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What Can Education Do for Hiv/Aids? : Implications for the Administrators and Managers of Higher Education in Africa

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Abstract

The first human retrovirus was isolated in 1978 from an American male with T-cell Leukemia by Gallo and associates. Described for the first time in 1981, the Acquired Immune Deficiency Syndrome (AIDS) become, in the space of few years, one of the most dreadful diseases of all time. While the exact origin and time of the emergence of HIV remain unsettled, it is now obvious that HIV/AIDS is an unprecedented havoc to the human race. The paper x-rayed government policy to the emergence of HIV/AIDS in different countries and argued that international image beyond political concerns, has decreed the agenda. Many countries in Africa initially refused to acknowledge AIDS within their borders for fear of stemming tourism while in the Caribbean the epidemic's full extent is obscured by fear, denial, limited treatment and lack of public health resources. In Africa, the mode of transmission has been mainly through heterosexual networking including premarital, marital and extramarital sexual relationships. The majority of those who became infected with HIV/AIDS are sexually active young people with over 50% of infection occurring in the 15-24 age range. The paper examined reasons why women are more vulnerable to HIV infection and examined how many countries are 'Getting to Zero'. HIV/AIDS has killed more than 40 million people globally, including celebrated and talented professionals, while in Africa, its consequences for the education sector are devastating affecting teachers, inspectors, administrators, planners and managers. In the light of the above, recommendations to remedy the situation and implications for university administrators in Africa are on offer.
Keywords: HIV; HIV/AIDS; Epidemic; 'Getting to Zero'; Higher education; University Administrators.

1. Introduction

Described for the first time in 1981, the acquired immune deficiency syndrome (AIDS) became, in the space of a few years, one of the most dreadful infectious diseases of all time. It was a physician in Los Angeles, USA, by the name of Michael Gottlieb who had observed the first case of what was to become one of the toughest and most widespread epidemics that the world has ever known. The Human Immunodeficiency Virus (HIV) cause the body to lose its defense against virus pathogens, emerging from the both the inside and the outside. The result eventually becomes the disease we all know as AIDS (www.ibe.unesco.org). HIV belongs to the family of viruses known as Retrovirus.

The first human retrovirus was isolated in 1978 from an American male T-cell leukemia, by Gallo and co-workers. The researchers called their isolate 'T cell Leukemia/Lymphoma Virus' (HTLV). The long name was informed by the fact that they demonstrated that the target cell for the virus is the T-4 helper cell population of the body. The first isolation of the virus with definitive association with AIDS was reported in May 1983 by Luc Montagnier, who was Chief Virologist at the Viral Oncology Unit of the Pasteur Institute, Paris. As expected some professional feud ensued between Gallo and Montagnier, as to who should get the credit. However, the matter was 'settled out of court' in a mature professional manner.

2. Symptoms of HIV

A paper submitted to Lynn University revealed that the majority of people infected by HIV develop a flu-like illness within a month or two after virus enters the body. This illness, known as primary or acute HIV infection; may last for a few weeks. Possible symptoms include fever, muscle soreness, rash, headache, sore throat, mouth or genital ulcers, swollen lymph glands mainly on the neck, joint pain, night sweats and diarrhea (www.mayoclinic.com & www.nou.edu.ng). In this connection, Arya and Reids (1988) indentified the major and minor signs of HIV/AIDS thus:

Major signs of AIDS	Minor signs of AIDS
1. Weight loss greater than 70% of the body weight	1. Constant cough for more than one month
2. Persistent fever for more than 1 month	2. Swollen gland lasting for many months
3. Diarrhea longer than one month	3. Skin rashes (generalised puritic dermatitis)
4. Persistent severe fatigue	4. Cold sores all over the body.
	5. Recurrent herpes

Source: Arya and Reids (1988).

3. The Origin of AIDS

The Nigerian Health Digest of March 1992 reveals that the origin of AIDS has become a matter of intense international debate. Being a new disease, there has been several theories, guesses, and hypotheses as to the origin of this dreadful disease. This generates debates and controversies. This is not surprising, because when catastrophe befalls man, the immediate tendency is to blame others. Initially, AIDS was thought to originate from Haiti and later from Africa (Health Care, 1986) not entirely surprising and quite in their character, the West claims that AIDS originated from Africa because of the discovery that the AIDS virus is similar to the virus found in Africa green monkeys. It is significant to note that this argument has been dismissed as a mere racist speculation and propaganda by the West designed to degrade Africa (www.questia.com & Alhassan (2001).

It is instructive to note that while the West is blaming Africa for the disease, Russia is convinced that AIDS originated from America, with the claims that the AIDS virus was the product of American chemical warfare research that was mistakenly manufactured in a chemical weapon laboratory (Alcorn, 2001). AIDS has also been linked to the moral and sexual decadence in the West such as homosexuality (Altman, 1986). This reasoning seems sound given the fact that AIDS virus was first identified among the homosexuals in the United States of America in 1981.

In 2009, French researchers, Jean-Christopha Plantier of the University be Rouen and his colleagues reported in the Journal Nature Medicine 'Our findings indicate that gorillas, in addition to chimpanzees, are likely source of HIV-1. The discovery of this novel HIV-1 lineage highlights the continuing need to watch closely for the emergence of new HIV variants, particularly in Western Central Africa, the origin of all existing HIV-1 groups'(www.ugglike.com). It was discovered in a 62-year-old woman who was diagnosed in 2004, soon after she moved to Paris from Cameroon. Routine genetic sequencing of the virus showed it looked like no other sample of AIDS virus and it was eventually compared to a gorilla similar immunodeficiency virus, itself only discovered in 2006.

