NIGER DELTA UNIVERSITY

16th Inaugural Lecture

AID TO AIDS: A JOURNEY OF SERENDIPITY.

BY

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Protocol:

Mr Vice-Chancellor,
Deputy Vice-Chancellor,
Registrar and other Principal Officers,
Provost, College of Health Sciences,
Deans of Faculties,
Chief Medical Director, Niger Delta University Teaching Hospital,
Learned Academic Colleagues,
Students, Past and Present,
Distinguished Ladies & Gentlemen

Preamble:

It all began 40 years ago when I enrolled as a fresh-faced teenager into the first College of Medicine in Nigeria at the University of Lagos in September 1974. My class was part of the first 200 cohort intake after the country embarked on a 5 year plan to produce 1000 doctors by 1980 in the thenfive premier First generation Universities in Nigeria.

I was among the second cohort to pass out of the College of Science & Technology (now Rivers State University of Science & Technology) in July 1974.
The journey from the rural Niger Delta to the cosmopolitan city of Lagos was filled with enthusiasm and a sense of adventurism.

The then Provost of our College of Medicine, the late Professor Felix Dosekun - an accomplished Physiologist - enjoined us to pass through the University and let it also pass through us. His inaugural lecture in 1962 was prescient[1] he opined that "the physiological sciences have enabled us probe more deeply into the nature and functions of the protoplasm". This fact was to define the identification of HIV many years later.

Our then teacher in Paediatrics, the Late Professor Olikoye Ransome-Kuti regaled us with anecdotes of the "Shrine"…late Afro-beat pundit Fela Anikulapo-Kuti's hang-out. Both persons were later to change the face of HIV in Nigeria for ever.

The sense of adventurism and delightful pleasure in all I did saw me pass out in 1979from the College of Medicine and return to the rural Niger Delta for my house-job in General Hospital, Port Harcourt. This was another epoch of fun and work.

After National Youth Service Corps year in rural Onueke, Abakaliki, then in Anambra State, I returned back to rural Emohua General Hospital in 1981. It was the foundation start-off for the University of Port-Harcourt Teaching Hospital. I was the first resident doctor in Obstetrics & Gynaecology to then Professor Kelsey Harrison, as well as Doctors, Nimi Briggs and Celestine John as they then were. Relocation followed to General Hospital Port-Harcourt in 1983 when it became untenable to sustain the teaching hospital in Emohua.

I left for the United Kingdom in September 1984 to continue my training in Obstetrics & Gynaecology and returned back to Niger Delta University and its affiliated Teaching Hospital in January 2012, to pursue with passion my calling as an academic and a fully-fledged specialist; involved in teaching, researching and providing services for HIV/AIDS; the topic of our discourse today.

Gallo5 in National Cancer Laboratory, United States. This isolation led to the definitive antibody test for HIV. The patent, registered by the United States Department of Health and Human Services remained controversial6, being shared eventually on 50/50 basis between France and USA after a suit filed by Institute of Pasteur in 1985 and resolved in 1987[7]

My cousin, Professor Tekena Harry (now a retired Virologist)who had spent one year on a Nigeria/France exchange programme in the Institute of Pasteurin 1980 reported the first case of HIV[8;9] in 1986 in Nigeria.In April 1985 Abbott Laboratories had on request from Prof. Tekena Harry donated HIV antibody test kits to the Nigeria Institute for Medical Research (NIMR), Yaba. A 13years old female patient initially seen by then Dr Abulsalami Nasidi (now Professor)was tested and found to be HIV positive. This was the first established case of HIV in Nigeria. It was brought to the attention of Nigerians by the then Minister of Health, late Professor O Ransome-Kuti (my former teacher in Paediatrics) in 1985.

Mr Vice-Chancellor, hitherto only clinical suspicions were made without any virological tests in Nigeria; until the NIMRunder the directions of Prof. Tekena Harry started a make-shift diagnostic centre with the kits supplied by Abbott Laboratories. The HIV epidemic was by this time nascent. It was prevalent amongst homosexuals and intravenous drug users in the developed world where it was known as the Gay Related Immunodeficiency Disease (GRID) with a heterosexual cohort largely centred in sub-Saharan Africa where it was known as the “Slim Disease”. In Nigeria the response varied from lukewarm acknowledgement by some to complete denial by others. The services for diagnosis in NIMR in 1985 remained under-utilized.

