

# Missed opportunities of poor implementation of prevention with positives among HIV-positive women on treatment in Ekiti State, Southwest Nigeria

## Abstract

**Introduction:** The current prevalence of HIV particularly in Nigeria does not reflect global efforts at curtailing the pandemic. One of the drivers increasing the rate of a new infection is the transmission of HIV by people already living with the virus. Scaling up prevention interventions and strategies will reverse this unwarranted trend.

**Method:** A cross-sectional study was carried out among women living with HIV (WLHIV) receiving care at the Adult Antiretroviral Clinic (ART) of the Ekiti State University Teaching Hospital, Ado-Ekiti between February and April 2021.

**Results:** One hundred and forty-eight eligible WLHIV participated and completed the study. The majority of the participants were married (74.3%), in a monogamous family setting (68.9%), within the reproductive age group (91.8%), and were Christians (75.7%). Only 5.4% earned all the components of prevention interventions and strategies for people living with HIV (PwP) leaving a wide gap of 94.6% missed opportunities.

**Conclusion:** The findings that WLHIV in this study are well literate about HIV risk transmission and prevention strategies and are adherent to their HAART medications did not translate to the adequate observance of prevention interventions and strategies. Scaling up prevention with positive programs (PwP) is urgently needed to prevent the further surge in the rate of new infections.

**Keywords:** HIV, prevention with positives, missed opportunities

Volume 12 Issue 4 - 2021

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**Received:** July 31, 2021 | **Published:** August 17, 2021

## Introduction

HIV/AIDS poses the main challenge to public health. An estimated 37.6 (30.2-45) million people are presently known to be living with HIV/AIDS worldwide.<sup>1-3</sup> Generally, struggles to prevent human immunodeficiency virus (HIV) infection have concentrated on reducing the risk of HIV infection among people who are HIV negative.<sup>1,4,5</sup> However, in recent times, there have been scale-ups of HIV testing, antiretroviral therapy (ART) availability, and improved care globally. As a result, more people living with HIV are living longer and better lives and this has brought a new task of meeting the HIV prevention needs of individuals living with HIV.<sup>5,6</sup> It has been identified that continued dependence on general HIV prevention campaigns may limit the efficacy and sophistication of prevention strategies, it may be more resourceful to change behaviors among fewer HIV positive people than many HIV negative individuals because unlike those who are HIV negative, they play a vital role in preventing new HIV infections, hence, the need for the introduction of positive prevention.<sup>6,7</sup>

Positive prevention also referred to as 'prevention with positives' can be defined as a set of approaches that help people living with HIV to live longer and healthier lives.<sup>8</sup> It is essential for both public health and human rights perspectives. It embraces a set of core features that help people living with HIV to: protect their sexual and reproductive health and avoid other sexually transmitted infections (STIs); slow HIV disease progression; and promote shared responsibility to protect their sexual health and reduce the risk of HIV transmission.<sup>8-10</sup> Basic approaches to prevention by people living with HIV consist

of health promotion, patients' sexual risk behaviors, partners' status and disclosure, signs and symptoms of sexually transmitted infections and other opportunistic infections, reproductive health, and family planning interventions.<sup>11-13</sup> Others are access to HIV, and sexual and reproductive health services, advocacy, community participation, and policy change.<sup>9,10,11,12</sup>

Although, it's been very successful in the United States of America,<sup>14,15</sup> it is, unfortunately, being ignored by health care providers, governments, and program managers in Nigeria.<sup>16</sup> Resources and efforts have been focused on the prevention of new HIV infections. Also, people living with HIV do not essentially recognize their prevention needs, as treatment has been seen as more vital.<sup>17</sup> There is scarcity of studies about prevention with positives in developing countries. This study aimed to describe the practice of prevention with positives among HIV-positive women in Ekiti State, Nigeria. This will create awareness among people living with HIV, health care providers, and policymakers and engenders interventions that will promote positive prevention in the developing countries where there is a huge burden of HIV.

## Methods

We carried out this cross-sectional study at the Adult Antiretroviral Clinic (ART) of Ekiti State University Teaching Hospital, Ado Ekiti, Ekiti State between February 2021 and April 2021. The ART clinic is one of the clinics in Ekiti State, Nigeria that provides comprehensive treatment for HIV-positive individuals in Ekiti State and its environments. The sample size was calculated using 0.2%

prevalence obtained in Ekiti State by the 2012 National HIV & AIDS and Reproductive Health Survey.<sup>18</sup> Ethical clearance was obtained from the Ethics and Research Committee of Ekiti State University Teaching Hospital, Ado Ekiti, Ekiti State; and informed consent was obtained from all participants. Systematic random sampling was used to select the participants. The first client out of every 3 was counseled. Inclusion criteria for the study were HIV-positive women on Highly Active Antiretroviral Drugs, aged 18 years and above who gave consent while exclusion criteria were severe medical illness or mental illness, and refusal to give consent. Out of 160 clients counseled, 148 agreed and gave consent for the study.

