Paradigm Shift in HIV Testing; Getting Along or Getting Behind?

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SUMMARY
In the last twenty five years, the Human Immunodeficiency Virus (HIV), the causative organism of the Acquired Immune Deficiency Syndrome (AIDS) has assumed a frontline position worldwide in health discourse. In the early days of the characterization of the clinical spectrum caused by infection with this virus, screening was an exception rather than the rule. This article reviews the landmarks attained till date in the all important issue of screening for HIV and concludes that Nigeria can not afford to be left behind in the major policy issue changes currently occupying the front burner globally.
Niger Med J. Vol. 48, No. 2, April – June, 2007: 39 – 41.

KEYWORDS: **HIV testing; exceptionalism; universal testing.**

INTRODUCTION

The Human Immunodeficiency Virus (HIV), the causative organism of the Acquired Immune Deficiency Syndrome (AIDS) is arguably the most important pathogenic virus in man to be discovered in the twentieth century. The burden of the disease on the social, economic and political fronts is indeed so profound that no other disease attracts as much global attention as HIV/AIDS. As at 2006, twenty-five years after the virus was firs discovered, appropriately twenty-five million people are reported to have died from the virus[1], a staggering estimate of one million per year over the period. Significantly, research efforts into the biology of the virus as well as clinical trials have resulted in significant advancements in the chemotherapeutic management of HIV/I\IDS from the use of Zidovudine (AZT) as monotherapy in 1987 to the current chemotherapeutic armamentarium of Highly Active Antiretroviral Therapy (HAART) using three drug combinations from the five classes of drugs currently approved for clinical use.

Since HIV antibody testing was first introduced in 1985,[2] the critically important aspect of HIV testing has generally presented a major challenge in the evolution of an "appropriate framework" which is universally acceptable to all stakeholders including patients, clinicians, at risk groups, public health officials and activist groups among others.

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In the Beginning; "Exceptionalism" in HIV Testing

Soon after the introduction of the HIV antibody test, fears about discrimination and stigmatization, concerns about the potentially severe psychological burden of an HIV diagnosis in the absence of effective therapy, and skepticism about the relation 'hip between testing and the changing of risky behaviour led AIDS activists to warn about the "dangers" of the test.[2] In the context, HIV testing was an "exception". Indeed the exceptionalist perspective was reflected in policies on surveillance and partner notification, but it was strongest in the context of HIV testing. However, public health officials saw differently insisting that the voluntary counseling and testing (VCT) of people at high risk should necessarily be a core feature of a preventive public health strategy[2].

Right to Privacy Vs Right to Testing; the Era of VCT

It soon became apparent that women were a particularly vulnerable group to the scourge of HI VIA IDS and as a result of concerns about rise in paediatric AIDS cases due to perinatal transmission of the virus, public health advocacies began to focus on screening for pregnant women. Indeed sentinel surveys of HIV among pregnant women became acceptable estimates of sero-prevalence of HIV in populations studied. However screening was largely voluntary and required consent. In the late 1 980s, as clinicians gained greater confidence in their ability to manage HIV disease, great concerns developed about restrictions imposed a few years earlier concerning HIV screening. But it was in the cases of infants and pregnant women that exceptional ism was most directly challenged. Some pediatricians assel1ed that babies had a "right to be tested" because, if infected, they required vigilant medical care before they became sick– a right that trumped the mother's right to privacy, which would be breached by the discovery of maternal antibody in the newborn. Ultimately, in the United States, two states – New York and Connecticut – enacted statutes mandating HIV testing in newborns? The report in 1994 by the Aids Clinical Trial Group (ACTG-076) that administering Zidovudine during pregnancy could reduce the rate of vertical transmission by two thirds further enhanced the wide acceptability of prenatal testing. In a five year review of missed opportunities for perinatal HIV prevention among HIV exposed infants, Peters et al[3] using multivariate analysis, reported that missed opportunities for perinatal HIV prevention contributed to more than half of the cases of HIV infected infants. The report of the ACTG soon generated interests at making screening compulsory part of routine medical care given the potential at reducing vertical transmission. This has however been a major hurdle to be surmounted. While it has been noted that legislative mandates

have been necessary to produce rates of childhood immunization that are effective in reducing the occurrence or vaccine-preventable diseases, the suggestion that such mandates are an option to consider in the effort to control vertical transmission of HlV-1 infection[4] is bound to generate more controversies.

Universal Tesing; The End of Exceptionalism

In 1998, the Institute of Medicine (IOM) recommended that universal HIV testing be a part of routine prenatal care[5]. It was believed that making the screening universally available could help eliminate the stigma attached to AIDS testing and would allow more at-risk mothers to be treated, reducing the incidence of perinatal transmission. It would also be cost-effective, as the benefits of early treatment with antiretrovirals far outweigh the cost of prenatal testing. The proposal was initially opposed by the American College of Obstetricians and Gynecologists (ACOG) because they believed it would "interfere with the relationship between physician and patient"[5], a year later however the ACOG later officially endorsed the IOM recommendations[2,5].In 2001, the Centre for Disease Control (CDC) considered these recommendations, and endorsed universal screening of pregnant women.[6] This replaced the earlier recommendation for voluntary counseling and testing of pregnant women earlier adopted in 1995. But while calling for a simplified "pretest process," eliminating time-consuming counseling, it did not explicitly recommend an "opt-out approach".