1. Introduction:

Mr Vice-Chancellor, let me begin by thanking you for the opportunity to deliver my inaugural lecture at pace with my contemporaries elsewhere in the country. Serendipity means "fortunate happenstance" or "pleasant surprise" a term coined by Horace Walpole (1717-1797)in 1754 when referring to the fairy Persian tale of the Princess of Serendib… who was always making discoveries by "accidents and sagacity"[2]. My career including my research activities have all been fortunate happenstance. I was admonished from my undergraduate days by then Dr.Tekena Harry (Virologist) that MBBS was just a stepping stone and post-graduate studies was the bane and essence of medicine. My encounter with the three-foremost Obstetricians & Gynaecologists in the Niger Delta of Nigeria in Emohua was my first rung on the ladder of postgraduate training. It became a defining moment for me, and imbued me with a passionate care for the afflictions of women. Excerpts of the Zaria maternity survey lecture was delivered in Port-Harcourt by Professor Harrison in 1982 before it became published in BJOG[3]….and the closing remark of "*sunset over the Sombrero*"reverberated throughout my early career.

I finished my core training in Obstetrics & Gynaecology in 1989 while at Fazakerley District General Hospital, now Aintree University Hospital, Liverpool and embarked on a higher medical training in Genitourinary & HIV Medicine, to provide service for the newly emerging global epidemic which affected sub-Saharan Africa disproportionately.

The Human Immunodeficiency Virus (HIV) a lentivirus of the subgroup retrovirus had been isolated variously in 1983 by Luc Montagnier4 in the Institute of Pasteur, Paris France and Robert

The British response was different but typical. Norman Fowler, the then Health Minister launched a public awareness campaign with the “Don't die of ignorance” video and leaflet. The Iron Lady,late Prime Minister Margaret Thatcher after persuasion by Norman Fowler set up anHIV Expert Working Group which responded albeit initially slowly but later swiftly to the threateningepidemic by expanding Genitourinary & HIV training posts and Consultant posts in 1987-1990. I was thus at the right place at the right time serendipitously. I embarked on the Higher Medical Training in Genitourinary Medicine of the Northern Regional Training Programme with rotations through Newcastle, Sunderland and South Shields from 1992 – 1996, after a preparatory stint on the University of Liverpool Vocational Training Scheme between 1990-92.I was subsequently appointed a Consultant Physician to the James Paget University Hospital, Great Yarmouth in 1996.

2. AIDS:

Mr Vice-Chancellor, AIDS is defined as Acquired Immunodeficiency Syndrome, a combination of various opportunistic infections following depletion of the immune response of an individual after HIV infection. The first reported series was on 5th June 1981 amongst 5 homosexuals (men who had sex with men)who had pneumocystis carinii pneumonia and thus the earlier coinage “Gay Related immunodeficiency Disease” (GRID). In this first series that was reported two died within days, and clinicians identified that the disease “was a cellular dysfunction” associated with “sexual contact between men”[10].

HIV has a preference to reproduce within CD4 cells. CD4 cells are cluster differentiated cells that serves serve as immune response to infections. They facilitate containment of these nosocomial

infections by the individual. When they are reduced in number, common infections in the environment which can be ordinarily dealt withbecomes a problem. This is sometimes seen when the immunity is deliberately suppressed as part of medical treatment in transplant patients or cancer patients who have it reduced as a consequence of the effects of anti-cancer drugs.

3. Early Training and service delivery in Genitourinary & HIV Medicine.

Mr Vice-Chancellor, sexually transmitted infections are a marker for unprotected sex. The facilities that are put in place for handling such cases confidentially and free treatment are essential for its control. Control ameliorates the complications associated with the disease.In the United Kingdom following the scourge of syphilis, chancroid and gonorrhoea during and after the First World War, the Venereal Disease Act was enacted in 1917 making it mandatory to notify and provide confidential free treatments. This confidentiality became the mantra for providing anonymous treatment with concomitant partner notification. The Venereal Disease Act was repealed in 1998 and evolved to the Sexually Transmitted Disease Directionsof 2000. It remained underpinned by the same principles of confidentiality guaranteed by enforceable law. Other contemporaneous legal changes at the time included the legalisation of abortion in 1967, the decriminalization of homosexuality in 1967 and setting 18 as the age of consent for consensual homosexual sex by the Criminal Justice and Public Order Act 1994. These Acts of Parliament rulings ensured that the Genitourinary Medicine services were well placed to respond to the HIV epidemic in providing confidential and free treatment in the United Kingdom.