However, while the exact origin and time of emergence of HIV remain unsettled, it is now obvious that HIV/AIDS is an unprecedented havoc to the human race. Former President Clinton of the United States described HIV/AIDS scourge as 'Catastrophic' on the timing. In this connection, it is to be noted that Gallo and his Associates (the discoverers of HIV/AIDS)- postulated that the progenitor of their isolate originated in Africa where there was monkey-human transmission. The virus according to the discoverers was later transported to other continents by Whites (Europe) commercial or slave traffickers, about sixteen century. The divergent claims and counter claims of its origin contributed a great deal to the awe with which people regard or disregard the presence of AIDS, particularly in Africa (www.questia.com). What is of crucial importance now is what humanity can do to stop the pandemic from consuming the world. This was the first time in the history of the world that an epidemic would defy all sorts of scientific solutions. In this connection, the battle against HIV/AIDS took a sad twist on Thursday, 17th July, 2014 with the death of Joep Lange, a Professor and leading light in global efforts to find a lasting cure to the deadly disease. It is to be noted that the 60-year-old, who was a former president of the International AIDS Society (IAS) (dev.nst.com.my), had been at the forefront of the research to defeat the condition of more than 30 years. He was killed with 297 others, among them his wife when a Malaysian Airlines Flight MH17 they were flying in from Amsterdam, Netherlands, was shot down by armed separatists in the eastern part of Ukraine. Lange with dozens of leading HIV experts were on their way to Australia for summit on AIDS when the tragedy occurred. According to the Director of London's School of Hygiene and Tropical Medicine, Peter Piot, Global Health and the AIDS response have lost one of their great leaders (dev.nst.com.my). Joep Lange was one of the most creative AIDS researchers, a humanist, dedicated to his patients and to defeating AIDS in the poorest countries. Executive Director of UNAIDS, Michel Sidibe, described Lange's death as a big loss for the entire HIV/AIDS research family, fearing it could lead to a delay in the ongoing efforts to record a major breakthrough (Dumo, 2014). The sense of loss to the global HIV/AIDS cause was aptly captured by another consultant, Trevor Stratton, who said, 'The cure for AIDS may have been on that plane, we just don't know'(Dumo, 2014)

4. Government Policy to the Emergence of HIV/AIDS

It is relevant to x-ray government policy to the emergence of HIV/AIDS in different countries: In some countries, international image, beyond political concerns, has decreed the agenda. For example, the Ministry of Public Health in the Union of Soviet Socialist Republic (USSR) (now Commonwealth of Independent States) classified AIDS as 'secret' (Seale, 1987) and no mention of the scourge is permitted in any scientific or lay publication. The policy extends to Cuba as well despite the growing incidence of AIDS propagated from troops stationed and infected in Angola (Mc-Namee and Mc-Namee, 1988).

In Africa, many countries, for example, South Africa, initially refused to acknowledge AIDS within their borders for fear of stemming tourism (www.hivworkshops.com). Despite the epidemics impact on human and economic resources, former President Thabo Mbeki's government moved slowly in fighting AIDS – a sluggish response generated by a political dispute over the cause, severity and treatment of the disease. Former President Mbeki, who in the past (prior to 2003) questioned the link between HIV and AIDS, angered HIV/AIDS activists when he said South Africa had few reliable statistics on AIDS death and could not access the real extent of the epidemics (www.blackherbals.com). HIV/AIDS was underreported and many people died of HIV- related causes such as tuberculosis or other opportunistic illnesses (www.theage.com.au). In 2000, AIDS accounted for about 40 per cent of the death of South Africans aged between 15-49 (South African's Independent Research Council, 2001 & engarticles.gazeta.kz). South Africa has largest number of people living with HIV. It spent nearly $1bn in 2009 in an ambitious Counselling and Testing campaign to roll back the epidemic. In the face of a global epidemic, public health policy has been subverted to presumed 'civil rights' and international vanity; rather than commanded by established medical precepts. Ofili (2001) revealed that there was an initial reluctance to openly address the problem of AIDS in Botswana. Since then, however, more aggressive approach had been adopted. In the Caribbean which has the highest

rate of HIV in the world next to Africa (www.diasporareporters.com), the epidemics full extent is obscured by fear, denial, limited treatment and a lack of public health resources (globalgayz.com).

5. What Do We Know About HIV/AIDS?

We know exactly how this virus is transmitted from one person to another. The transmission of HIV/AIDS can only take place through bodily fluids: blood, semen, vaginal secretions and breast milk. Most infections worldwide occur through penetrative sexual contact (www.ibe.unesco.org). In Africa the mode of transmission has been mainly through heterosexual networking including pre-marital, marital and extra-marital sexual relationships (Quinn, 1986). This mode account for 93% of all adults cases while contaminated blood transfusion and other blood products make up the balance. In contrast, heterosexual transmission account in 75% in the Caribbean, 70% in South East Asia,14% in Western Europe, 9% in North America, and 6% in Australia (Mann *et al.*, 1992). A striking exception is Barley and Richard (1990) that reviewed three independent studies in Ugandan samples which yielded a higher infection rate among females (1.4 times) than among males (www2.unescobkk.org). Sex between infected person and uninfected person is the most common means of transmission in Nigeria. The nation's HIV prevalence was 5.8 per cent in 2001 and the epidemic has moved into a state of generalized epidemic in the country affecting all the six geopolitical zones and the Federal Capital Territory (FCT) (Alhassan, 2003) while South Africa's HIV/AIDS epidemics is one of the most severe in the world (Setswe *et al.*, 2009). Another frequent mode of transmission is via contaminated needles used by intravenous drug users.

Mothers can transmit HIV to their children in three specific ways: 1) during pregnancy 2) during childbirth, and 3) through breast feeding (viagenbio.com & www.mohprof.eu). Mother-to-Child HIV transmission in pregnancy and Childbirth is also called perinatal transmission. Nigeria carried the highest burden of Mother -to-Child transmission of HIV in the world, nearly 60,000 in 2012-a number that has remained unchanged since 2009 (UNO, 2014)(& viagenbio.com). It is to be noted that Mother-to-Child HIV transmission can be reduced by:

(i). Reducing the risk of HIV infection in women and their partners by promoting safer sex- before and during pregnancy and during breast feeding (viagenbio.com). (ii). Providing anti-HIV drugs to women before and during delivery (iii). Avoiding unnecessary invasive procedures (such as amniocentesis-taking a sample of the fluid surrounding the baby in the womb) during pregnancy and delivery (viagenbio.com). (iv). Avoiding the risk of HIV transmission through breast milk, where appropriate alternative infant-feeding methods are available. (v). Reducing the risk of HIV transmission through contaminated blood transfusion to women and their children.

