

# HIV Infection Among Male Prison Inmates In Abuja, Nigeria. HIV Infection Among Prison Inmates

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## ABSTRACT

The Prison population is at risk of HIV infection even though they are most often neglected risk group in the area of prevention and management. The seroprevalence of Human Immunodeficiency Virus [HIV] infection among male inmates in Kuje prison, Abuja- Nigeria was determined. Two hundred sera specimens from the prison inmates were tested using 3 different test kits. Of 200 samples tested 12 [6%] had HIV-1 antibodies. The highest prevalence of HIV antibodies was found in the age group of 10-20 years [7.1%]. This was followed by the age group of 21-30 years [6.8%] while the least [4.0%] was observed among those aged 41-50 years. HIV among inmates particularly the young was high. Preventive and management measures should always be extended to inmates of Nigerian prisons. Prisoners should continuously be educated about HIV pandemic and methods of prevention. [Nature and Science 2010;8(6):92-94]. (ISSN: 1545-0740).

**Key words:** HIV, Prevalence, Inmates, Abuja, Nigeria

## INTRODUCTION

Acquire Immunodeficiency syndrome [AIDS] caused by Human immunodeficiency virus (HIV) is a global pandemic and the greatest public health concern in recent time. It has been demonstrated that prison population is at the risk of HIV even though they are most often neglected risk group in the area of prevention and management (Joshua et al, 2004). A prevalence of 8.7 % had been previously reported among Nigerian prison inmates in (Akpan *et al.* 2004). A Survey of some high security prisons in the country further revealed level of homosexual activities among prison inmates in the country (15 % in Kano prisons and 8 % at Kirikiri maximum security prison in Lagos) (Olayide,2001). Also Federal Bureau of Prison study in 1982 reported that 3% of Federal prison inmates engaged in homosexual activity while in incarceration (Nacci & Kane 1982). Most of these sexual activities among inmates usually occurs either voluntarily or through threats and coercion (Joshua and Ogboi 2008). Yet previous report on the prevalence of HIV among inmates in some Nigerian prisons seems not momentous enough to provoke expected effective management prison's, prevention and control strategies from Government and Non-Governmental Organization.

Therefore, this study was designed to determine the current status of HIV infection among prison inmates in Abuja, Nigeria with the view to generate information that may spur or stimulate planning, management, prevention and control strategies for Nigerian prisoners.

## MATERIALS AND METHODS

**Study population and design:** The study population included all categories of males inmates under incarceration, i.e.( convicted i.e. prisoners and those awaiting trial i.e remandees). Having obtained ethical clearance from prison authority, pre-counseling test was conducted on the interested candidates and their consent was sought. They were than stratified according to age group distribution using the stratified random sampling method.

A total of 200 blood samples were collected from the inmates. The sample size was based on the recommended WHO guidelines which take into consideration estimates of HIV prevalence in the population surveyed (F,M.O.H,2005).

Five milliliter of blood was collected by venepuncture at the clinic. The blood was allowed to clot, then centrifuged and the serum was carefully collected. Each sample was giving a Lab I.D code. Other demographical data of the patients were recorded accordingly. The sera were all screened for HIV using rapid capillus method and Genie II, while one discordant result was confirmed by the Determine 1&2 (tie-breaker) HIV kit [National Committee for Clinical Lab. Standards, (1993).

All the kits were used according to manufacturer`s instructions.

Post-test counseling was conducted before result was revealed to all candidates. There were a total of 500 male prison inmates out of which 200 inmates voluntarily participated and 300 inmates refused.

## RESULTS

Out of the 200 study population, 12 inmates (6.0%) of the study population were HIV positive. The highest prevalence (7.1%) of antibodies to HIV was found among those aged 10-20 years old, while

the lowest prevalence (4.0%) was found within the age group 41-50 years old, (See table 1).

**TABLE 1:** HIV distribution among different age groups.

Age groups(Year)	Number of samples	Number of HIV Positive	Number of HIV Negative
10 – 20	42	3 (7.1%)	39
21 – 30	88	6 (6.8%)	82
31 – 40	45	2 (4.4%)	43
41 – 50	25	1 (4.0%)	24
TOTAL	200	12 (6%)	188 (94%)

**TABLE 2:** Reaction pattern of the different HIV kits used.

KITS USED	NUMBER TESTED	NUMBER POSITIVE	% POSITIVE
CAPILLUS	200	12	6%
GENE II	200	11	5.5%
*DETERMINE 1&2	1	1	0.5%

\*Used only for discordant results from Capillus and Gene II.

## DISCUSSION

The impact of HIV pandemic is enormous, robbing many countries of the world of both human and natural resources. A previous report of HIV among prisons inmates in Nigeria has not yet provoked the expected Government policies on care, management and prevention strategies on Nigerian prison inmates (Olayide, 2001).

The 6% prevalence rate of HIV observed in this study does not support previously reported cases (Joshua and Ogboi, 2008). In that report a prevalence rate of 12% was obtained in Kaduna prison. This may be due to the poor health facilities in the Kaduna prison as compared to the Kuje prison which is a model maximum security prison. The HIV infection recorded in this study could have occurred either outside the prison before incarceration or inside within the wall of the prison. The precise information would have been obtained if HIV status of the

inmates is determined at the point of entry (before incarceration). The prison used in this study accommodated 500 inmates instead of the expected maximum capacity of 200 inmates. This situation is worrisome in the phase of the HIV scourge currently experienced worldwide.

The highest proportion of HIV occurred among those aged 10-20 and 21-30 years but lowest among 31-40 and 41-50 years old inmates. This trend compares favorably with other reports (Joshua and Ogboi 2008,). The younger group (10-30 years) represents the most sexually active population commonly prone to risky behaviors that could expose them to HIV infection.

These behaviors include unprotected sex and sharing of unsterilized materials such as surgical blades, Razor blades, needle and scissors etc. which they probably could not afford to buy and where HIV

preventive measures are not well understood (Joshua et al, 2006).

According to Akpan et al(2004), high prevalence of HIV among prisons inmates in Nigeria necessitate as a matter of urgency the need to institute counseling and screening before and after incarceration, and to provide adequate medical care including antiretroviral drugs to HIV positive inmates where necessary.

Crowding of inmates may promote the spread of the infection while incarceration and where possible HIV infected inmates should be isolated and confined to avoid the spread of the disease. Education remains a powerful weapon to reduce the spread HIV infection both within and outside the walls of prison (Autores et al,2002).

### CONCLUSION AND RECOMMENDATION

Nigeria is currently facing a generalized epidemic of HIV/AIDS affecting every facet of the society. The magnitude and intensity of the epidemic vary in size according to the sub-population groups, states and geographical zones of the country. Apart from the increasing HIV prevalence in the country, the most affected age group constitutes the most productive sector of the nation. The public health implication of both infections on families, communities and indeed the whole country will be enormous and cannot be over emphasized.

It is therefore recommended that the federal and state governments, the private sector, non-governmental organizations, United Nations (UN) agencies, multilateral and bilateral donors, and the media should plan and execute HIV prevention and control strategies among prison inmates.

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