These services provided timely diagnoses of sexually transmitted infections with appropriate contact tracing and partner notification. The clinical activities were regulated by peer-led Genitourinary Medicine Faculties with the established Royal Colleges. Training and service commitments were defined including quality standards and acceptable staffing levels. My training and subsequent service delivery involved regular audits in the diagnosing of sexually transmitted infections like gonorrhoea[11] or chlamydial[12;13], trichomonal infection[14], syphilis[15] and genital warts infection[16;17].

These infections were acquired from homosexual, heterosexual and bisexual contacts. All these patients were routinely offered and screened for HIV. Thus in the United Kingdom a significant database of HIV infected patients were established nationally early in the epidemic.

From these databases, clinical trials were set up to compare the efficacy of the emerging antiretroviral drug treatments.

4. Early drug treatments for HIV/AIDS (1984-1992)

Mr Vice-Chancellor, the HIV viral structure through the works of Robert Gallo and others using human culture plates has become established by 1984 and HIV had been shown to be the cause of AIDS. The HIV was also now recognised as a lentivirus (subgroup of the retrovirus). As part of its replicative pathway it needed to change its viral configuration from RNA-base to DNA-base before immortalisation in the genome of the host cell, using the reverse transcriptase enzyme. Once embedded in the DNA of the host cell (CD4 cells) it replicated, producing billions of new HIV virions that destroy the CD4 cells in which replication had occurred. In the early

phase of the infection, marked often by short period of vague feverish states in some individuals, the CD4 cells are replaced as efficiently as they are destroyed. The equipoise left the individual well for considerable period of time, often from 9 – 11 years without any significant illness and potentially low risk of transmitting the infection in the absence of concurrent sexually transmitted infections.

For the virus to reconfigure from the RNA to DNA it needs the action of the enzyme reverse transcriptase. In the National Cancer Institute, working with tissue culture plates developed by Robert Gallo and his team, Samuel Broder18 started working on various shelved anti-cancer drugs 2',3'-dideoxynucleosides. Jerome Horwitz had developed Zidovudine and other 2',3'-dideoxynucleosides, for the treatment of cancer in 1964, as it showed anticancer efficacy in-vitro but was never proven clinically.In the National Cancer Institute, Broder working with colleagues in 1987 had noticed abortion of HIV replication in-vitro. Thus 6years after the first description of GRID and 3 years after isolation of HIV the first armamentarium of drugs was found serendipitously. It was tried on patients with advanced AIDS-related complex (ARC) or AIDS and the patients showed short term delay in disease progression of 4months[19].

However scepticism[19;20] on the place of monotherapy and timing of treatment as a result of resistance to AZT (Zidovudine), led to the first randomised controlled clinical trial, The Concorde trial[21] from 1988 to 1992 in Europe. Again, I was in the right place at the right time, as I started my training in 1992 in one of the participating centres of the Concorde trial (Newcastle General Hospital, Newcastle under Drs Mike Snow, Edmund Ong, Richard Pattman & Peter Watson).The Concorde trial showed no benefit in early or

deferred treatment with Zidovudine (AZT)monotherapy in asymptomatic HIV infected patients.

On the back-heels of this came the AmericanAIDS Clinical Trial Group (ACTG) 175which randomised dual therapy study with either Zidovudine (AZT) combined with Didanosine (DDI) or Zalcitabine (DDC). This dual therapy showed efficacy in delaying disease progression in the short term with the emergence of viral resistance limiting further drug activity.

In Europe, a replication of the ACTG 175 was undertaken in a multi-national drug trial, the Delta Trial[22], between 1992 – 1994. It randomised patients and compared AZT monotherapy to AZT + DDI or AZT +DDC. The initiation of treatmentwith dual therapy prolonged life and delayed disease progression than AZT monotherapy. My training unit in Newcastle General Hospital also enrolled patients into this trial. The trial did not address the time to start treatment. What was however evident was the significant development of resistance with AZT monotherapy.

Most of the trial participants were white homosexual males, with few black Africans, mostly migrants from sub-Saharan region.

At about the same time in 1994 another seminalrandomised placebo-controlled clinical study[23]undertaken in United States of America had shown benefit in prevention of mother to child transmission from 25.5% to 8.3% when AZT versus placebowas administered as monotherapy to pregnant mothers.

