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An appraisal on quality of life in AIDS patient

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ABSTRACT

Quality of life is the expectation of the individual or society for a good life which outline both positive and negative features of life. Acquired immunodeficiency disease is caused by human retrovirus which was considered as a fat illness before the introduction of proper treatment. Symptoms of the disease include flu like illness, skin rash, sore throat, opportunistic infections, enlarged lymph nodes in necks and so on. According to WHO, since the beginning of pandemic 76 million people have been infected with HIV virus and about 33 million deaths has been reported. At the end of 2019 about 38.0 million people were living with the disease globally. Antiretroviral drugs are used for the treatment of human immune deficiency virus. The review paper was prepared by referring review and research papers from research gate, pubmed, google scholar, science direct and search was based on key words such as AIDS, HAART, Quality of life in Aids patients. Aids was considered as a fatal illness till the introduction of proper treatment regimen. The morbidity, mortality and disease severity was reduced to a great extent by antiretroviral drugs. Quality of life was also seen to be improved in patients. Social support has a positive impact on quality of life. Factors like depression, emotional stress, unemployment, suicidal ideation affect the quality of life in AIDS patients.

Keywords: HIV; HAART; Quality of life; antiretroviral drugs; social circumstance; suicidal ideation; spirituality.

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INTRODUCTION

Quality of life (QOL) is the expectation of an individual or society for a good life which outline both positive and negative features of life.^[1] Acquired immunodeficiency disease is caused by "human immunodeficiency virus".¹ The attack by virus leads to weakened immune system and hence the host is vulnerable to life threatening opportunistic infection, neurological disorders and malignancies. The disease affect both sexes as well as in all age groups. Aids was first identified in U.S in 1980.^[2] The unexplained occurrence of

pneumocystis jiroverci pneumonia was reported in homosexual men and hence the disease "AIDS" was identified.^[2] According to WHO, since the beginning of pandemic 76 million people have been infected with HIV virus and about 33 million deaths has been reported. At the end of 2019 about 38.0 million people were living with the disease globally.

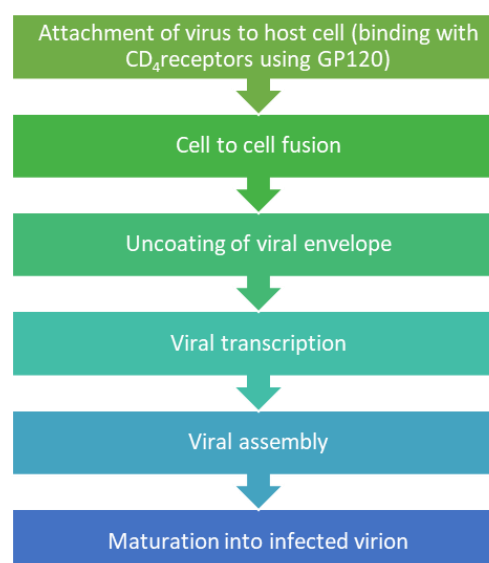


Figure 1: Activation of HIV virus in host

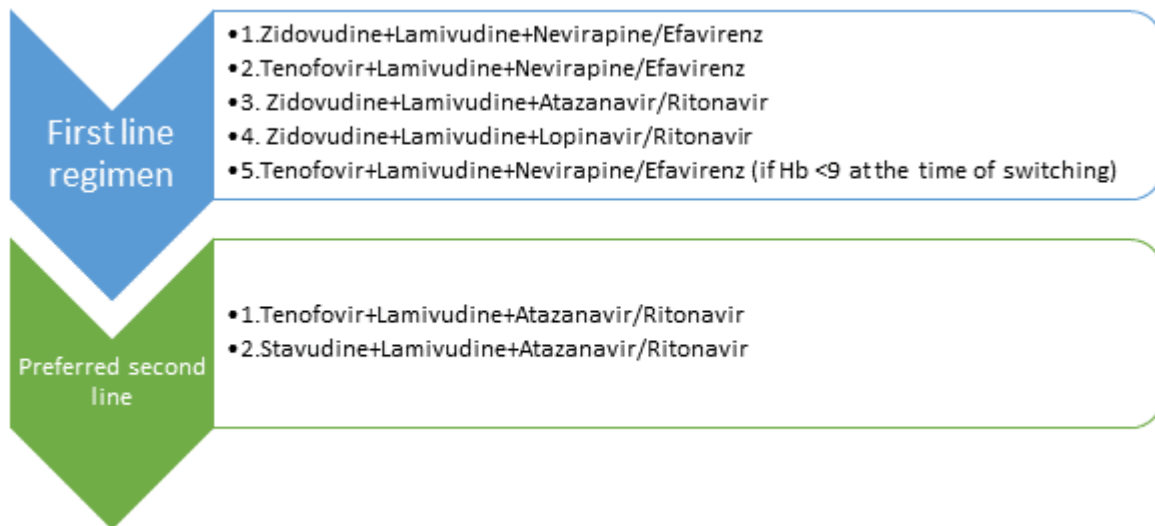


Figure 2: Highly active antiretroviral therapy (HAART)

HIV mainly affects the immune system and central nervous tissue. HIV virus consist of reverse transcriptase and a lipid bilayer surrounding the capsid. Surface glycoprotein Gp 120 have high affinity to the CD4 receptors proteins in the helper-T cells. [3] HIV enters body through attachment with CD4 receptors using gp120. [3] The genetic material is released from virus after penetrating the host cell. Replication of genetic material occurs with the help of these enzymes integrase, reverse transcriptase and protease. Viral RNA is converted to DNA using reverse transcriptase. [3] The viral DNA enters the host genome and transcription and translation occurs enabling the production of new viral protein. [3] Protease help in assembling of viral particles as well as maturation as infectious virions. [3]

Antiretroviral drugs are used as potential agents for treatment of human immunodeficiency virus. Antiretrovirals include reverse transcriptase inhibitors, protease inhibitors, fusion inhibitors, chemokine receptor 5 antagonist and integrase strand transfer inhibitors. [2,4] HAART(Highly active antiretroviral therapy) is a active therapy of HIV².

