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HIV/AIDS AND ANTIRETROVIRAL ROLLOUT: IS THERE A PLACE FOR PLANT-DERIVED ANTIRETROVIRALS?

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According to the recent UNAIDS and WHO statistics released at the end of 2004, an estimated 39.4 million people (adults and children) lived with HIV in 2004; there were an estimated 4.9 million newly-infected adults and children with HIV during 2004; and there were an estimated 3.1 million adults and children who died from AIDS-related diseases in 2004 (AIDS Epidemic Update, December 2004). The same statistics revealed that in **Sub-Saharan Africa** alone, an estimated 25.4 million adults and children lived with HIV in 2004; that an estimated 3.1 million people (adults and children) were newly infected with HIV during 2004; and that an estimated 2.3 million adults and children died from AIDS-related diseases during 2004!

HIV/AIDS has caused untold hardships, miseries and untimely deaths to many people in several families and communities throughout the world. This global epidemic has generated a lot of debate and discussions in many literate and illiterate circles, and its management and control have topped the health priority list of many nations, especially in Africa. To date, there is no known cure for AIDS (caused by HIV). A lot of scientific research has been done to shed light on human understanding of HIV and AIDS. Recent scientific findings have provided the scientific audience with more information and knowledge on HIV and AIDS, and more tools are constantly being developed to curb the menace. Some countries and multinational pharmaceutical companies have now embarked on synthetic antiretroviral (ARV) agents to manage and control most of the symptoms of the disease in people living with HIV and AIDS. However, many of the available synthetic

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antiretroviral drugs (ARVs) have been reported to be very toxic, especially to the liver. Some African traditional health practitioners have also come up with a number of plant products that are seemingly effective in the management and/or control of many symptoms of AIDS. There have been several claims by many herbal practitioners of having "*remedies and/or medicines to cure HIV and AIDS*". Interestingly enough, research has shown that some of the herbal remedies have the potential of prolonging the lives of people living with HIV and AIDS (Dabra, 2004). Flanigan *et al.* (2005) have cited cases of successful use of antiretroviral therapy in the management of HIV and AIDS symptoms in North America and Europe (Yeni *et al.* (2004). Since synthetic ARV drugs are too expensive and unaffordable for many people living with HIV and AIDS in Sub-Saharan Africa, the development of African plants with potential ARV properties should, therefore, be one of the greatest challenges facing the 21st century African scientists.

It is now well-known that HIV infection destroys the immune system by affecting T-cells and other immunity-protecting structures in the body, resulting in increased levels of viral load in the body, and subsequently leading to the onset of HIV/AIDS symptoms such as diarrhoea, weight loss, etc (Brandful, 2004). According to Addy (2004), indicators such as reduction in susceptibility to opportunistic infections, elimination of AIDS symptoms, attenuation of the viral load, improvement in the immune status of patients (high CD_4 counts) and minimal toxic and side-effects, should constitute the major parameters to be used in the evaluation of the efficacy and safety of plant-derived recipes to be used as potential ARV agents. We are, therefore, of the opinion that African Governments, International Organizations and NGOs should rise up to assist African researchers in funding collaborative research initiatives aimed at evaluating African plants with potential antiretroviral properties.

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