5. Drug development and advances (1994-1998)

Mr Vice-Chancellor, three significant events occurred in 1994-1998; firstly the laboratory synthesis of "blockers" to the reverse transcriptase enzyme; secondly "blockers" to the protease enzymes both necessary for the replication and maturation of the HIV. The third event was the capability of quantifying the HIV levels in the serum.
Nevirapine a non-nucleoside analogue was discovered by Boehringer Ingelheim Pharmaceuticals in 1996and Efavirenz another non-nucleoside by DuPont Pharmaceuticals in 1998 both reverse transcriptase inhibitors.

Saquinavir (first protease inhibitor) wassynthesized and patented by Hoffmann-La Roche Pharmaceuticals quickly followed Ritonavir by Abbot Pharmaceuticals and Indinavir by Merck Pharmaceuticals; all in 1996. Indinavir, the eight antiretroviral drug to be licenced was the most potent of its class.

The epidemic was now raging. By 1996 the global burden of HIV was estimated at 33.4 million with mortality of 3 million annually. Sub-Saharan Africa bore the brunt, 70% affliction with 30 % mortality. The response from most African countries varied tremendously. Uganda embraced and acknowledged the impact on its populace.

This was the "golden years" of HIV treatment. The landmark INCAS trial[24] had shown that with 3 drug combinations of AZT, DDI & Nevirapine reduced viral replication to below quantifiable levels with commensurate increase in CD4 cells and survival.This was the beginning of the"Lazarus effect" in HIV/AIDS. Patients were now

recovering and remaining well but with a cocktail of medications taken at various challenging times. Side effects of these potent cocktails were also worrisome. The good news, were reduced mortality of patients and increased survival.

David Ho, in one of the plenary session at the 11th AIDS Conference in Vancouver in 1996 showed the potency of triple therapy, two nucleoside analogues and a protease inhibitor. HAART(highly active antiretroviral therapy) came into the lexicon including the catch-phrase "hit early,hit hard"[25]. David Ho subsequently became the Time Magazine Man of the Year in 1996. Yoweri Museveni, the Ugandan President was the only African Head of State that attended.

6. Providing AID to AIDS

Mr Vice-Chancellor, I returned from the Vancouver Conference in July 1996 greatly enthused. I quickly enrolled patients in expanded access (Phase IV) as Site Investigator for Efavirenz (DuPont Pharmaceuticals), Saquinavir (Roche Pharmaceuticals) and Indinavir (Merck) after the appropriate ethical committee approval was obtained. I introduced triple therapy in East Anglia to my cohort of 30 HIV Infected patients. Our mortality dropped to only 1 or 2 a year from the previous 5 to 10 deaths annually. Patients began to get well. I was again "at the right place at the right time".

I was also concomitantly able to improve access to my service[26]. I was able to meet with the standards of seeing 90% of my patients within 48 hours by increasing the consultant staffing level27. The unit participated in both undergraduate and postgraduate teaching including research and service delivery.

served recreationalor procreation purpose" and "had nothing to do with ethnicity"[28-30]. I was elected and served as the President of the section from 2004-2006. The section during my tenure invited our erstwhile Ag Provost Professor Raphael Oruamabo to present on Paediatric HIV, the text of which was eventually published as book chapter.

I also went on to develop the first clinic-based multi-media website[31;32] (now decommissioned) for sexually transmitted infections as part of the 50 years anniversary of the National Health services funded by the Great Yarmouth Haven Rotary Club. This also addressed the sexual ill-health noted in my catchment population of mostly ethnically homogenous whites[33;34.]

Meta-analysis (*31 citations to date*) done in my unit in 2007 on the efficacy of antiretroviral therapy in sub-Saharan Africa showed similarity in outcome with developed countries[35]. We showed that ART increased CD4 count from three months to 3 years with the majority of subjects having undetectable viral load at each analysed time point. This was promissory for response to treatment for HIV in sub-Saharan Africa.

7. Heart to Heart Clinic: Niger Delta University Teaching Hospital

Mr Vice Chancellor, I returned in 2012 to rural Niger Delta on appointment as Senior Lecturer by your predecessor in September 2011. This was another golden era of HIV therapy for Nigeria. The drugs we piloted and used in England were now off-patent and thus the cheaper generic formulations were now available free of charge provided by non-governmental organisations (NGOs). Donor led-

Optimism was high for the eradication of HIV as levels below detectable limits persisted for years. However the virus remained in sanctuary sites not reached by drug treatment. Cure eluded all. Whereas cure was not assured, the concept of chronic disease management emerged. It was now recognised that sustained virological suppression was achievable with compliance. Life expectancy was now comparable to non HIV infected population. Treatment prevented transmission in sero-discordant couples and mother-to-child transmission. Treatment regimen had become simplified to one tablet a day comprising three-drug formulation and access was now more universal.