WHO latest recommendation on antiretroviral therapy

WHO has published guidelines in 2016 for treating and preventing HIV infection. [5] First line therapy for adults and adolescents include tenofovir disproxil fumarate+lamivudine/emtricitabine+efavirenz 600 mg. [2,5] Use of Dolutegravir is recommended in both first line and second line ART, during pregnancy, tuberculosis co-treatment and for children. [5]

Impact of antiretroviral drug caused a heavy impact on the disease ranging from the fatal to chronic disease. [1] Thr morbidity, mortality and quality of life is increased in AIDS patients due to the advanced treatment facilities. [1]

METHOD

The review article was prepared by referring various research and review articles from research gate, pubmed, google scholar, BMC health service research, journal for family medicine and primary care, science direct and so on. Search was based on key words AIDS, HIV, HAART, antiretroviral, Quality of life in AIDS patients. [6]

Quality of life in aids patients

Acquired immunodeficiency disease was considered as a fatal illness; in which the recovery from disease was considered as very difficult. On introduction of proper treatment using antiretroviral drugs, the disease severity was reduced to chronic illness. Quality of life of patients was also improved by the introduction of proper treatment. Certain factors like social circumstance, depression, unemployment, suicidal ideation, psychosocial factors were considered as major influence in quality of life in AIDS patients. [6]

Social support

Social support for AIDS patient are of great concern due to chances of developing depression, psychosocial behavior. The patients may have various worries on isolation by society and family, chances of infecting others, shock, fear of disease. [7] Chances of developing depression are high in patients due to emotional stress. [7,8] Non adherence to medicines, risky behavior and reduced survival rates are observed with psychosocial behaviour. [7] Emotional stress and lack of social support has a great impact on disease progression. [9] Increased social support to the patients show a positive effect on quality of life.

Spirituality and regional aspects

Religional aspects and spirituality have a role in bringing hope to the life of HIV affected patients. [10] According to some studies, spirituality helps in reducing stress, emotional burden, mental problem as well in accepting the disease state in patients. [11] Hope for

living in increased by spirituality and in turn the patient become more mentally stable and accept the current situation of illness.

Depression

According to WHO, depression is defined as mental health disorder characterized by persistently depressed mood or loss of interest in activities, causing significant impairment in daily life. In HIV patients, depression is more commonly seen. [12] Lack of interest in daily activities, loss of appetite, insomnia, difficulty concentration, feeling guilty are observed in patients with AIDS which affects the Quality of life of patients [12]. Non adherence to antiretroviral therapy are seen in patients with depression. [12] Disease condition is seen to be worsened in depressive patients and hence the outcome related to health improvement is reduced. [13] Based on some evidence, it is found that risk of developing depression in HIV positive patients are four time more than HIV negative individuals. [14]

Unemployment in HIV patients

Discrimination based on the disease and severity of disease have a negative impact on unemployment in people with HIV infection. [15] For individuals who are working, the job is not considered as a financial support but as a social support, identity and confidence to lead the life. [9] Reemployment help in improving quality of life as well as health outcomes [16,17] Utilisation of health care facilities is also negatively affected by unemployment. [18]

Suicidal ideation

Suicidal ideation is a psychiatric emergency which if untreated may harm himself or to others. In HIV positive individual as suicidal tendency is seen more commonly than in general population. Poor mental health is seen in people affected with HIV infection. [19] Treatment of disease will be affected due to the lack of knowledge of disease and also due to poor mental health. [19] Poor social support, emotional burden and stress can increase the suicidal tendency. [20]

Barriers to medical help

Cost of HIV treatment, lack of awareness and lack of privacy, reduced emotional and social support are the most important barriers in seeking medical help. Cost of the treatment may not be affordable by all individuals. Emotional support help in building a self confidence in people with HIV. [21] Reduced emotional and family support may be a barrier in seeking medical help. Quality of life is affected by the discontinuation of treatment by the patients.

CONCLUSION

Quality of life of AIDS patients are seen to be improved with the introduction of antiretroviral therapy. Morbidity and mortality rate was seen to be reduced. AIDS was considered as a fatal illness till the introduction of proper treatment regimen. But the

disease severity was reduced to chronic illness in many countries due to proper utilization of treatment regimen. Quality of life of the patients are affected by factors like social support, depression, unemployment, suicidal ideation and psychosocial factors and so on. Social support of the patients are of great concern. Reduced social support may lead to depression and psychosocial behavior. Patients may have various worries on isolation by society and family, shock, fear of disease, HIV positive status. Suicidal ideation in HIV positive individuals are commonly seen than in general population. Unemployment affects the quality of life negatively. Discrimination based on disease are the factors which mainly affect unemployment. For working individual, the reentry to job is considered not as a financial support but as confidence to lead life, social support and identity. Spirituality positively affect quality of life by increasing the hope of patients to lead a new life. Poor mental health, depression and emotional stress may lead to non-adherence to medication, thus lead to disease severity. Providing support to the patients and proper treatment help to improve QOL in AIDS patients

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