Two of the strategies listed above are receiving much attention (viagenbio.com): providing anti HIV drugs and avoiding HIV transmission through milk. According to the Chief Executive Officer, Nigerian Institute of Human Virology, Dr. Dakun the prevention of Mother-to-Child transmission of HIV in Nigeria is at an abysmally low 20 percent in 2011(www.hivworkshop.com). South African's government which has long resisted AIDS – fighting antiretroviral drugs as expensive and potentially toxic, in 2000 bowed to domestic and international pressure and pledged to begin a nationwide drug treatment programme.

The UNAIDS has asked Nigerian's National Agency for the Control of AIDS (N.A.C.A.) to develop a framework that would eliminate mother-to-child transmission of HIV by 2020 and halt AIDS by 2030 (www.unaids.org). According to Dr. Bilali Camara, Country Director, UNAIDS, President Muhammadu Buhari had made it clear to the world that Nigeria would play its role in the process to ensure that HIV/AIDS became a history by 2030 - the global target of ending the epidemic (www.harare.unesco.org). UNAIDS will work with all the national structures such as NACA, State Governments and other bodies to be able to move together and make it a reality. According to Camara, the United Nations General Assembly meeting has approved the 90-90-90 target and it was endorsed by all the United Nations Member States. 'The World Health Organisation (WHO) has released its guidelines on the target and called it 'treat all'. Meaning that anybody tested positive of HIV/AIDS must be treated irrespective of his CD4 count as soon as possible'. Camara said the President emphasized his commitment and vision on the new ambitious target of fighting the disease in Nigeria (*dailytrust.com*).

As many as seven million Africans with HIV who should be getting treatment are not (engarticles.gazeta.kz). Worldwide, the number is about 10 million. It is to be noted that former Botswana President Festus Mogae belong to a select champions club who will provide leadership and encouragement for African national leaders. As he puts it, ' we want to use our privilege access to former colleagues to impress on African presidents the fact that the prevention of Mother-to-Child Transmission (PMTCT) is a priority (tatuarte.org). In my own country (Botswana), we reduced it from 25 percent in 2001 to two (2) percent in 2008. Now (2011) we have eradicated it. So we want say to our African leaders that aside from PMTCT, voluntary male circumcision is another positive strategy. Inspite of our budget constraint, nothing should be more important to a leader than saving the lives of his/her constituents'(*thenationonline.net*).

A recent report by UNAIDS, the Joint United Nations Programme on HIV/AIDS, grouped Nigeria with Indonesia, the Central African Republic, the Democratic Republic of the Congo, Russia and South Sudan as the six countries that are "being left behind" in the fight against HIV. At the 2014 American Conference on the treatment of HIV held in Denver, Colorado in the United States it was revealed that the HIV/AIDS situations in Nigeria had worsened. Their assessment was that infection rate had been on the rise just because the country was no longer taking reasonable precautions to protect the vulnerable members of the society against the spread of the disease and the inevitable consequences, which is a higher mortality rate. According to Margret Lampe of the US Centers for Disease Control and Prevention, the number of people living with AIDS in Nigeria increased by 500,000 in the previous three years, while the number of AIDS-related deaths also witnessed a marginal rise to 217,148 within the same period (www.punchng.com). A disturbing United Nations report in 2013 said, " Nigeria had the largest number of children acquiring HIV infection, nearly 60,000 in 2012- a number that remained unchanged since 2009". The Denver verdict is a setback for Nigeria, which had previously recorded a decline.

Figures released by the Nigerian Institute of Medical Research during the 2012 World AIDS Day showed that Nigeria was among 12 countries worldwide that recorded a 20 percent reduction in the rate of new infections. This was due to sustained efforts by (N.A.C.A.) and the numerous non-governmental agencies that are involved in awareness programmes about the dangers posed by the disease and how to prevent new infections.

According to (www.un.org), poverty is clearly a factor not just in the impact of AIDS but in HIV spread. In depriving people of access to health facilities, schools and media, poverty limits their access to information and education about HIV. Poverty also pushes families, often unaware of the risk, to send children into workforce or to hand them over to recruiters promising jobs in a distant place where, unprotected, they might be forced into a childhood of harsh labour abuse (HIV Insite, 2000).

If we know how HIV is transmitted, how come that the world is still experiencing more than 14,000 new infections per day? One of the reasons is, of course, that the majority of those who become infected with HIV/AIDS are sexually active young people. Over 50% of the infection occurs in the 15-24 age range. Increasing numbers of adolescent females are being infected with HIV (UNAIDS, 2000) & www.ibe.unesco.org.

6. Ignorance of This Disease

Those who know little about this disease are numerous. In fact, most people infected by HIV/AIDS are unaware of their status and may remain so far many years. This situation find expression in the view of the Acting Public Affairs Officer of the US Consulate, Kevin Kraft during the commemoration of the 2017 World AIDS day held in Lagos that

> *"Many people living with HIV in Nigeria are unaware of their status due to insufficient recommended number of HIV testing and counselling centre. Low access of retroviral treatment remains an issue for People Living With HIV (PLWHIV) in Nigeria, and I welcome the new commitment of the Federal Government of Nigeria to use domestic funds to provide antiretroviral drugs to an additional 50,000 people living with HIV" (punchng.com).*

Those who do not have the virus may also have no idea whether they are or are not infected. This is because several years may elapse before the first appearance of the disease. This ignorance makes the epidemic impossible to master and creates substantial opportunity for transmission of the virus. It also decreases the odds of an effective response (www.aau.org). It is important to note the advantage of undergoing screening for HIV: It is a positive step toward knowing one's HIV status and effectively preventing the spread of the disease.