In 1997 late Prof Olikoye Ransome-Kuti set the stage for the awareness of Nigeria's HIV/AIDS pandemic for the second time, when he announced the death of his junior brother, the Afro-beat Legend Fela Anikulapo-Kuti from the complications of AIDS. This time it resonated with the national psyche, 12 years after he had announced the first confirmed case as former Health Minister in 1985. He felt frustrated by the monumental conspiracy of silence around HIV/AIDS. The National response by setting up the National Agency for the Control of AIDS (NACA) in 2000 came on board late. But better, late than never.

Mr Vice-Chancellor, almost at the same time in the United Kingdom and the developed world; an obvious preponderance in sexually transmitted infections and HIV were being manifest in the black and ethnic minority populations, as it still is. A few of us mostly members of the Medical Association of Nigerian Specialist and General Practitioners as it was then known and the Afro-Caribbean Medical Society, championed the formation of the Black & Ethnic Minority Health Section (now delisted) of the Royal Society of Medicine. We sought to discuss academically these issues and I posited quite vigorously that "sex was common to *homo-sapiens* for whom it

funding provided a pool of all drug classes, readily available for patients thereby transforming care. Saquinavir the first protease inhibitor approved and patented in 1995 came off patent in November 2010.

There were many challenges I faced on arrival to provide a veritable sexual health service including HIV/AIDS care and teaching of our medical students.
My principal appointment remains the teaching of medical students from level 400 to 600. This entails didactic lectures and bed-side teaching including running outpatient clinics and ward rounds. We do this in the Niger Delta University Teaching Hospital. The first of the challenges was the non-existent of any sexually transmitted disease clinic in NDUTH and Bayelsa in general. I will juxtapose this defect in my analysis of the challenges.

Current legislature in Nigeria has criminalized homosexuality, making those at greatest risk of HIV infection "invisible" by the Same Sex Marriage (Prohibition) Act 2006. Confidential and free treatment for STDs with statutory notification is none existent, thus there is no one-stop shop for sexual health in Bayelsa in particular and most of Nigeria in general.

The current state of play with the management of HIV infection is early treatment. It has now been firmly established that early treatment prevents transmission to the uninfected. The World Health Organisation (WHO) 2014 guidelines recommend treatment when CD4 count is less than 500. This implication is early detection, which can only occur where there is routine and opportunistic testing.

If treatment is commenced with the now established universally generic co-formulation of the three-drug classes as a single drug,

the United States Agency for International Development, was a wonderful gentleman and leader. I met the astute Infectious Disease Physician then Dr Dimie Ogoina (now Professor of Medicine) also in post. I cannot miss to mention the Head of Department of Medicine, Federal Medical Centre, a self-effacing highly knowledgeable Endocrinologist, Dr. Finomo O Finomo – who was co-ordinator for the HIV services.

Unfortunately the services for HIV in Bayelsa have not kept pace with services elsewhere in the world. It is unfair to compare apples and oranges, but ifthat is what you have,then that is what you compare.

The records I have to date from 2007, when Family Health International partnered with Niger Delta University Teaching Hospital in forging a comprehensive HIV/AIDS care, treatment and support show dismal facts. It was funded by United States Agency for International Development. Whereas the rest of the developed world was monitoring response to treatment with viral load measurement, NDUTH was still as in most part of Nigeria, was using surrogate markers with CD4 count gain. Viral resistance testing was not available and guesses were needed to sequence therapy. Most diagnostic tools and resources to procure them were none existent.

Mother to child transmission is not accurately known but only 44% of pregnant mothers completed antiretroviral prophylaxis. During the period July 2008 to June 2011, amongst 2340 antenatal booking only 91.03% agreed to be tested for HIV, of whom 108 (5.07%) were positive. Of the 108 HIV positive pregnant mothers only 48 (44%) completed their HIV therapy.

In my former unit in the United Kingdom[36] from 1996-2007 amongst

then compliance can be improved for continuous virological suppression. The individual so treated is less likely to transmit and infect their sexual partners or new-born baby when their viral load is undetectable. The life expectancy of these HIV positive individuals will be no different from their HIV negative counterpart.
Most importantly the 20 – 25 years old University graduate compliant with regular treatment can marry a negative partner, have uninfected children and see their grandchildren after a fulfilled career.

