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#### **RESEARCH ARTICLE**

Herbs: A Better Cure Option for HIV

Seema Srivastava

Department of Zoology, University of Rajasthan, Jaipur Email: drseemaa07@gmail.com

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# ABSTRACT

HIV infection was identified in 1980s. A disease predictive of a defect in cell mediated immunity, in a person with no known case for diminished resistance to that disease. HAART treatment gave a new hope to control the disease. Human body responds better with nature than chemicals. They always have side effects than "nature". There are many different approaches that have been around for years claiming cures for HIV, herbal solutions have been more acceptable as drugs as reteroviral treatment may keep the virus from spreading but cannot eliminate the virus. Though herbs proven to be useful in the treatment need clinical trials to show an accurate level of efficacy but, once proved will come up with better cure option to the disease. **Key words:** HIV, Herbs, Disease, Cure

# **HISTORY OF THE DISEASE**

It is widely believed that HIV originated in Kinshasa, in the Democratic Republic of Congo around 1920 when HIV crossed species from chimpanzees to humans. Up until the 1980s, we do not know how many people developed HIV or AIDS. HIV was unknown and transmission was not accompanied by noticeable signs or symptoms.

While sporadic cases of AIDS were documented prior to 1970, available data suggests that the current epidemic started in the mid- to late 1970s. By 1980, HIV have already spread to five continents (North America, South America, Europe, Africa and Australia). In this period, between 100,000 and 300,000 people could have already been infected.(Mann,et al., (1989) In June 1982, a group of cases among gay men in Southern California suggested that the cause of the immune deficiency was sexual and the syndrome was initially called gay-related immune deficiency (or GRID) (CDC,1982) In September, 1982, the CDC used the term "AIDS" (acquired immune deficiency syndrome) for the first time, describing it as. "a disease at least moderately predictive of a defect in cell mediated immunity, occurring in a person with no known case for diminished resistance to that diseases (CDC,1982).

CDC identified all major routes of transmission and ruled out transmission by casual contact, food, water, air or surfaces and also published their first set of recommended precautions for healthcare workers and allied health professionals to prevent "AIDS transmission" (CDC, 1983)'. In the year1983 the number of AIDS cases in the USA had risen to 3,064 - of this number, 1,292 had died AIDS. (Gov.'A Timeline of AIDS) In 1999, the WHO announced that HIV/AIDS as the fourth biggest cause of death worldwide and number one killer in Africa. An estimated 33 million people were living with HIV and 14 million people had died from AIDS since the start of the epidemic (World Health Organization (WHO) (1999) (The World Health Report 2009).

# **TREATMENT OPTIONS**

In June 1995, the FDA approved the first protease inhibitor beginning a new era of highly active antiretroviral treatment (HAART) James, J.S. (1995). The FDA approved Complera, the secondall-in-



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The human body does not respond better with foreign chemicals than "nature." Drugs manufactured by a pharmaceutical company are bad for the human body and will always have more "side effects" than nature.

The situation with HIV/AIDS changed dramatically in 1996 with the widespread introduction of protease inhibitors used in polydrug therapy ("drug cocktails," combinations of three or more HIV-inhibiting drugs). Many persons with AIDS who were experiencing wasting syndrome and numerous opportunistic infections suddenly began to gain weight and experience improvements in general health. The death rate from HIV/AIDS dropped significantly by 1997, partly because of the success of these drug therapies. Thus far, only one-third of persons infected by HIV have been treated by this new method, and it has been proposed that the drug cocktails be made available to everyone who is able to take them regularly. New drugs that go into the mix are being introduced annually. This should help reduce side effects and improve efficacy for those who are resistant to the earlier drugs (usually as a result of using them in monotherapy, as had been the previous practice (Subhuti Dharmananda, 2011)

The severity of nutrient deficiency increases with AIDS, compared to that observed in early stages of HIV infection. (Watson 1994) (Romeyn 1995) and Nutrition and HIV Infection (FASEB, 1990). Many people with HIV take herbs to support the immune system and to help it repair the damage caused by the virus. This is one of the most important uses for herbs but it's also an area in which it may be difficult to find enough information to make informed choices.