7. Vulnerability of Women to HIV Infection

In 2001, the W.H.O. succinctly stated the reasons why women are more vulnerable to HIV:

(i). Female sexual organs has a wide surface area which provides conducive conditions for easy penetration of even the smallest amount of the Human Immuno Deficiency Virus that is deposited.

(ii). Sperm deposited after sexual contact 'sits' in the vagina for a long time and therefore get enough time to penetrate.

(iii). Abrasions, cracks and bruises suffered by women during sexual intercourse as a result of friction also facilitate easy penetration of the virus. It is to be noted that women have natural secretions that should line the vagina walls before intercourse take place. When this does not happen, bruises are formed, creating favorable condition for HIV transmission. This implies that women should not yield to men's request for dry sex. Women should demand foreplay in order to become 'wet' before sexual intercourse.

(iv). STDs & STIs are major causes of HIV/AIDS among women. Some of the manifestations of STDs are sores which are also avenues for penetration of the HIV virus. Women should seek proper treatment if they should contact any. Women must also avoid sex when they have STDs or use a condom. The use of female condom should be vigorously promoted for women whose partners refused to use the male condom. The availability of female condom should empower women to take control of their sexual life (webhealthcentre.com).

(v). There are more virus in sperm than in vaginal secretions.

(vi). As with Sexually Transmitted Diseases, women are at least four times more vulnerable to infection; the presence of untreated STDs is a risk factor for HIV.

(vii). Many women have to exchange sex for material favors, for daily survival. There is formal sex work. There is also this exchange which in many poor settings, is many women's only way of providing for themselves and their children (hhd.org).

(viii). Women cannot request let alone insist, on using a condom or any form of protection (hhd.org).

(ix). For married and unmarried men, multiple partners (including sex workers) are culturally accepted.

(x). Women are expected to have relations with or marry older men, who are experienced, and more likely to be infected. Men are seeking younger and younger partners in order to avoid infection and in the belief that sex with a virgin causes AIDS (WHO, 2001).

8. How Many Countries are Getting to Zero?

Every December 1st is the World AIDS Day set aside by the W.H.O. as a day to reflect on the devastating effects of HIV/AIDS globally (www.responsenet.org). It was established in 1988 (www.cnn.com) to raise awareness and focus attention on the global AIDS pandemic, four years after scientists identified HIV as the cause of AIDS. Between 2011 and 2015, World AIDS Day celebration had as its theme as '***'Getting to Zero***: ***Zero New HIV Infections***. ***Zero Discrimination***. ***Zero AIDS-Related Death''*** ("UN Commends Nigeria's Assent to Zero Discrimination Law")

(unaids.org). According to the Joint United Nations Programme on HIV/AIDS, accelerated progress has been reported in most parts of the world. But, there are worrying signs that some regions and countries are not on track to meet global target and commitments on HIV, except Ukraine, which has reported decline in the number of newly identified HIV cases, representing a new turning point for the country (unaids.org).

New HIV infections have been on the rise in Eastern Europe and Central Asia by 13 per cent since 2006 (www.gulf-times.com & unaids.org). The Middle East and North Africa have seen a doubling of new infections since 2001. This was due to inadequate access to essential HIV services. Key populations, including men who have sex with men, people who use drugs, transgender people and sex workers are often blocked from accessing life-saving services (UNAIDS, 2013). Nigeria's National Action Committee on AIDS (NACA) confirmed that there was a global decline in infections in both children and adults, but much more in children, from 2.2 million in 2008 to 1.0 million in adults compared to 24 per cent in children from 2009 to 2011 (www.vanguardngr.com).

9. Is Nigeria Getting To Zero?

In March 2014, the main stakeholders in Nigeria HIV response led by National Agency for the Control of AIDS(NACA) and UNAIDS met to validate Nigeria's figure for the 'Global AIDS Response Country Progress Report' (Federal Republic of Nigeria, 2014) and these figures were eventually published as representing the approved figure for Nigeria by UNAIDS in Geneva. The figures reported are, among others, as follows (www.punchng.com):

1. Number of people living with HIV/AIDS: At the end of 2013, 3.5 million Nigerians were living with HIV/AIDS, the second largest in the world after South Africa, which has 5.6 million sufferers.
2. New infections: Number of new infections has been on the decrease since 2010; from 288,870 in 2009 to 283,589 in 2010; 274,367 in 2011, 239,706 in 2012 and 220,394 In 2013. The drop in the new infections among young people aged 15-24 years who are new sex debutants and hence represent new infections in the populations show similar trends: from 74,783 in 2009 to 72,814 in 2010, 70,992 in 2011, 59,739 in 2012 and 54,662 in 2013. Nigeria, according to the latest UNAIDS report, is one of the heavily burden countries which, in the last decade, has witnessed significant declining number of new infections.
3. Number of HIV Counselling and Testing sites (2012: 2,391 sites vs. 7, 075 sites in 2013); 2,792; 611 tested in 2012, compared with 4,077,633 in 2013.
4. Anti-Retroviral Therapy: 516 health facilities offering ART in 2012, compared to 820 in 2013; 490,021 were receiving Anti-Retroviral drugs in 2012, compared to 639, 397 in 2014. This represents an increase of 148,919 new individuals put on this life-saving drug in one year. At the end of 2013, 46 per cent of eligible individuals were on ARVs, compared to 30 per cent in 2012.
5. Prevention of Mother to Child Transmission (PMTCT): number of PMCTC sites increased from 1,410 in 2012 to 5,622 in 2013.

Correspondingly, the number of HIV-positive pregnant women who accessed ARV prophylaxis increased from 40,465 to 57,871. This increase raised the percentage of women from 11 per cent in 2009 to 30 per cent in 2013. There is still a long way to go to achieve elimination target of 90 per cent, but this is significant progress from a couple of years ago (apps.who.int). The WHO/UNAIDS policy statement on HIV testing states that routine HIV testing should be promoted in Clinical Setting, Sexually Transmitted Infections (STI) Clinics and areas of high HIV prevalence with access to antiretroviral treatment (www.plosmedicine.org). The goal of routine testing is to increase the proportion of individuals who are aware of their status, lessen HIV- related stigma, and provide more people access to life-saving therapy (Bayer and Edington, 2009; Branson *et al.*, 2006).