8. <u>Foundation Chair in HIV in Bayelsa.</u>

Mr Vice-Chancellor, while the future indeed is bright with new treatment regimens, it is not all smooth sailing in Bayelsa State in particular and Nigeria in general.
Bayelsa State was created in 1996, same time as my appointment as a Consultant - andthe equivalent of Lecturer1 - would I have been in Nigeria. I returned and under your watch Mr Vice-Chancellor I was granted a Chair in the speciality, the first, of its kind, in Nigeria. Thank you Sir.

The prevalence of HIV in Bayelsa is 9.1% and it is the third highest in Nigeria. The prevalence in the 8 local government areas varies from 3.5% in Southern Ijaw to 12.7% in Sagbama.

Mr Vice Chancellor, tertiary HIV care in Bayelsa is provided from two service points, Niger Delta University Teaching Hospital, Okolobiri and the Federal Medical Centre, Yenagoa - which has a memorandum of understanding with the Niger Delta University in the training of medical students. I came into post to find one of the most dedicated teams I have ever had the privilege to work with. Dr Otonyo Inatimi who had co-ordinated the HIV unit under the aegis of

30,043 antenatal booking, there were only 13 HIV positive mothers (0.03%). All 13 women completed their antiretroviral treatments and none of the 12 live-born babies were infected. There was one still-birth associated with Nevirapine toxicity.

In 2014, in our 25-bedded medical ward in NDUTH, 28 patients died from the complications of HIV/AIDS, an average of 2 patients a month. These patients presented late and had often stopped taking their medications on their own accord. The commonest opportunistic infection causing death was tuberculosis (TB). The Female/male ratio was 2.25:1. Women continue to bear a disproportionate death toll.

These challenges were recognised by all including the clinicians and the donor agencies.I will quote some of them.
"Limited commitment of some stakeholders to adopt the – BAYELSA fights AIDS program as their own"; "Poor completion of PMTCT service due to long established cultural practices by client to deliver at TBA places" "High turnover of lower income population". (*FHI/GHAIN Project Report*)
"Ineffective and inefficient services for sexually transmitted infections"; "intense transactional and intergenerational sex"; "widespread HIV related stigma and discrimination"; "chronic poverty" (*DPH, Ministry of Health, Bayelsa State*).

Mr Vice-Chancellor, the widespread HIV related stigma and discrimination, we found in our study in the clinic was a corollary for low disclosure[37;38]. This translated into low partner notification and thus a pool of recycled infectivity.

An undergraduate NDU trainee from the Department of Education attached to my unit during her guidance and counselling posting

remarked in her report; and I quote: “Our Izon or African men…..can have up to 3 wives…so it moves from generation…..simply because of the secret”.

Mr Vice-Chancellor, let us all start by knowing our HIV status and when known disclose to our partner(s). With early treatment we will truncate infectivity and achieve our life expectancy without worry for the complications of HIV/AIDS.

This is my AID to AIDS…a journey of "always making accidental discoveries with sagacity of things I was not in quest of" as defined by the erudite Horace Walpole.

9. Conclusion

Donor agencies are currently funding the HIV treatment and care in Nigeria. They will be leaving Nigeria in September 2016 with a phased exit plan in place since 2014. HIV treatment and care costs about N15,000 per month or N180,000 per annum well beyond the reach of many Nigerians. Bayelsa ranks the third most prevalent state with HIV in Nigeria. Disclosure rate to partners is less than 50%37;38 and Female/Male sex ratio is 1.95:1. With this degree of HIV female infectivity, mother-to-child transmission will remain a burden to the paediatric and child health services. But is the infection exclusively fuelled by heterosexual sex? Can we reduce the stigma associated with sexual acquisition and its connotations?

Most importantly can we change and modify our behaviour?

Mr Vice-Chancellor, we had partial accreditation of our medical school in August 2012 and since then we have graduated 3 sets of medical students totalling 104, a considerable workforce in increasing the medical manpower of the State and the country. They have been privileged to train in our facility. Most have done their internship under our watch. These will be agents of change in healthcare delivery.

We also have a new dispensation of change as a mandate for the governance of the country at large. We wait to see if meaningful legislative changes that evolved the British NHS Genitourinary Medicine services to make it one of the European countries with the lowest burden of STI and most tolerant of sexual foibleswill translate ultimately to Nigeria. The National Health Bill and National Health Insurance Scheme are pointers in the right direction.

