

## Attitudes and Practices of Patients Receiving Anti-Retroviral Care in JOS towards HIV Prevention

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### Abstract:

**Background:** HIV infected individuals, are central to the prevention and control of HIV in Nigeria. Yet not much is known if they are concerned about preventing transmission of the virus to others. The purpose of this study therefore was to determine the knowledge attitude and practices of patients seeking HIV/AIDS care in Jos towards preventing transmission to others.

**Methodology:** A cross sectional descriptive study was conducted among HIV patients registered in the HIV/AIDS clinics of the three major public Hospitals in Jos, Plateau state using a multistage sampling method. Data was collected using interviewer administered questionnaire.

**Results:** A total of 400 HIV infected individuals comprising 70% females and 30% males were studied. Mean age of respondents was  $34.2 \pm 0.40$  years. Three hundred and twenty-eight (82%) of the respondents knew how to prevent themselves from infecting others with the HIV virus; 93% had good attitude towards preventing the transmission of HIV but 36.5% did not. About thirty three percent have had at least one new sexual partner after their HIV diagnosis and thirty percent (30%) have had unprotected sex with HIV negative partners or partners whose HIV status they did not know.

**Conclusion:** The behavior practices of many HIV patients favours the transmission of the virus to others. Efforts should be made to prevent this by incorporating counselling and prevention in care programs.

**Keywords:** attitudes, HIV, Prevention of transmission.

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### I. Introduction

HIV infected individuals are the exclusive reservoir and source of all HIV infections in the World.<sup>[1]</sup> As with other infectious diseases, the reservoirs occupy a central position in all prevention and control efforts. Elimination of the reservoir of infection is an accepted public health strategy for dealing with communicable diseases when the reservoir is non-human. However, when the reservoir is human, control efforts are directed towards protecting the susceptible host and rendering the reservoir incapable of serving as a source of infection. This is usually achieved through their identification and treatment, and in some cases isolation and quarantine. In the case of HIV/AIDS isolation and quarantine are both useless and unrealistic since the potential for transmission is life-long and many infected individuals are unknown. Control efforts therefore rely on the efforts of susceptible hosts to protect themselves and, more importantly, the conscious efforts of infected persons (reservoirs) to avoid infecting others. Although high risk sexual practices that favour the transmission of HIV to others are not uncommon among people living with HIV, the prevalence of high risk sex become substantially reduced when people become aware that they are HIV infected.<sup>[2],[3]</sup> Unfortunately not all people infected by the HIV virus know that they are so infected which makes the protection of susceptible hosts indispensable. In spite of this the few that know their status owe it as a duty to society to ensure that they do not transmit it to others. This places on them the responsibility of disclosing their status to all sexual and potential sexual partners, intending marriage partners and their care givers both in health care facilities and in the home including their family members. They also need to consider seriously the decision to have children and take all necessary measures to ensure that they do not infect the infants. In the face of widespread stigma and discrimination these are no easy tasks and some people living with HIV/AIDS either due to fear of discrimination, ignorance or deliberate intent to spread the virus ignore all these measures leading to avoidable infections with the attendant consequences to the individuals, their families and society.

In some parts of the world such as the United Kingdom and the United States of America, deliberate spread of HIV and all that is interpreted as deliberate or reckless exposure of others to the virus is outlawed and offenders, upon conviction, are liable to imprisonment.<sup>[4]</sup> In Nigeria and other developing countries there are no clear laws against intentional or negligent infection of others with the HIV virus (except the Lagos state law which prohibits doctors from transfusing blood that has not been screened for HIV, and the public health laws of the various states concerning communicable/contagious diseases which are considered unconstitutional by

current legal opinion.<sup>[5],[6]</sup> and nobody has to date been found guilty of this by a court of law in Nigeria.<sup>[7]</sup> In this circumstance all susceptible Nigerians who are unable to adequately protect themselves rely on the conscience of infected people for their protection. The purpose of this study therefore was to determine the knowledge attitude and practices of HIV patients seeking treatment in Jos towards preventing others from infection.

## II. Materials And Methods

### 2.1 Study location

Jos city is the administrative headquarters of Plateau state in central Nigeria. It is known for its temperate climate that has attracted Nigerians of various religious and cultural backgrounds to make it a home. The city has two tertiary public health facilities and one Faith based private health facility providing high quality antiretroviral care that attracts patients from all over north central Nigeria.

### 2.2 Methods

The study was cross sectional and descriptive in design. It was hospital based. Two health facilities, Jos University teaching hospital and Faith Alive hospital were randomly selected from the three public health facilities in Jos where antiretroviral care is provided. In each of the selected hospitals, a random sample of patients registered in the HIV clinic was selected. The selected patients were interviewed on their clinic day by trained final year medical students. Each of the selected patients completed an interviewer administered questionnaire, after an informed verbal consent. The questionnaires enquired about their knowledge of HIV transmission, as well as their attitudes and practices towards preventing the spread of the virus. The data was analysed using the statistical package for social sciences version 11.