The inability of Nigeria to attain its Universal Access targets as set out in National HIV/AIDS Strategic Plan 2010-2015, is attributed to many factors: (www.punchng.com) Chief amongst this factors include inadequate funding, weak health system and inadequate capacity. The National HIV and AIDS Spending Assessment conducted in 2010 showed clearly that only about 25.3 per cent of the spending on the HIV response was from national government (National HIV Validated Data NACA, 2014). From the response of the Director-General of NACA, John Doko, it is obvious that poor funding is at the root of the problem in Nigeria. Out of the estimated N140 billion projected funding for treatment under the Presidential Comprehensive Response Plan for HIV/AIDS, the Federal Government was said to have appropriated only N8 billion, leaving a deficit of N132 billion. Reports further claim that only 20 per cent of that N8 billion was released. This show a lack of seriousness by the government, whose apathy is worsened by the gradual withdrawal of funding by international donor countries and organizations.

In a report to mark World AIDS Day on December 1st, 2014, (www.hindustantimes.com) the ***ONE Campaign***, (thedemocraticnews.org) an advocacy group working to end poverty and preventable diseases in Africa, warned that reaching 'the beginning of the end' of the AIDS pandemic did not mean the end of AIDS was around the corner. 'we have passed the tipping point in the AIDS fight at the global level, but not all countries are there yet, and gains made can easily stalled or unravel', according to Erin Hohlfelder, ***ONE*'s** director of global policy (www.jpost.com). United Nations data show that in 2013, 35 million people were living with HIV, 2.1 million people were newly infected with the virus and some 1.5 million people died. By far the greatest part of the HIV burden is still in the sub-Saharan Africa. The AIDS pandemic began more than 34 years ago and has killed up to 40 million worldwide. The UNAIDS Agency stated that, by June 2014, some 13.6 million people globally had access to AIDS drugs, a dramatic improvement on the 5 million who were getting treatment in 2010. 'Despite the good news, we should not take a victory lap yet', said Hohlfelder who highlighted several threats to current progress, including a $3 billion shortfall in the funds needed each year to control HIV around the world. 'We want to see bold new funding from more diversified base, including more from African domestic budgets', Hohlfelder added. ***ONE*** also noted that HIV is increasingly concentrated among hard-to-reach populations such as injecting drug users, gay men and sex workers-groups who are often stigmatised and have

trouble accessing treatment and prevention services (*www.punch.com/news/nigeriaall-wipe-out-hivaids-by-2030-fg*). Nigeria is struggling with the epidemic of HIV.

10. Data of Death by HIV/AIDS of World Stars

Millions of people have died of HIV/AIDS. This includes celebrated and talented professionals. Alhassan (2001) reported data of death by HIV/AIDS of world stars:

(i). The very first disturbing data of death by AIDS came from the United States with famous and respectable names like Rock Hudson, the Hollywood star;

(ii). Henry Post and Robert Hayes, celebrated journalists;

(iii). Lord Avon and Stanton, creative painters;

(iv). Willie Smith and Antonio Lopez, topflight fashion designers;

(v). Raymond Tasco, theatre director;

(vi). Michael Foucault, the French Philosopher;

(vii). The Unites States basketball sensation. Earvin John, popularly known as Magic Johnson. The former US President, George Bush was one of the astounded people across the world, who mourned the loss of their star player, describing it as highly regrettable, sad and unfortunate. Speculation were rife that Johnson was an homosexual – a group of people who are highly susceptible to the disease- but he came out himself to say; ' I am not an homosexual and I've had more than one thousand female friends I'd gone to bed with (Adesina, 1991)';

(viii). Tony Richardson, ace film director and Oscar award winner;

(ix). Freddie Mercury, the rock star, leader of the group Queen with star hit tracks like **Bohemian Rhapsody** and **WE Are The Champions** (www.queenarchives.com) could not conquer death through AIDS which had been eating away his life for years, unknown to the world. Mercury was the king of Queen. Mercury had a wild time in his 45 years of existence (www.dailymail.co.uk). He confessed before the disease got him; 'I've had more lovers than Elizabeth Taylor. My sex drive is enormous and I've got a big bed that can sleep six'. What he did not publicly acknowledge however was the fact that he was gay, an homosexual (www.queenarchives.com). He used to surround himself with male followers tagged with girls names like Phoebe and Liza. A close friend of Freddie, Dave Clark, described him as somebody like 'a rare painting' (Adesina, 1991). But not to AIDS. The disease did not find him rare at all and made mincemeat of him, leaving behind a 25 million pound fortune;

(x). Kenneth Kaunda, former President of Zambia, lost one of his sons to AIDS (www.nssa.us);

(xi). Fela Anikulapo Kuti – the Bohemian legendary maestro of Afro beat died of heart failure arising from complications of AIDS. His Lawyer and Human Rights Activist, Femi Falana (SAN) submitted that while AIDS was the immediate cause of Fela's death, there were other remote causes which can be traceable to the Nigerian State: between 1974 and April, 1997 Fela was in court for over 1,000 times. He was brutalized to the extent that when death came calling, Fela had no immunity left again to fight it. His death took a stylish turn as national and international attention once again focused on the dreaded deadly disease.

(xii). In Cote d' Ivoire, AIDS kills one teacher every school day;

(xiii). Three teachers die every day in Zambia;

(xiv). In Malawi, AIDS kills 600 teachers annually; and

(xv). Ghana is faced with AIDS generated worrying mobility and mortality among teachers.

