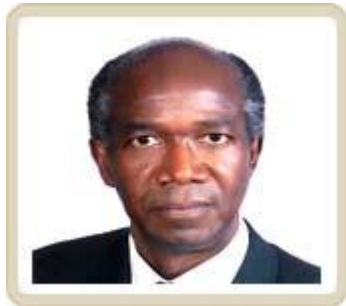


Uganda Aids Commission - Notice

Friday, 12th August, 2011



On the Origin of HIV/AIDS

A Statement by Professor Vinand M. Nantulya, MD, PhD, FRCPath* Chairman, the Uganda AIDS Commission

In an article published in the July 19, 2011 issue of the New Vision, titled “Origin of HIV/Aids Thirty Years of the Untold Story,” Hon. Dr. Sam Okuonzi, MP, speculates on the origin of HIV/AIDS virus and concludes that it was artificially constructed by scientists in the United States for ulterior motives. He asserts that HIV was manufactured in a laboratory in the U.S. and then spread through a Hepatitis B vaccine trial.

As a scientist and international health expert, I find it disquieting that our respectable colleague should be delving into an old discredited story which at best is extremely diversionary. The issue at stake right now is that Uganda is faced with a serious epidemic which we all must strive to contain. An astounding and widely acclaimed success was recorded in the past, the result of a high degree of solidarity among the people of Uganda, led by their President. But the rate of new infections is rising again and the epidemic continues to devastate communities. So we need to go back to the drawing board; study what has gone wrong; and mount a strong, well coordinated effort to eliminate this deadly epidemic.

Let me start with a comment on Hepatitis B vaccine. I started doing research on Hepatitis B virus way back in 1970, two years following the discovery of this virus by Baruch S Blumberg. Working with the late Professor Kaare J. Lindqvist we defined its epidemiology in the region and the role it plays in the causation of liver disease, including liver cancer. We even contemplated preparing the very first vaccine but for the lack, at that time, of a high speed centrifuge in our laboratory at the University of Dar es Salaam Medical School.

Indeed the very initial vaccine produced by Merck Sharp and Dohme was developed along the very line we had planned to process it, namely formaldehyde treatment. I know for sure that HIV/AIDS virus simply cannot survive and be infectious to anybody after such harsh treatment by this chemical. So the idea that Hepatitis B vaccine so-prepared would carry live HIV/ AIDS virus as a

contaminant simply is not possible. In any case the formaldehyde treated vaccine was introduced much later and after HIV was reported in humans.

Introduced even much later is the genetically engineered vaccine developed by an old friend and colleague, Bill Rutter, of Chiron Laboratories which is used today in the expanded programme on immunization. But science aside, a major concern here is that reference to Hepatitis B vaccine in the said article could have unintended consequences including the potential to undermine our national vaccination programme if the general public were to perceive that Hepatitis B vaccination carries the risk of HIV infection. This is beginning to appear in some letters to the editor! Dr. Okuonzi also claims that crucial information about the origin of HIV/ AIDS has been withheld from Africa by international experts. This is far from the truth. Accurate information about HIV and its origins is widely available in peer-reviewed scientific literature.

For instance, an article published in the February 5, 1998 issue of the widely respected international scientific journal, Nature, titled "An African HIV-1 sequence from 1959 and implications for the origin of the epidemic," reported that the earliest known case of infection with HIV-1 in a human was detected in a blood sample collected in 1959 from a man in Kinshasa, Democratic Republic of the Congo. Furthermore, in the February 4, 1999 issue of Nature, an article titled "Origin of HIV-1 in the chimpanzee *Pan troglodytes troglodytes*," explained how scientists used DNA analysis to determine that "all HIV-1 strains known to infect man" were closely related to a simian immunodeficiency virus (SIV) found in the *Pan troglodytes troglodytes* chimpanzee.

Moreover, in 2000, scientists analyzed the relationships among various strains of HIV-1. Their calculations showed that the main HIV-1 virus probably established itself in humans in about 1930, as explained in an article in the June 8, 2000 issue of Science, titled "Timing the Ancestor of the HIV-1 Pandemic Strains." This is contrary to Dr. Okuonzi's claim that "HIV never existed before 1978 when HIV was manufactured in a laboratory in the US." There is a lot more scientific literature that contradicts Dr. Okuonzi's claims, but I do not wish to dwell on this. What is clear is that HIV-1, the virus that causes the AIDS pandemic, could not be man-made because direct evidence shows that AIDS has existed in humans at least since 1959, and probably since 1930. This was long before humans had the means to genetically engineer microbes.

The scientific evidence available does indicate that the HIV-1 virus started by jumping the species barriers from primates to humans, a phenomenon also known to occur in other human diseases such as influenza, plague and tuberculosis. It is unfortunate that Dr. Okuonzi wrote this article. I do know for sure that inaccurate and sensational articles such as the one in question can distract us from the real task at hand and lead to a reversal of the gains we have made so far. Rumours and false beliefs could divert the Uganda people's attention away from doing what is best to eliminate the epidemic.

What we really need right now is to lead the people of Uganda along a path that will contain this epidemic. All of us Ugandans must not lose sight of this in the interest of our individual as well as our collective future. What we should be concerned about is the more than 120,000 Ugandans who will become infected with HIV this year; more next year; and the year after that – so we must work harder to prevent HIV transmission. Almost 1.2 million Ugandans - over 6 percent of the adult population - are already infected with HIV. All of these people must be cared for and eventually

provided with life-saving antiretroviral drugs. And 1.2 million Ugandan children have lost one or both parents to AIDS and must be provided with care and support.
Let us use science and not myth and rumor to guide our response to what is still a national crisis.

**The author was until recently a Senior Health Policy Advisor to the Global Fund to Fight AIDS, Tuberculosis and Malaria, Geneva, Switzerland and previous to that he was Senior Research Scientist in International Health, Harvard School of Public Health.*