Self-administered questionnaires were administered to the participants. Questionnaires were made up of a biodata section that

described their age, marital status, type of marriage, employment status, religion, and place of residence. The second section was about prevention with positive practices like partner disclosure, use of the condom, sharing of sharp objects, knowledge about contracting other strains of HIV, pap smear, family planning services, and others. Data obtained was analyzed using Statistical Package for Social Sciences version 25. Data are presented in frequency and percentages.

## Results

During this study, 148 women participated and completed the study. The sociodemographic characteristics were depicted in Table 1. The majority were in the reproductive age group. (Table 1) Most were in monogamous relationships. (Table 1) Most participants were Christians and of the Yoruba ethnic group.

**Table 1** Sociodemographic characteristics of participants

Characteristics	Frequency	Percentage (%)
<b>Age</b>		
<20 years	6	4.1
20-24 years	12	8.1
25-29 years	28	18.9
30-34 years	38	25.9
35-40 years	36	24.9
41-44 years	14	9.5
44-49 years	8	5.4
≥50 years	6	4.1
<b>Marital Status</b>		
Single	26	17.6
Married	110	74.3
Separated	4	2.7
Divorced	8	5.4
<b>Type of marriage</b>		
Monogamy	102	68.9
Serial monogamy	20	13.5
Polygamy	26	17.6
<b>Religion</b>		
Christianity	112	75.7
Islam	24	23
None	2	1.4
<b>Tribe</b>		
Yoruba	118	79.9
Igbo	20	13.5
Hausa	4	2.7
Others	6	4.1
<b>Residence</b>		
Urban	86	58.1
Semi-urban	12	8.1
Rural	50	33.8

Table Continued...

Characteristics	Frequency	Percentage (%)
<b>Education</b>		
No formal education	6	4.1
Primary uncompleted	10	6.8
Primary completed	12	8.1
Secondary uncompleted	28	18.9
Secondary completed	5	6.8
Tertiary uncompleted	18	12.2
Tertiary completed	64	43.2
<b>Occupation</b>		
Employed	92	62.2
Unemployed	56	37.8

Only 8 participants (5.4%) practiced all the components of prevention with positives. (Figure 1) More than half were not using any family planning method despite being informed about its importance. Almost all participants (95.1%) adhered to their medications while the majority were well educated about HIV transmission risk assessment

and healthy living. (Figure 1) Two-thirds have disclosed their status to their partners while prevention practices like consistent use of condoms and avoidance of sharing sharp objects with others were being practiced by only 12.2%. Thirty-one (41.9%) had a Pap smear for cervical screening within the last year (Figure 1).

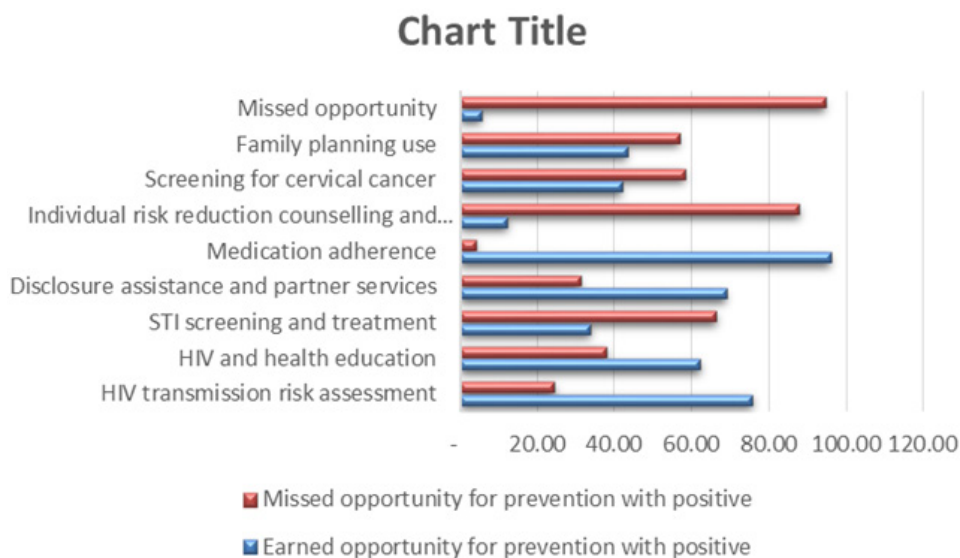


Figure 1 Showing the title chart of missed and earned opportunities of Prevention with Positives (PwP) in Ekiti State, southwest, Nigeria.