11. Is There A Cure For HIV/AIDS?

There is currently no cure for HIV, although antiretroviral treatment can control it. Most research is towards a 'functional cure' where HIV is reduced to undetectable and harmless levels permanently, but some residual virus may still be present in the body. Some research is looking for 'sterilizing cure' where all HIV Virus is eradicated from the body, but this is more complex and risky. Trials of HIV vaccines are encouraging, but even once developed will only offer partial protection (avert.org). A major scientific breakthrough has happened in the field of HIV research. Researchers are now able to create HIV- resistant cells, a new study from the ***Proceedings of The National Academy of Sciences*** reveals. These resistant cells rapidly take the place of diseased cells, which means it is markedly more effective than other HIV treatments and therapies. The research was conducted by The *Scripps Research Institute* (TSRI) in San Diego, California, where laboratory workers first tested their hypothesis against rhinovirus, most notorious for causing the cold. `This is really a form of cellular vaccination', said study senior author Dr. Richard Lerner, Professor of Immunochemistry at TSRI.

For people who have been living with HIV for a long time, talk of a cure at the ***amfAR's 2017 World AIDS Day HIV Cure Summit*** at the University of California, San Fransisco (UCSF) offers hope for something that not long ago was almost unimaginable. UCSF is home to the *amfAR Institute for HIV Cure Research*, established in 2015 with a five-year $20million grant to UCSF. " I have been living with HIV for about 35 years now…and now we are talking about a cure, which most of us thought we would never live to see", said Jeff Taylor of the *amfAR Institute of Community Advisory Board* in a wrap-up at the end of the summit (curecountdown.org).

12. The Consequences of HIV/AIDS for the Education Sector

In March, 2001, the Acting Deputy Director-General of Education, UNESCO, Madam Aicha Bah Diallo stated that studies conducted in the last few years in sub-Saharan Africa have shown the devastating impact of AIDS on education systems; education supply as well as demand (hhd.org). She further revealed that:

> *AIDS exerts extra pressure on the human and financial resources available to education… In certain countries, the number of teachers dying of AIDS is higher*

> *than that of graduates of teacher training schools. Schools are being compelled to close down for lack of teachers …. In 1999 alone, 800,000 pupils lost their teachers to AIDS (quoted in UNICEF).*

Okebukola (2010) similarly noted that HIV/AIDS has crippled education across Africa, particularly in rural areas. Violent conflict, natural disaster and food shortages are also contributing factors in the low primary school enrolment of children, particularly in West and Central Africa (www.ncbi.nlm.nih.gov). It is imperative to note that in 1986, the W.H.O. was the first United Nations Agency to take up the Global challenge of AIDS and to date continues to be the most important contributor to the international effort. For several decades the W.H.O. has provided financial support and technical guidance for AIDS activities in more than 150 countries around the world (www.un.org).

According to Blantyre (2001), Malawi's education system has been severely hit by the HIV/AIDS pandemic, which is claiming at least 600 teachers a year. At a meeting on strategies to check the impact of HIV/AIDS, former Education Minister, George Ntafu said the authorities must step up measures against the scourge. Ntafu sounded an ominous note of warning by stating that:

> *'If our education system is infected by HIV/AIDS to a point of being overrun by it, nothing good can be expected of Malawi now or in future' (Blantyre, 2001).*

The Minister also revealed that the HIV/AIDS pandemic was just one of many problems facing the country's education system: morale in the teaching profession was low from poor salaries and lack of incentives. Ntafu called for new strategies to save the situation. The Minister noted that Malawi's chance at overcoming the HIV/AIDS were however, still bright given that about 90 per cent of its population was still AIDS-free. About 14 per cent of Malawi's population of 10 million people mostly within the 15-49 age brackets is said to be infected by HIV the virus that causes AIDS (Alhassan, 2001).

Former Minister of Education In Ghana, Professor Christopher Ameyaw-Akumfi revealed that HIV/AIDS is reducing the number of children in schools and that infected parents are finding it difficult to meet even the modest education expenses, and are also withdrawing their children from schools, putting the whole education system in danger (data.unaids.org). HIV/AIDS is also constraining the government ability to provide educational services with worrying mobility and mortality among teachers (Alhassan, 2001; Boadu, 2001)(& www.harare.unesco.org).

In Africa , the consequences of HIV/AIDS for the education sector are devastating affecting teachers and the whole system (www.adeanet.org). As Kelly (2000) succinctly puts it, the impact is felt on:

(i). The **demand** for education. (Fewer births as people die young).

- Children infected and dying
- Orphans and Child heads of families unable to attend school.

(ii). The **supply** of education

- Teachers dying at a range greater than they can be replaced.
- Increasing structural weaknesses and declining national wealth .
- Competition from other sectors such as health thereby reducing resources for education

(iii). The **quality** and **management** of education

- Teachers absenteeism
- Loss of inspectors, administrators, planners and managers impact on the social and community environment in which education is supported.

The followings are **recommended to remedy the situation**:

(1) There should be immediate vigorous and wide scale action in all schools and education institutions to cause changes in behavior. Saving the lives of those not yet infected with HIV- especially, the 14 age group-is the highest priority. It is to be noted that changing behavior is not an easy task. Indeed, experience has shown that simply providing information or advocating changes in attitude is not enough (www.adeanet.org). It is therefore imperative to embark on the followings:

- The introduction of regular and well-designed life skills programmes into schools for children of all ages. Selected and properly trained teachers should deliver the programmes. Progarmmes must include practical approaches. For example, use of drama and other participatory techniques that allow children to experience and practice examples of behavior change.
- Effective teaching method employed in educating about HIV/AIDS prevention differs from more traditional subject areas. Teachers need to learn additional skills, instructional methods and models, and perhaps change some of their old ways of teaching in order to effectively deliver school-based AIDS education using different channels and approaches (www.ibe.unesco.org). Integrating AIDS education as part of a comprehensive health education programme is important. Success in HIV/AIDS preventing curricula is possible when it is thorough and integrated with other risk-reduction issues, such as drug and alcohol abuse, sexuality and anti-discrimination (Alhassan, 2009).
- The use of peers of role models for young people –these might include local youth, sports, stars and popular groups and media. Therefore, it is imperative that adolescents receive effective HIV/AIDS preventive education (www.adeanet.org).

