if they were using a same coping way. It was thought worthwhile to study that how much of the HIV and AIDS patients adopting either EFC or PFC differed on clinical patterns. The results indicate that even after using PFC, the AIDS patients were found to develop more clinical personality patterns as compared to HIV patients. It was further studied in the same groups that what will be the condition if both the groups use EFC. Here, an entirely different condition was found, where no significant difference was observed on 10 out of 11 subscales. Both, HIV and AIDS patients used emotion-focussed coping, depicted same levels of clinical personality patterns. Only the mean score of AIDS patients on one subscale of Borderline features was higher than the mean score of HIV patients.
The next objective was to find out the gender differences in clinical personality patterns separately amongst HIV and AIDS patients using EFC and PFC. It was hypothesized that no significant gender difference in clinical personality patterns would be amongst HIV and AIDS patients adopting emotion focussed or problem focussed ways of coping. Firstly, the difference regarding EFC was observed in HIV and AIDS patients. It was found that in HIV patients on 7 out of 11 subscales, the males using EFC had a significantly higher mean than the females using EFC. The subscales were somatic complaints, schizophrenia, alcohol problems, drug problems, depression, antisocial features and borderline features. On rest of the four subscales, no significant difference was noticed. In AIDS patients using EFC on 9 out of 11, there was no significant gender difference. Rest two subscales where the difference was significant were alcohol problem and drug abuse.

Same thing was studied in case of PFC and it was found that in HIV patients using PFC, all the mean values of 11 subscales of PAI excepting alcohol problem had no significant gender difference, which means that male patients of HIV adopted PFC had a higher tendency to consume alcohol than the females.

So far the gender differences in AIDS patients adopted PFC was concerned, it was found that on 9 out of 11, there was no significant gender difference. On two subscales, i.e., alcohol problem and drug abuse, the difference was significant. Here, the situation was as alike as in case of AIDS patients using EFC, meaning that the male AIDS patients either adopted PFC or EFC had a higher score on alcohol problem and drug abuse than the female AIDS patients. Although the differences were non-significant on some subscales but differences were there, hence, the hypothesis has not been proved.

To conclude the results, EFC was found to be adopted more and no gender difference in adopting EFC was observed both, the extent and frequency wise. The clinical patterns were found to be more prevalent amongst those following EFC than PFC for total sample and HIV, but for AIDS the patients adopting either EFC or PFC, higher prevalence of the clinical patterns was observed.