## III. Results

A total of 400 patients were studied of which 70 % ( 280) were females and 30% males. The age ranged from 20-59 years with a mean of 34.2 years. 55.8 % ( 223) were married and 6% widowed. Majority (85.3%) were Christians, and most (41.3%) were civil servants, only few (16.3%) were unemployed or housewives. Table 1 shows the base line characteristics of the subjects.

Most of the patients (53.3%) knew they were living with HIV only within the last two years and about half (51.8%) started receiving antiretroviral treatment in the last two years. 73% of the study subjects had started receiving antiretroviral drugs at the time of the study.

Fourteen percent of study subjects believed they were infected by their spouses but majority of study subjects (54.8%) were unsure of the source of their infection.

Three hundred and twenty-eight (82%) of study subjects knew how to prevent others from acquiring HIV infection through them while about 20% lacked this knowledge. The ignorance was most marked in the ways of preventing mother to child transmission. (Table 2) Fourteen percent of study subjects were ignorant of the fact that their child could be infected through vertical transmission if they decide to have a new baby.

Ninety-three percent (93%) of study subjects think that PLWAS should protect others from acquiring HIV infection through them. However 36.5% of respondents would marry any body irrespective of his/her HIV status; and 18.3% would enter into new marriages without informing their prospective spouse of their HIV status.

About thirty-three percent (33.5%) of respondents have had at least one new sexual partner since they knew that they carry the HIV virus, and 3% have had more than three partners since then. Thirty percent have had unprotected sex with HIV negative partners or partners whose HIV sero-status they do not know since their diagnosis and 22.9% of respondents or their spouse have become pregnant after their diagnosis. About six percent (5.5%) of study subjects have contracted new marriages since their HIV diagnosis and thirty six percent (36.4%) of these did not inform their prospective spouses of their HIV diagnosis. Thirty percent were married to HIV negative individuals. (Table 3)

## IV. Tables

**Table 1 Base line characteristics of study subjects**

Variable	frequency (%)
Age (yrs)	
20-30	156 (39.0)
31-40	160 (40.0)
41-50	70 (17.5)
51-60	14 (3.5)
Total	400 (100)
Sex	
Male	120 (30)

Female	280 (70)
Total	400 (100)
Marital status	
Single	124 (31.0)
Married	223 (55.8)
Separated	29 (7.3)
Divorced	24 (6.0)
Total	400 (100)
Occupation	
Student	66 (16.5)
Civil servant	177 (44.3)
Business	82 (20.5)
House wife	37 (9.3)
Applicant	28 (7.0)
Other	10 (2.5)
Total	400 (100)
Religion	
Christianity	341 (85.5)
Islam	59 (14.8)
Total	400 (100)

**Table 2 Respondents' knowledge of how to prevent HIV transmission.**

Characteristics	Frequency (%)
Do not share tooth brush with others	
Yes	313 (78.3)
No	87 (21.8)
Do not share spoons/cups	
Yes	164 (41)
No	236 (59)
Do not have unprotected sex	
Yes	356 (89)
No	44 (11)
Do you think your baby could be infected if you or your spouse decides to have a baby?	
Yes	344 (86)
No	56 (14)
Exclusive formula feeding reduces the chances of mother to child transmission of HIV	
Yes	330 (82.5)
No	70 (17.5)
HIV medicine (nevirapine) given to child at birth reduces the chances of mother to child transmission of HIV	
Yes	299 (74.8)
No	101 (25.3)

**Table 3: High risk practices of our respondents.**

Activity	Frequency (%)
Number of new sexual partners since HIV diagnosis	
0	266 (66.5)
1	92 (23.0)
2	22 (5.5)
3	8 (2.0)
>3	12 (3.0)
Total	400 (100)

Have had unprotected penetrative sex	
Since HIV diagnosis	
Yes	120 (30)
No	280 (70)
Total	400 (100)
Had a new baby after HIV diagnosis	
Yes	91 (22.8)
No	299 (74.8)
Total	388 (97)
Mode of delivery	
Caesarean	40 (10.0)
Spontaneous vaginal	47 (11.8)
Instrumental	4 (1.0)
Total	91 (100.0)
Baby breast fed	
Yes	31 (7.8)
No	52 (13.0)
Contracted new marriage since HIV diagnosis	
Yes	22 (5.5)
No	326 (81.5)
No response	52 (13.0)
Total	400 (100)
Informed prospective spouse of HIV diagnosis before marriage	
Yes	14 (63.6)
No	8 (36.4)
Total	22 (100.0)
HIV status of new spouse	
Positive	14 (63.6)
Negative	6 (27.3)
Don't know	2 (9.1)
Total	22 (100)