  As has been stated elsewhere (Alhassan, 2003) (& www.nou.edu.ng), preventing HIV infection among adolescents is an excellent strategy for solving the AIDS pandemic. This is because the United Nation's Projection estimate (2000) reveals that over 50% per cent of the population of sub-Saharan Africa is under 24 years old, and more than 4,500 young people in Africa are infected with HIV each day!.
- Leaders of society at all levels (such as Ministers, Members of the National Assembly and district and local community leaders must also contribute to getting the message across. They should speak openly and frankly

and break the silence about HIV/AIDS. Most importantly, they must set a good example for others to emulate (www.adeanet.org).

- The media, particularly radio have a vital role to play in changing behavior. Radio is the adapted medium as it is accessible to people everywhere and can deliver messages that are tailored to different groups in society in their own languages and idioms.

(2) Effort should be put in place urgently to cope with the educational impacts of HIV/AIDS. Radical changes in strategy in the education sector will be needed to cope with decreases in demand, supply and resources (www2.unescobkk.org).

- All available human resources will need to deployed to fill the growing gaps in people and in skills. Strategies may include reactivating retired teachers, bringing in less skilled teaching assistants and then training them on the job, training more planners and managers and giving them better skills in forward planning to meet the projected problems.
- Planners must have a clear picture of what is happening, which will require better information gathering.
- Innovative approaches that countries have been developing since ***Jomtien*** to meet shortages of schools and teachers and to reach out-of-school children in communities hold valuable lesson. Approaches include the use of volunteer teachers and multi grade teaching based around community schooling and non-formal education. They can be adopted and build upon in the fight against HIV-AIDS. Overall, greater flexibility is required in the whole approach to education-emphasizing learning rather than schooling and bringing in practical skills and entrepreneurship that young people will need for their survival.

(3) The greater vulnerability of girls and women should be addressed. Females are more vulnerable than males to infection with HIV/AIDS.

Females and especially younger women are more susceptible to infection with each act of unprotected intercourse. Even more importantly, women are more vulnerable socially, because of their relative lack of social and economic empowerment (www.rti.org). According to Armah (2000), women are four times more vulnerable to HIV infection than men. Poverty alleviation amongst women in Africa often compels them to engage in sex with multiple partners. Current efforts to empower girls and women through education must be continued and intensified. Furthermore, men must be sensitized and educated so that they break away from violent or domineering attitudes and behaviors.

The views of Kelly (2000) (& www.sedos.org) **on what education can do** for HIV/AIDS is succinct enough to qualify for expression in this chapter.

In the Short and Medium Term

While as yet there is no infection, education has the potential to:

- Provide knowledge that will inform self protection;
- Foster the development of a personally held, constructive value system;
- Inculcate skills that will facilitate self-protection;
- Promote behaviour that will lower infection risks;
- Enhance capacity to help others to protect them against it.

When infection has occurred, education has the potential to

- **S**trengthen the ability to cope with personal infection;
- Strengthen capacity to cope with family infection;
- Promote caring for those who are infected
- Help young people stand up for the human rights that are threatened by their personal or family HIV/AIDS condition.
- Reduce stigma, silence, shame, discrimination.

When AIDS has brought death, education has the potential to

- Assist in coping with grief and loss;
- Help in the reorganization of life after the death of family member(s);
- Support the assertion of personal rights

In the long term, Education has the potential to

- Alleviate conditions, such as poverty, ignorance, gender, discrimination that facilitate the spread of HIV/AIDS
- Reduce vulnerability to the risk situation of prostitution, streetism, dependence of women on men.
- The next section of this chapter reveals why Universities in Africa are high- risk zones regarding HIV/AIDS.

12.1. Universities as High-Risk Institutions

UNAIDS has listed the behavioral and social factors which play a role in kick-starting a sexually-transmitted HIV epidemic or driving it to higher levels.

- Large proportion of the adult population with multiple partners **Roman figures**
- Overlapping as opposed to serial sexual partnerships
- Large sexual networks
- Age mixing typically between older men and younger women
- Little or no condom use

- Women's economic dependence on marriage or prostitution, robbing them of control over the circumstances of safety of sex (UNAIDS, 2000) (& www.harare.unesco.org).

There is a high causality between having unprotected intercourse with multiple sex partners and becoming infected with HIV. In a case study involving 7 Universities in Africa: (www.uwicentre.edu.jm) Benin, Ghana, Jomo-Kenyatta University of Agriculture & Technology, Kenya, University of Nairobi, Kenya, Namibia Western Cape. South Africa and University of Zambia evidence indicates that almost everyone of the above manifest itself to a greater degree in the sexual behaviour of students on University campuses (www.harare.unesco.org).

The prevailing 'culture' of University campuses - the unspoken assumption that 'this is the way things happen here, these patterns of behavior are acceptable in our circumstances' – appears to be ambivalent about, or even open to sugar daddy syndrome, sexual experimentation, prostitution on campus, unprotected casual sex, gender violence, multiple partners and similar high risk activities. But in the context of HIV/AIDS within student communities today, such a culture may well become a culture of death. In a setting of HIV/AIDS prevalence, the university culture stands in danger of affirming risk more than safety. It is in danger of affirming death more than life. In other words, a university is a high risk-situation for the transmission of HIV. The assumption we have to work from is that residential University students are a high-risk population (Chetty, 2000). There is a justified presumption when children go to school that they will be safe and protected by those in authority. The mandate of higher education is to develop the whole man mentally, morally and physically and to confer on their products who are found worthy in character and learning, to enable them assume leadership roles in their immediate and extended society (rotary9640.org).