Studies have shown that people with HIV produce high levels of free radicals, and that their bodies have lower levels of antioxidants to counteract this problem, many people living with HIV take antioxidant supplements. Examples of strong antioxidants are the nutritional supplements n-acetyl-cysteine and coenzyme Q10 (CATIE'S practical guide to nutrition). Some of the antioxidant herbs are ginger, ginkgo, milk thistle and turmecures for HIV are not well known and have been around for years. An herbal cure for HIV has always been an option, but this is never been publicized. A natural HIV cure is truly the best solution, drugs and retro viral treatment may keep the virus from spreading but do not eliminate the virus.

## **HERBAL OPTIONS**

There are many different approaches that have been around for years claiming cures for HIV. One herbal type of solution for HIV consist of first, Olive leaf extract with a high amount of oleuropein, usually 20% or more, along with oregano extract or oregano oil and astralagus. In Africa, herbal medicines are often used as primary treatment for HIV/AIDS and for HIV-related problems. In general, traditional medicines are not well researched, and are poorly regulated. The evidence and safety concerns related to the use of two specific African herbs, which were recommended by the Ministry of Health in South Africa and member states for use in HIV: African Potato and Sutherland is yet not clear even after reviewing the pharmacology, toxicology and pharmacokinetics of these herbal medicines. Despite the popularity of their use and the support of Ministries of Health and NGOs in some African countries, no clinical trials of efficacy exist, and low-level evidence of harm identifies the potential for drug interactions with Ground-breaking research could see herbal remedies becoming an integral part of mainstream medicine in South African hospitals, bringing hope to thousands of HIV/Aids sufferers who cannot afford expensive anti-retroviral therapy antiretroviral drugs (Mills et al., 2005)

Reports from one KwaZulu-Natal provincial hospital, where herbal medicine has become part of the routine medical service, show significant improvements in health in many patients opting for traditional care. More than 400 patients, after initial assessment, had undergone treatment with remedies, many of which had their roots based in century-old African tradition. Among the findings

on 211 patients who had visited the hospital's natural treatment clinic, 50 percent showed steady weight gains, while 17 percent remained in a stable condition.

In another study, observed over three months, 67 out of 89 HIV patients boasted weight gains and an improved health status while on a regimen of natural medication combined with standard antibiotics and a special diet plan.

Though it needs clinical trials to show an accurate level of efficacy, but when people are poor the natural herbal route is a cost-effective way to treat the sick. Indigenous plants which have been introduced as remedies in various forms - from creams to tablets - include Sutherlandia, Warburgia and African Ginger, all of which have therapeutic qualities beneficial to those with HIV.

Many of them are natural antibiotics with properties that are known to relieve thrush, chronic pain, bronchitis, nausea, night sweats, diarrhoea and swollen glands. Others help with loss of energy and assist in weight gain.

What is most important is that these plants can be grown on our doorsteps and in our back yards.(Liz Clarke for Source: Daily News, October 30 2002) According to a 1998 study, Vitamin C has the antioxidant potential to minimize cell damage and reduce the overall amount of HIV in the body. Injections of Vitamin C in extremely high doses seem to hinder the growth of the HIV virus. People with HIV are more likely to have a heart attack or getlung cancer. (Trant & Chaturvedi, 2007) Cigarette smoking can raise these risks even more. (Web Med).

While HIV/ AIDS is incurable, the objective of treatment is to curb opportunistic infections from getting a foothold by boosting the immune system, and thus prolonging life, as well as improving the patient's quality of life. Garlic revs up the immune system's disease-fighting ability, killing many bacteria and viruses on contact, preventing their proliferation. Bacteria and viruses, furthermore, do not form resistance to garlic as they can to regular pharmaceutical antibiotics and medications. In addition, garlic, unlike pharmaceutical antibiotics, does not harm the intestinal flora, which is so important to digestion and absorption of nutrients. Garlic is thus important as an adjunct treatment for HIV/AIDS, significantly helping improve a patient's life. HIV and AIDS patients are encouraged to eat raw, crushed garlic every day within a healthy regime prescribed by their physician and nutritionist. A number of studies have found garlic to be effective against the common infections in AIDS, including, herpes and mycobacteria, cryptococcus, as well as cryptosporidia and pneumocystis. Indeed, garlic may actually obstruct the spread of HIV virus in the AIDS patient (Miracles of Garlic).