Acknowledgement:

Let me firstly recognise the sacrifice made by my wife (Barrister Florence Abiye Clement-Harry) during the long periods of absence in my quest for the Golden Fleece. She resolutely stood by me, through thick and thin. This belief saw me through it all, unscathed.

I am grateful to all my mentors, Professor Tekena Harry, PhD, Late Mr. Israel Rocker FRCOG, Late Mr.John Lawson FRCOG, Dr. Sakina Rashid FRCOG, Dr.Edmund Ong, FRCP(I), Dr.Abayomi Opaneye FRCOG, Dr. Christopher Sonnex FRCP, Dr. John Meaden FRCOG, Emeritus Professor Kelsey Harrison FRCOG, Emeritus Professor Nimi Briggs FRCOG, Professor Celestine John FRCOG, Professor Raphael Oruamabo FRCP, Professor Nelson Brambaifa Dr Ingrid Salvary FRCP Professor Anthony Okpani FWCS - who have all contributed in making me what I am today. I owe them an immeasurable debt of gratitude.

I have worked with a wonderful team of dedicated clinicians, nurses, pharmacists, laboratory scientists and non-clinical staff. I salute them all; particularly the “Heart to Heart Clinic” brigade of Niger Delta University Teaching Hospital under the guidance of the indefatigable Matron Asalagha, always calm.

I salute all my hard-working Medical Officers; Dr. Ikenna Ebuenyi, Dr. Ken Nnamdi, Dr.Emmanuel Anene and ever smiling Dr.Uche Chukwueke and all the House-Officers who have passed through the unit. The stalwart support of our CMD and the Honourable Commissioner of Health cannot be underplayed.

I have come to know and respect the excellent Bayelsa State HIV/AIDS Management Team including our Donor Agency (FHI360/SIDHAS), for their singular dedication and commitment.

The adage - “It is better to light a candle, than to curse the darkness”, Eleanor Roosevelt (1884 – 1962), aptly describe their modus-operandi.

My clinical consultant colleagues in both NDU/NDUTH….what can I say? It has been an exceptional privilege working with you all, and “we can do everything and anything with nothing”. Your confidence in electing me your Dean will not be misplaced.

Let me also acknowledge all the members of the “Table”- Senior Staff Club of NDU who made me feel welcome, after my considerable sojourn “overseas”. A wonderful eclectic set of ladies and gentlemen!

Mr Vice-Chancellor, thank you for making it possible for me to deliver this lecture, as the first Clinician in NDU to do so and as the Foundation Chair in Genitourinary & HIV - the first in Nigeria. Your visionary direction for NDU is there for all to see.

I thank everyone for finding the time to come from far and near to grace this occasion.

I dedicate this lecture to all my patients for whom this is an AID to AIDS.

Thank you and God Bless. Journey mercies as you depart.

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Abbreviations:

1. ACTG: AIDS Clinical Trial Group
2. AIDS: Acquired immunodeficiency syndrome
3. ARC: Aids-related complex
4. AZT: Azidothymidine
5. BJOG: British Journal of Obstetrics & Gynaecology
6. CD4: Cluster differentiated cells
7. CMD: Chief Medical Director
8. DDC: Zalcitabine
9. DDI: Didanosine
10. DNA: Deoxyribonucleic acid
11. DPH: Director of Public Health
12. EFV: Efavirenz
13. FMC: Federal Medical Centre
14. F:M: Female to male ratio
15. FHI: Family Health Initiative
16. GRID: Gay related immunodeficiency syndrome
17. GHAIN: Global HIV & AIDS Initiative Nigeria
18. HAART: Highly active antiretroviral therapy
19. HIV: Human immunodeficiency virus
20. INCAS: Italy, The Netherlands, Canada and Australia Study
21. NACA: National Agency foe Control of AIDS
22. NDU: Niger Delta University
23. NDUTH: Niger Delta University Teaching Hospital
24. NHS: National Health Service
25. NIMR: Nigeria Institute for Medical Research
26. NGO: Non-governmental organisation
27. NVP: Nevirapine
28. PMTCT: prevention of mother-to-child transmission
29. RNA: Ribonucleic acid
30. SIDHAS: Strengthening and Integrating HIV & AIDS

Services

31. STI: sexually transmitted infections
32. TB: Tuberculosis
33. TBA: Traditional birth attendant
34. VCT: Voluntary Counselling and Testing
35. WHO: World Health Organisation

Citation

Professor Tubonye Clement Harry was born on 29th October 1955 in Degema General Hospital, Degema to late Elder Clement Sunday Harry and Madam Florence Dabota Harry now 82 years old, both from Harry's Town (Obuama).