12.2. Implications for University Administrators and Managers

The scenario presented above has some fundamental implications: The entire university community – but especially the university management – need to face this squarely. They should also recognise that certain practices may heighten the risk of HIV infection. For instance, the requirement that students undertake field trips as in Geology, Geography and so on or gather field experience such as in Banking & Finance and Teaching Practice, either during term or vacation periods, generally result in their being away from their normal surroundings, being required to make their own accommodation arrangements and having some money readily available – a combination of factors that increase the likelihood that an individual will engage in sexual activity, possibly with lethal consequences (www.harare.unescoorg).

Universities must consider all the factors identified above. Universities must be willing to make all necessary changes. It is to be noted that modifying a university culture and social behaviour so that they affirm life more strongly than death, safety more than risk, is not easy. It cannot be done from the top alone, but needs the involvement of individuals all down the line, including the very important constituency formed by the students and their unions. But without some leadership, it is unlikely that other parties will initiate effort for a change in this direction (synergyaids.com). We must all realise that with HIV/AIDS it can no longer be 'business as usual'. The time to act is **NOW.**

It seems Universities in Africa are in danger of repeating the mistakes that their respective countries have also made in dealing with HIV/AIDS (www.harare.unesco.org). Among such mistakes are:

(i) Under-estimating its potential to destroy systems
(ii) Being lulled into complacency and inaction by the external signs of apparently healthy individuals and currently functioning systems:
(iii) Treating the disease as essentially a health issue
(iv) Not showing requisite sense of urgency;
(v) Giving urgent, but short-term financial problems higher priority than dealing with a disease situation that has potential to undermine everything that the situation strives to accomplish;
(vi) Failing to build up the necessary capacity for managing the impacts of the disease, and
(vii) Acting as if enough were being done when individuals or groups initiate response and activities, but without seeking to establish these on a co-ordinated institutional basis or to build them into an institutional framework.

Universities are also in danger of allowing HIV/AIDS on campus to remain enshrouded in a cloak of silence, secrecy and shame that constraints efforts to limit its further spread and respond to its challenges. Above all, universities in Africa are in danger of failing to show the wholehearted and exceptional personal, moral, political and social leadership commitment that is needed for overcoming HIV/AIDS: The cost of these shortcomings will be manifested in time wasted and lives lost. If efforts are made to avoid the mistakes and in the context of strong and visible leadership, then the message will not be 'all bleak, for the future does not have to be like the past' (Whiteside and Sunter, 2000). It must be noted that Universities possess the expertise to assist society in managing and gaining control over the epidemic and its impacts. With strong and visible leadership from the senior University Management, they can synergise the currently disparate efforts into one coherent united onslaught on the HIV/AIDS enemy.

12.3. University HIV/AIDS Awareness-Raising

The main thrust of university information, education and communication efforts in relation to HIV/AIDS seems to be concentrated into the brief period of orientation undergone by fresh students. Universities in Africa have a long tradition of dedicating a week or so to orienting incoming students to the complexities of University academic and social life. HIV/AIDS is tending to feature ever more prominently among the topics for this orientation activities. Students receive some factual information about the diseases and infections including Sexually Transmitted Diseases (STDs) and the avoidance of unwanted pregnancies. Information is also given about available University health and counselling services and condom availability (www.shapezim.org.zw). As Kelly (2000) succinctly puts it, it is critical

that fresh students are alerted from the outset to be HIV/AIDS – vigilant, especially when the warning bells are sounded by senior university administrators. But in the absence of continuous follow-up activities, these one-off communication are likely to have little impact where it must be urgently needed on STUDENT BEHAVIOUR.

There is a clear need to establish on-going HIV/AIDS education programme that should provide students with training in psycho-social life skills such as assertiveness, effective communication and decision-making. These are basic requirements needed by students in order to be able to resist peer pressure in such high risk areas as alcohol abuse, drug-taking and casual sex**.**

13. Conclusion

While the paper attempted to identify major and minor symptoms of HIV, and argued that the exact origin and time of emergence of HIV remain unsettled, it stated that obviously, HIV/AIDS is an unprecedented havoc to the human race and that what is of crucial importance now is what humanity can do to stop the pandemic from consuming the world. HIV continues to be a major global public health issue, having claimed more than 40 million lives so far. In 2013, 1.5 million people died from HIV-related cause globally. It x-rayed government policy to the emergency of HIV/AIDS in different countries where international image, beyond political concerns, has decreed the agenda. It is to be noted that a new AIDS vaccine is about to begin in the United States, and this one is a little different-the virus has been developed over the past 15 years by Robert Gallo, the scientist who first proved in 1984 that HIV trigged the disease.

The transmission of HIV/AIDS can only take place through bodily fluids: blood, semen, vaginal secretion, and breast milk. Most infections worldwide occur through penetrative sexual contact. In the Africa, the mode of transmission has been mainly through heterosexual networking including premarital, marital and extra-marital relationships: this mode account for 93% of all adult cases while contaminated blood transfusion and other blood products make up the balance. As many as seven million Africans with HIV who should be getting treatment are not. The reasons why women are more vulnerable to HIV infections were presented. The paper further identified the countries that are "Getting to Zero': Zero new HIV infections. Zero discrimination. Zero AIDS-related deaths'' (unaids.org). Accelerated progress has been reported in most parts of the world. But, there are worrying signs that some regions and countries are not on track to meet global targets and commitments on HIV. The pandemic has devastated millions of families, create tens of millions of orphans, seriously burden national economies and healthcare centre systems and threatens to destabilize whole regions. It is the number one killer in Africa. It has also killed globally celebrated and talented professionals, including teachers, inspectors, administrators, planners and managers (www.onusida-aouc.org). In the light of the above, the consequence of HIV/AIDS for the education sector was examined and recommendations are on offer to remedy the situation while implications for the administrators and managers of higher education in Africa are generated. The movement of people across West African countries on daily basis, calls for pragmatic measure: There is the need to sensitize everybody to be serious about the HIV/AIDS pandemic. We need to be cautious and caring by not infecting others. HIV/ADS is sordid, it is insidious but it is invisible. Increased mobility of population and conflict situations will continue to exacerbate the continent's already tenuous position regarding HIV/AIDS.

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