Study, originating from the University of Michigan, suggests that eventually many lives may be saved as a result of the development of Ban Lec, a concentrated extract of banana lectins. Lectins are proteins that bind to sugars. The HIV virus is contained in an "envelope" containing the sugar mannose. In laboratory studies, Ban Lec attached itself to the envelope of HIV, prohibiting its replication. Though it doesn't means that eating bananas can help to prevent the transmission of HIV but it can be explored further for the treatment options. There is no evidence of any kind to suggest that eating bananas is any sort of a preventive factor in HIV infection. This suggests that Ban Lec, a highly concentrated lectin agent, may eventually prove beneficial in inhibiting HIV transmission. In another study, a high lignin extract of pine cone seeds demonstrated anti-HIV activity, and helped to reverse the cellular destruction caused by HIV-infected white blood cells. Still other research shows that plant sterols, which are similar to cholesterol, may help to inhibit the invasion of cells by HIV. In mice and monkeys, an extract of pokeweed inhibited HIV significantly. At least three North American prairie plants have demonstrated significant enough anti-HIV activity that they are being studied further. (Medicine Hunter, 2011).

Proteins are useful for building blocks of r cells, muscles, organs, as well as immune system. Therefore, it is much better for HIV-related patients to obtain about 100 to 150 grams of protein per day for men and 80 to 100 grams of protein per day for women to ensure the immune system.

A patient getting with HIV particularly has to raise the calorie intake to keep weight. Thus, a HIV person needs to have 17 to 20 calories per pound every day. In addition, in case the patient loses weight, he has to raise this amount to 30 calories per pound each day for weight increase.

With an HIV patient, free radical production can be elevated; thus, the demand for higher levels of antioxidants is highly recommended for them. Additionally, good food sources of this necessary nutrient feature small red beans, blueberries, prunes, pinto beans, cranberries, as well as strawberries.

Best Diets for HIV Patients in Health (Ezine Mark.com) finds many people use herbal remedies to supplement their diet. Supplements can stop anti-HIV drugs working properly. (AIDSMAPS HIV&AIDS sharing knowledge, changing lives) hence needs proper guidance from the doctor.

Some research studies shows lemon has the ability to control the spread of HIV virus, Professor Roger Short from the Melbourne University discovered the juice of the lemon kills HIV virus in the test tube. AIDS researcher, offers this juice recipe for building the immune system, flushing the liver and the lymphatic system, getting nutrients, and increasing energy: wash a whole undyed lemon, cut it in quarters, blend in a blender. Add one cup of water and one tablespoon cold-pressed, extra virgin organic olive oil. The drink can be sweetened with a few tablespoons of orange juice. Blend. Strain and drink juice. Taking this drink once a day, konlee reports, can raise T-cell counts, decrease viral load, and improve lymphatic drainage. (Peace Wisher report)

Bolstering immune system's ability to function may be key in preventing HIV-related symptoms and progression, and nutrients play a key role in immune function.

Dr. Harold Foster pioneered the use of selenium and amino acids, plus antioxidants, for HIV and AIDS. In 2003 published a study that revealed HIV did not appear to spread as well in populations that have adequate dietary intake of selenium. He later suggested that people eating diets with higher levels of amino acids and selenium may be somewhat protected from HIV infection, as this "antioxidant defense system" may act as an initial defense against viral infection (2004).

"Physicians involved in selenium and amino-acid field trial in Botswana reported that this nutritional protocol reverses AIDS in 99% of patients receiving it, usually within three weeks."

According to Dr. Foster, nutrient deficiencies are at the foundation of the disease progression from HIV to AIDS. He explained AIDS is a deficiency disease caused by HIV. HIV-1 contains a gene that is virtually identical to that which allows humans to produce the enzyme, glutathione peroxidase. As the virus is replicated, it begins to seriously compete with its host for the four nutrients needed to make this enzyme, specifically the trace element selenium and the three amino acids, glutamine, cysteine and tryptophan.

As infection increases, serious deficiencies of these nutrients develop. Inadequate selenium causes the immune system to collapse, the thyroid to malfunction and depression to develop.

Glutamine deficiency leads to muscle wasting and diarrhea. Shortages of cysteine result in skin problems such as psoriasis and greater susceptibility to infection. A lack of tryptophan causes diarrhea, dermatitis, dementia and ultimately death. It becomes easy for other pathogens to infect the patient. In short, the infected person has developed the disorder we call AIDS. The treatment of HIV/AIDS, therefore, should always include diets elevated in these four nutrients to reverse such deficiencies."

## CONCLUSION

By far studies looking for or supplementing medication of HIV patients with herbs or natural products although do not claim its cent percent cure but surely a protective and supporting therapy. The option needs further research to reach to a better cure options. Any such results would definitely be a boon for patients fighting with HIV-AIDS.

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