

## Stress aspects in HIV/AIDS Disease

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### ABSTRACT

If this study was to determine the correlation of perceived stress with selected physiological and psychological factors in an HIV-infected, correlations between perceived stress and state and trait anxiety, depression, HIV-related symptoms.

**Keywords:** HIV/AIDS, Psychological Factors, Stress, Health Tips

**H**uman immunodeficiency virus, or HIV, is the virus that causes acquired immune deficiency syndrome (AIDS). The virus weakens a person's ability to fight infections and cancer. People with HIV are said to have AIDS when they develop certain infections or cancers or when their CD4 count is less than 200.

HIV disease is a major source of emotional and physiological stress for those who are infected (Faulstich, 1987). Chronic exposure to stressful events reduces immunity, contributes to increased symptomatology and hastens disease progression to AIDS (van Eck et al., 1996). Further, it appears that the physiological and immunological responses to potentially stressful events are due primarily to the individual's assessment of the event, the perceived stress.

Human immunodeficiency virus (HIV) infection and acquired immune deficiency syndrome (AIDS) is a global epidemic that has been reported from all countries. Worldwide, the rate of infected adults is approximately thirty-seven million, 50% of which are women. It is estimated that two million and five hundred thousand children under the age of 15 are living with HIV or AIDS. Transmission cases are injection drugs users (IDUs), and the rest of them are affected by sexual intercourse, blood products, and mother-to-child transmission.

Negative thinking and stigma in society against AIDS lead to many social issues, like physical and mental health problems in affected patients, leading to many difficulties in their useful activities and interests. Infected individuals are so vulnerable to many changes in their whole lives including reduction in self-confidence and self-esteem, decrease in daily functions and social activities, increase in sense of vulnerability, disorganized thinking, and also physical

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symptoms. Moreover, frequent visits to the doctor, the high cost of drugs, and also the side effects of drugs lead to the reduction of quality of life.

Stress is the physiological response to a stressor, when the body reacts to a challenge. Stress typically describes a negative condition or a positive condition that can have an impact on the person's mental and physical well-being. Long-term or chronic stress weakens the immune system and leads to disease susceptibility and makes the body prone to depression. The most common psychiatric disorder in AIDS patients is depression. Depression is a state of low mood and aversion to activity that can affect a person's thoughts, behavior, feeling, and sense of well-being. Depressed people can feel sad, anxious, empty, hopeless, worried, helpless, and worthless.

### Cause

- The HIV infection is caused by the human immunodeficiency virus (HIV).
- After HIV is in the body, it starts to destroy CD4+ cells, which are whiteblood cells that help the body fight infection and disease.
- HIV is spread when blood, semen, or vaginal fluids from an infected person enter another person's body, usually through sexual contact, from sharing needles when injecting drugs, or from mother to baby during birth.

**Symptoms and Complications of HIV/AIDS** :Symptoms of HIV infection appear 2 to 12 weeks after exposure. At this point the virus begins rapidly taking over immune cells in the blood. The symptoms of this phase are flu-like and include:

- diarrhoea
- fatigue or weakness
- fever
- headache
- joint pain
- night sweats
- rash
- swollen glands
- weight loss
- yeast infections (of the mouth or vagina) that last a long time or occur frequently

**Table : Psychosocial Factors That Can Have a Negative Effect on Immune Function**

<b>PSYCHOLOGICAL ISSUES</b>	<b>BEHAVIORAL ISSUES</b>	<b>MEDICAL ISSUES</b>
Preoccupation with death and dying	Restricted breathing patterns (shallow breathing, unconscious breath-holding)	Repeated exposure to HIV and other infections
Chronic impatience	Inadequate fluid intake (partial dehydration)	Limited capacity for self-care when sick
Sustained survival stress	Poor appetite, eating habits, and/or nutrition	Limited involvement in/understanding
Protracted, unmanaged grieving		
Clinical depression		
Lack of purpose and goals		

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Lack of self-assertiveness Lack of emotional support (or inability to accept support) Poor coping ability	Insufficient or disrupted sleep Substance abuse, exposure to toxins Inadequate or inappropriate exercise	of HIV-related health issues Passive, uninformed relationship with primary care providers
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### Stress in HIV Patients

If you are HIV infected, you and your loved ones constantly have to deal with stress. Stress is unique and personal to each of us. When stress does occur, it is important to recognize the fact and deal with it. Some ways to handle stress are discussed below. As you gain more understanding about how stress affects you, you will come up with your own ideas for coping with stress.

Try physical activity. When you are nervous, angry, or upset, try exercise or some other kind of physical activity. Walking, yoga, and gardening are just some of the activities you might try to release your tension.

Take care of yourself. Be sure you get enough rest and eat well. If you are irritable from lack of sleep or if you are not eating right, you will have less energy to deal with stressful situations. If stress keeps you from sleeping, you should ask your doctor for help. Talk about it. It helps to talk to someone about your concerns and worries. You can talk to a friend, family member, counselor, or health care provider. Let it out. A good cry can bring relief to your anxiety, and it might even prevent a headache or other physical problem. Taking some deep breaths also releases tension.