The latest CDC recommendation appears to be all inclusive for in-patients in Hospital settings. The essential core issues of the recommendation are as follows; for patients in all health-care settings H I V screening is recommended for patients in all health-care settings after the patient is notified that testing will be performed unless the patient declines (opt-out screening)[7]. Persons at high risk for HIV infection should be screened for HIV at least annually. Separate written consent for HIV testing should not be required; general consent for medical care should be considered sufficient to encompass consent for HIV testing. Prevention counseling should not be required with HIV diagnostic testing or as part of HIV screening programs in health-care setting. For pregnant women HIV screening should be included in the routine panel of prenatal screening tests for all pregnant women. HIV screening is recommended after the patient is notified that testing will be performed unless the patient d clines (opt-out screening). Separate written consent for HIV testing should not be required; in effect general consent for medical care should be considered sufficient to encompass consent for HIV testing. Perhaps one the most compelling evidence of the need for universalism of HI V screening was the report of CDC investigators that reviewed the experience in North Carolina (USA) between 2001 and 2006. The critical finding is summed up as follows; "The conclusion is that 42% of patients with HIV had their first HIV test within I year of an AIDS diagnosis, and these patients had received healthcare without testing an average of 4 times within the prior 3 years"[8]. While the earlier recommendations focused essentially on routine testing among high risk groups and high prevalence settings, the latest recommendation is a radical departure probably marking the end of "exceptionalism" era and a marked reconceptualization of the requirements for consent. According to advocates of change who favour universal screening, the transformation of HI V disease into a complex chronic condition requiring long-term, ongoing clinical management means that the limits imposed when medicine had little to offer have outlived their justification.

It is argued that prevailing requirements impede wide-scale testing because they are burdensome and time-consuming. Furthermore, they relieve physicians of an obligation to offer testing. It should furthermore be acknowledged the fact that an opt-out approc.ch shifts the burden from those who would choose to undergo the test to those who would refuse.[2]

Implications for Developing Nations

Not unexpectedly, there are bound to be concerns as to the effects of adopting such policy particularly in developing and resource poor settings such as Nigeria. Such concerns include acceptability and cost effectiveness among others. Available studies however suggest that with adequate public health mobilization efforts, good results could be anticipated. With the introduction of voluntary counseling and testing (VCT) as a strategy for prevention of maternal to child transmission (PMTCT) in Nigeria, Ekanem and Gbadegesin reported 96.1 % acceptance rate among pregnant women in antenatal clinic in Lagos Nigeria if it would assist in preventing transmission of HIV to their babies.[9] Similarly Stringer et al reported increased HIV testing rates among pregnant women in a large, urban obstetric clinic population in the United States after implementation of a policy of routine HIV testing with active patient refusal[10]. Furthermore, lmmergluck *et al* have showed that universal screening is more cost effective than voluntary testing for HIV among pregnant women." The experience in Botswana clearly shows the advantage of universal screening over the voluntary testing strategy at reducing MTCT.[12] In 2004, to increase use of free national PMTCT and antiretroviral treatment (ARV) programs, Botswana began routine, noncompulsory (i.e., "opt-out") HIV screening in prenatal and other health-care settings. Concerns had been raised· that routine testing in Africa might deter women from seeking prenatal care and might result in fewer women returning for their test results and HIV care after testing.'2 To assess the early impact ·of routine testing on HIV -test acceptance and rates of return for care, the CDC Global AIDS Program and the PMTCT program in Botswana evaluated routine prenatal HI V testing at four clinics in Francistown, the second largest city in Botswana, where HIV prevalence has been greater than or equal to 40% since 1995. The results of that assessment, which indicated that, during February-April 2004, the first 3 months of routine testing, 314 (90.5%) of347 pregnant women were tested for HIV, compared with 381 (75.3%) of 506 women during October 2003-January 2004, the last 4 months of the opt-in testing period ($p<0.001$). The results clearly show that universal testing had clear advantage over voluntary testing in the setting of antenatal care. A good deal of similar outcome should be expected if universal testing is applied to all Hospital patients. This indeed is a radical departure from the past and doubtless a paradigm shift in HIV

testing; from exceptional ism to universalism. This indeed is a major policy issue. Universalism of HIV testing should take the front burner of policy discourse in HIV/AIDS management in the immediate future and health policy makers in Nigeria should give attention to this as there really is no alternative to getting along. A possible outcome of failure "getting along" will be the continued underestimation of the actual prevalence of the disease. This on its own merit is a major factor driving the epidemic.

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