## V. Discussion

Although the human immunodeficiency virus has killed more than 20 million people worldwide, a comprehensive public health approach that has stopped other epidemics is yet to be used to address it.<sup>[8],[9]</sup> This may explain the grave findings of this study and their implication on the prevention and control of HIV in Nigeria. A startling twenty percent of HIV infected individuals that are having contact with health care services lack the essential knowledge to prevent their spreading the virus to their family members and other members of society. This is worrisome because individuals seeking HIV/AIDS care should receive fundamentally, knowledge on how to live positively with the disease and, how to prevent their spread of the virus to others and their cross infection with other strains of the virus which may include resistant strains. Implying that the health care services are missing the opportunities to interrupt transmission of the virus in the course of their interactions with those seeking care and treatment. They may at the same time, also, be missing the opportunity to prevent the emergence and spread of resistant strains by failing to adequately educate them on prevention. Although it is known that only few patients in care in some developed countries receive counseling about preventing transmission of the virus such neglect should not occur in developing countries like Nigeria because many of them cannot even afford to care for a fraction of their population that are already infected and should therefore do all in their power to prevent additional infections.<sup>[10]</sup>

Majority of respondents (93%) believe that PLWAS should protect others from being infected by the HIV virus, which is encouraging but 36.5% of them would marry anybody irrespective of his HIV status and 18.3% of them would marry uninfected individuals without disclosing their HIV status. This is inconsistent with the attitude of preventing the transmission of HIV to others because their HIV negative spouses would obviously be exposed to the virus and may acquire the infection in the long run.

The inconsistent attitude could be as a result of ignorance of the ways HIV is transmitted or a burning desire to fulfill the social role of marriage. Getting married in the Nigerian society is considered a lofty goal especially among women, many of whom see the consummation of marriage as an essential step to the enhancement of their status in society.

Despite the relatively high level of knowledge (80%) of HIV prevention, a considerable number of our respondents still engage in practices that expose them and others to high risk of infection with HIV and other sexually transmitted diseases. For instance about 30% of respondents have had unprotected penetrative sex since their HIV diagnosis, 33% have had at least one new sexual partner and 3% have had more than three new sexual partners since they knew of their HIV status. This shows a gap between knowledge and practice even among our respondents who are a privileged few among the mass of Nigerians living with HIV/AIDS. They are privileged because they receive care in some of the best centres in the country where they should have received adequate education about HIV, including prevention education. It also shows that our respondents do not differ in high risk sexual behaviours, from the average Nigerian. A 2003 National HIV/AIDS and reproductive health survey found that more than a quarter of sexually active Nigerian men had more than one sexual partner in the preceding year.<sup>[11]</sup> This could be because some of our respondents, because they now feel well, have returned to their high risk life styles. For many people living with HIV, the same structural, interpersonal, and behavioural challenges that put them at risk for HIV persist beyond their HIV diagnosis and play a role in their inability to prevent HIV transmission.<sup>[12]</sup> The high risk behaviour of our respondents are similar to those of HIV positive persons in the USA where although majority feel concerned about not infecting others and make efforts to prevent transmission, as much as 20-50% still report unprotected sex with partners who are either HIV negative or of unknown HIV status to them.<sup>[12]</sup> However, it is known that preventive interventions targeting HIV infected persons are efficacious in reducing high risk sexual activity and thus preventing the transmission of HIV and other sexually transmitted infections.<sup>[13]</sup>

The high risk behaviours found among our respondents who are receiving care in some of the nation's model HIV care centres may be an indication that the health system has failed by not providing them the necessary health education/ risk reduction counseling to avoid such practices which portend grave dangers for them as individuals and for society. Effective HIV/AIDS care should incorporate risk-reduction counseling, distribution of condoms and promotion of their use as well of provision of ART when indicated including adherence counseling.<sup>[14]</sup> Such care would improve individual treatment outcomes and reduce disease transmission.<sup>[15]</sup>

The result of this study may be an indication that preventable HIV transmission still goes on even among people living with HIV/AIDS that are receiving care. This may have grave consequences as those among them who may be experiencing drug failure, could be transmitting resistant strains of the virus to others thereby spreading resistance in the community.

## VI. Conclusion

One of the limitations of this study is that the questionnaires were interviewer administered which may have affected the results. The attitude and practices were also self-reported and may have been under or over reported, considering the sensitive nature of the issues explored. Our findings indicate that high risk behaviours practices exist among HIV infected individuals receiving care and treatment in Jos. But they do not indicate whether this is due to the failure of the health care system to incorporate adequate prevention interventions or to ineffectiveness of existing prevention with positives interventions. Further studies are needed to determine if prevention interventions are incorporated in the package of care provided to the patients in these care facilities and their effectiveness.

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