### AIDS dementia

HIV/AIDS and some medications for treating HIV may affect your brain. When HIV itself infects the brain, it can cause a condition known as AIDS Dementia Complex (ADC). Symptoms can include the following: 1. Forgetfulness, 2. Confusion, 3. Difficulty paying attention, 4. Slurred speech, 5. Sudden shifts in mood or behaviour, 6. Muscle weakness, 7. Clumsiness

#### **If you think you may have ADC:**

Don't be afraid to tell your doctor that you think something is wrong. These symptoms can be subtle in the beginning, and telling your care providers about your concerns can help them to diagnose and treat you early.

Keep a notepad with you and write down details about your symptoms whenever they occur. This information can help your doctor to help you.

Build as much support as possible, including friends, family, and health care providers. Although it's possible to treat ADC successfully, it may take a while for some symptoms to go away.

### Coping tips

It is completely normal to have an emotional reaction upon learning that you are infected with HIV, such as anxiety, anger, or depression. These feelings do not last forever. As noted above, there are many things that you can do to help take care of your emotional needs. Here are just a few ideas:

1. Talk about your feelings with your doctor, friends, family members, or other supportive people.
2. Try to find activities that relieve your stress, such as exercise or hobbies.
3. Try to get enough sleep each night to help you feel rested.
4. Learn relaxation methods such as meditation, yoga, or deep breathing.
5. Limit the amount of caffeine, nicotine, alcohol, and recreational drugs you use.
6. Eat small, healthy meals throughout the day.
7. Join a support group.

There are many kinds of support groups that provide a place where you can talk about your feelings, help others, and get the latest information about HIV/AIDS. Check with your health care provider for a listing of local support groups.

More specific ways to care for your emotional well-being include various forms of therapy and medication. Used alone or in combination, these may be helpful in dealing with the feelings you are experiencing. Therapy can help you better express your feelings and find ways to cope with your emotions. Medicines that may be able to help with anxiety and depression are also available.

The most important thing to remember is that you are not alone; there are support systems in place to help you, including doctors, psychiatrists, family members, friends, support groups, and other services.

Balbin EG et al.,(1999)suggested that the psychoneuroimmunological pathways by which immune and neuroendocrine mechanisms might link psychosocial factors with health and long survival.

Leserman J et al.,(1999)study that the more stress and less social support may accelerate the course of HIV disease progression. Additional study will be necessary to elucidate the mechanisms that underlie these relationships and to determine whether interventions that address stress and social support can alter the course of HIV infection.

Murphy DA et al.,(2000)suggested that the both satisfaction with support and adaptive coping were associated directly with depression in HIV-infected adolescents.

L. Grassi et al.,(2007)significant that the psychological stress was significantly correlated with poor coping mechanisms, maladaptive response to illness, external locus of control and weak social support, but not with medical variables. The implications of these findings are discussed.

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KH Basavaraj et al., (2010) study that the impact of HIV infection on the dimensions of QOL, including physical and emotional well-being, social support systems, and life roles, has emerged as a key issue for persons infected with HIV.

McIntosh RC, and Rosselli M (2012) significant that functional impairment, though to a lesser degree. Coping by avoidance and social isolation predicted more severe mental health outcomes. Spirituality and positive reappraisal predicted greater psychological adaptation than did social support seeking. Despite advancements in anti-retroviral treatment for women, HIV/AIDS symptoms and acute and/or chronic psychosocial stress pose the same threat to behavioral and mental health. In the face of these stressors, positive reframing appears to promote psychological adaptation in a way which may lead to positive health outcomes in women living with HIV/AIDS.

Machtiger E et al., (2012) The findings demonstrate highly disproportionate rates of trauma exposure and recent PTSD in HIV-positive women compared to the general population of women.

Ilse Elisabeth Plattner (2013) indicate that the threat of HIV creates a cognitive and emotional dilemma, which makes young people prone to engaging in denial to maintain trust in their relationships. Knowledge about HIV-related dating stress and coping mechanisms can benefit psychological counselling and sexual health education for young people.

T. Jayanthi and Dr. V. Srikanth Reddy (2014) Results revealed that Gender is significantly influencing the stress faced by HIV/AIDS patients due to emotional problems, occupational problems and financial problems. Whereas the influence of Gender on stress faced by HIV/AIDS patients due to family problems, health problems and social problems is not significant.

Zahra M Behboodi et al., (2015) study that the HIV infection is related with psychiatric disorders. According to the results, women are more vulnerable to depression and anxiety and they need more care. Management of these psychiatric disorders is very important and requires innovative comprehensive approaches.

## CONCLUSIONS

Associations between psychological stress and disease have been established, particularly for depression, CVD, and HIV/AIDS. Other areas in which evidence for the role of stress is beginning to emerge include upper respiratory tract infections, asthma, herpes viral infections, autoimmune diseases, and wound healing. Evidence derived from prospective observational studies provides support for stress as an important factor in certain diseases but cannot establish a causal relationship. However, the review of these studies are consistent with those of natural experiments regarding the effects of real-life stressor exposure on disease risk; with those of laboratory experiments showing that stress modifies disease-relevant biological processes in

humans; and with those of animal studies investigating stress as a causative factor in disease onset and progression. This consistency of research findings strongly supports the hypothesis of a causal link. The development of interventions that can reduce the behavioral and biological sequelae of psychological stress and the demonstrated efficacy of such interventions in randomized clinical trials would provide critical data on the clinical importance of this work.

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