## Discussion

This study examined the three pillars of HIV prevention with positives (PWP); protecting sexual and reproductive health and avoidance of sexually transmitted infections (STIs), Delay HIV disease progression, and promotion of shared responsibility to protect sexual health and reduce the risk of HIV transmission to others. To properly investigate these three pillars among our study population, our study tool addressed seven areas of prevention interventions and strategies; HIV transmission risk assessment, HIV and health education, STI screening and treatment, Disclosure assistance and partner services, Medication adherence, Individual risk reduction, and prevention practices, Screening for cervical cancer and Family planning use.

The majority of the women that participated in the study were in the reproductive age group between 25-40years. Most participants were in monogamous relationships, Christians, and of Yoruba ethnic group. This is a reflection of what is obtainable in the environment where this study was carried out.

At baseline, a good number (75.7%) of the respondents had sound knowledge on HIV transmission risk assessment with the majority 66.2% being well equipped with information about HIV and health education. These findings are higher than that seen in the country's National Reproductive Health Survey, where it was observed that correct knowledge on all routes of possible transmission and methods of prevention was 54% and 52.5% respectively.<sup>19</sup> In a study carried out in Northcentral Nigeria among 318 People Living with HIV AIDS

receiving care at a treatment clinic, a higher knowledge on possible means of transmission and prevention of HIV was seen. The study reported that overall; 77.7% of respondents had good knowledge of HIV and AIDS.<sup>20</sup> This study also revealed an impressive rate of medication adherence of 95.9% with relatively low missed opportunities (4.1%). This finding is similar to a high adherence prevalence rate found in an earlier multicentre study from Ado-Ekiti metropolis, southwest Nigeria by Aduloju et al.<sup>21</sup>

Thirty-one percent did not disclose their HIV status to their spouses. This number is high because of the negative effect on partner services. Studies have shown that Women may not disclose their status to their partners due to fear of violence or rejection.<sup>22,23</sup> We also found out that only 12.2% had been counseled on risk reduction and prevention practices. This can lead to the emergence of resistant strains of HIV and further increase the incidence of HIV, thereby counteracting the global and national 90-90-90 target of ending the HIV/AIDS epidemic by 2030.<sup>24</sup>

Despite the recommendation by the WHO that HIV screening should be done at enrolment,<sup>25</sup> only 38.9% of participants in this study have had sexually transmitted infections (STI) screening and treatment. HIV-positive patients with STI co-infection are at risk of increased morbidity and mortality and can also lead to a rise in the incidence of HIV infection.<sup>26</sup> Those who have been screened for cervical cancer were below half of the respondents. Meanwhile, HIV-positive females are at higher risk of abnormal Pap smears than HIV-negative women.<sup>27</sup> Similarly, in this study, we found a high unmet need for family planning. Those using any form of family planning were also less than half. This is similar to studies from Malawi and Ethiopia where 51.2% and 30.2% used some forms of contraceptives.<sup>28,29</sup> This will not promote adherence to PMTCT as it can cause an increase in mother-to-child transmission of HIV.<sup>30</sup>

In all, we did not see any change in the prevalence of missed opportunities in prevention strategies and interventions for women living with HIV for over three decades of the HIV epidemic in Nigeria. Only 5.4% of WLHIV earned all the opportunities of prevention with positives intervention and strategies. We recorded very high missed opportunities. Similar high but lower missed opportunities (60%) had been documented for prevention continuum in a predominantly Black and Latino community in New York by Zucker et al.<sup>31</sup> Also, in Ethiopia, Fetene and Feleke found 76.1% missed opportunities for earlier HIV testing and diagnosis among 425 study population.<sup>32</sup> On the contrary, in a study from a high resource setting where access to healthcare is unrestricted, missed opportunities for earlier diagnosis have been reduced to 14%.<sup>33</sup>

## Conclusion

In sum, ART has afforded many HIV-positive people the opportunity to live a more normal and healthy lifespan. This situation provides service providers the possibility of promoting more aggressively a double message for HIV-positive individuals concerning HIV prevention: (1) the necessity to protect oneself from disease progression, coinfection, and superinfection and (2) the need to accept some social responsibility of not transmitting HIV to others. It is of utmost importance that HIV prevention for HIV-positive and HIV-negative persons alike be addressed more holistically than before. This will create awareness among people living with HIV, health care providers, and policymakers and prompts interventions that will promote positive prevention in the developing countries where there is an enormous burden of HIV.

## Acknowledgments

None.

## Funding

None.

## Conflicts of interest

No potential conflicts of interest are reported by the authors.

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