He attended and finished his primary school education in St Michaels School, Buguma in 1965 and passed his First School Leaving Certificate examinations with distinction after (double promotion in 1962 & 1964 respectively). He was a recipient of the Eastern Regional Scholarship in 1966 and started his secondary school in Stella Maris College, Port-Harcourt and transferred to Kalabari National College from 1969-1971 after liberation of Rivers State during the Nigeria-Biafra war. He received the Rivers State Scholarship automatically in 1969 as a former recipient of the Eastern Regional Scholarship. He passed his West African School Certificate Examinations in Division 1 in 1971 and proceeded to the College of Science & Technology (now Rivers State University of Science & Technology) for his University of London, GCE "Advanced Level" Examinations in Physics, Biology & Chemistry in 1974. He then proceeded to the College of Medicine of University of Lagos from 1974 to 1979 on Federal Government Scholarship and graduated MBBS in April 1979.

Houseman-ship followed in General Hospital, Port-Harcourt from 1979-1980. After the compulsory National Service in Onueke Health Centre, Ezza Local

Government Area, Onueke in the then Anambra State but now Ebonyi State from 1980-1981, he joined the University of Port-Harcourt Teaching Hospital, then domiciled in General Hospital, Emohua as the first resident in Obstetrics & Gynaecology. Relocation followed in 1983 to the then General Hospital, Port-Harcourt in 1983 as the then University of Port-Teaching Hospital. After passing his primary examinations of the West African College of Surgeons & National Postgraduate Medical College in Obstetrics & Gynaecology equivalent to the (MRCOG Part 1) respectively, he proceeded to the United Kingdom in 1984. He obtained the membership of the Royal College of Obstetricians & Gynaecologist (MRCOG), United Kingdom by examination in 1989. He undertook higher medical training programme in Genitourinary & HIV Medicine and was accredited and awarded the specialist certificate in Genitourinary & HIV Medicine of the Royal College of Physicians. He was the second Nigerian in the United Kingdom to obtain this prestigious specialist certificate in 1996.
He was appointed a Consultant Physician in Genitourinary & HIV Medicine, to the James Paget University Hospital from 1996 to 2012. At the inception of the Norwich Medical School, University of East Anglia in 2002, he was a foundation staff and he rose through the ranks as Tutor to Honorary Senior Clinical Lecturer in 2008.

He have taught and convened undergraduate and postgraduate courses as well as examining. His research base is broad and has resulted in numerous peer-reviewed publications and scientific

presentations both nationally and internationally. He has been site Principal Investigator for various Phase 111 & 1V Drug Trials. He was trained in Good Clinical Practice. He is an Associate Editor of *Sexual Health Matters* and have peer-reviewed for *Lancet, AIDS Care, Sexually Transmitted Infections, International Journal of STD & AIDS* and *Journal of Public Health* including the 14th& 15th International AIDS Conference of 2002 & 2004 respectively and National Coordinating Centre for Health Technology Assessment, Southampton. He has acted as an Advisory Appointment Committee member for the Royal College of Obstetricians & Gynaecologist in UK. He was the Section President of the Black & Ethnic Minority Health, Royal Society of Medicine in UK from 2007-2009 and was active in organising postgraduate events in the Royal Society of Medicine.

He was conferred the Fellowships of both the Royal College of Physicians and Obstetrics & Gynaecologist in 2010 respectively for his significant contribution to the speciality.

He relocated to Niger Delta University in 1st February 2012 to pioneer the establishment of Genitourinary (including Sexual & Reproductive Health) & HIV Medicine. He was actively involved in the accreditation process for the medical school in the College of Health Sciences, Niger Delta University in April & August 2012 respectively and belongs to various University & Hospital committees. He is the Deputy Editor-in-Chief of the *Niger Delta Medical Journal* which published its maiden edition in February 2015 and is currently the Dean of the Faculty of Clinical Sciences since February 2015.

He is married to Barrister Florence Abiye Clement-Harry with whom he has a daughter, both of whom are still living in the United Kingdom. He is a keen scrabble player, jazz-music enthusiast and rambler. He enjoys cooking.