

# Community attitude towards the reproductive rights and sexual life of people living with HIV/AIDS in Olorunda Local Government Area, Osogbo, Nigeria

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**Background:** Globally, the *Human immunodeficiency virus/acquired immunodeficiency syndrome* (HIV/AIDS) epidemic remains a major public health problem. In most countries in sub-Saharan Africa, HIV/AIDS has already reversed the post-independence developmental gains.

**Purpose:** This study assessed community attitudes regarding the reproductive rights and sexual life of people living with HIV/AIDS (PLWHA) in Olorunda Local Government Area of Osun State, Southwestern Nigeria.

**Design and methods:** In a community-based descriptive cross-sectional study, the sample size calculation was based on the assumption that 67% of the target population has a negative attitude regarding the reproductive rights of PLWHA; a confidence interval (CI) of 95% was used. A minimum sample size of 340 was obtained using the formula  $n = Z^2pq/d^2$ . An anticipated 10% nonresponse rate was added to obtain a sample size of 374; a multistage sampling technique was utilized to select a total of 450 respondents. Data collected through a semistructured standardized and pretested questionnaire were analyzed using Statistical Package for Social Sciences software, version 15.

**Results:** The study revealed that 283 (66.6%) and 142 (33.4%) of respondents were urban and rural dwellers, respectively. Mean age of respondents was 28.7 years  $\pm$  2.2 years. Four hundred and two (94.6%) respondents were aware of HIV/AIDS, and 88.7% had knowledge of at least six different modes of HIV/AIDS transmission. About 30.7% of respondents had discriminatory and stigmatizing attitudes towards PLWHA, and 50.9% and 44.8% had negative attitudes towards their sexual and reproductive rights, respectively. There were significant associations between gender, marital status, educational status, occupation, and residential area of respondents and their attitude towards the reproductive and sexual right of PLWHA ( $P < 0.05$ ).

**Conclusion and recommendation:** Discriminatory and stigmatizing attitudes to PLWHA found among respondents translated into a negative attitude regarding the reproductive and sexual rights of PLWHA. There is an urgent need to institute programs for raising community awareness about the rights of PLWHA, especially in rural areas, and to strengthen legislative provisions for protecting and preserving the reproductive rights of PLWHA.

**Keywords:** community attitudes, PLWHA, reproductive and sexual rights

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## Introduction

In the desire to have children, the intersection between *Human immunodeficiency virus* (HIV) status and childbearing is complicated. However, HIV-positive men and women report strong pressure from family members, people in their communities, and

health care providers to give up the idea of having children, either because of the risk of perinatal HIV transmission or out of concern for the children raised by parents who may die prematurely of acquired immunodeficiency syndrome (AIDS). On the other hand, childbearing in most societies plays a central role in the social identity of both men and women, and couples are expected to have children. In this sense, it is not surprising that the preponderance of research from both developed and developing countries suggested that HIV status does not depress fertility desires, since pregnancy does not have an adverse effect on disease progression.<sup>1</sup>

Most, if not all, adults desire a healthy, happy, and rewarding sexual life. Sexuality is a central part of being human, involving attitudes toward sex, intimacy, sexual desires, and the ability to fulfill one's desires. Sexuality is a central aspect of being human throughout life and encompasses sex, gender identities and roles, sexual orientation, eroticism, pleasure, intimacy and reproduction. Sexuality is experienced and expressed in thoughts, fantasies, desires, beliefs, attitudes, values, behaviours, practices, roles and relationships. While sexuality can include all of these dimensions, not all of them are always experienced or expressed. Sexuality is influenced by the interaction of biological, psychological, social, economic, political, cultural, ethical, legal, historical, religious and spiritual factors.<sup>2,3</sup> Sexual rights include the right of all humans to pursue a safe, satisfactory, and pleasurable sex life with the partner of their choice, free of coercion, discrimination, and violence.<sup>3</sup> All humans should have the right to the highest possible standard of sexual health, which includes access to sexual and reproductive health care services.

While many HIV-infected individuals do not wish to have children, others desire children despite their infected status. But it should be underscored here that the risk of vertical transmission (transmission from mother to child during pregnancy, labor, delivery, and breastfeeding) is a problem.<sup>1</sup> HIV/AIDS remains a major health and developmental challenge in Nigeria. The country is a complex mixture of diverse ethnic groups, languages, culture, religions, and regional political groupings, all of which are major challenges for HIV prevention programs.<sup>4</sup>

HIV-related stigma and discrimination are pervasive at the national and local levels. Judgmental attitudes towards people living with HIV persist, making it difficult for people living with HIV to disclose their status for fear of hostility or discrimination, and of negatively affecting the quality of care they receive. Far too often, health care professionals have refused to care for HIV-positive patients, disclosed clients'

HIV status without consent, provided highly directive and biased counseling on contraceptive method, and pressured women to undergo sterilization.<sup>5</sup> All of these problems are compounded by the fact that many men and women with HIV are among society's most vulnerable individuals, and are already struggling against diverse conditions such as poverty, oppression, and discrimination.<sup>1</sup>

While the ability to lead a healthy sexual life, and to choose whether and when to have children are well-established features of reproductive health and human rights, issues surrounding sexual activity and childbearing among HIV-infected women and men have received little attention in sub-Saharan Africa, especially in Nigeria. This study therefore aims to assess community attitude towards reproductive rights and sexual life of people living with HIV/AIDS (PLWHA) in Olorunda Local Government Area, Osun State, Nigeria, and suggests strategies for improving community attitudes towards PLWHA and removing obstacles and deterrents to certain preventive measures.

## Materials and methods

### Description of study area

Olorunda Local Government Area is one of 30 Local Governments in Osun State. It has a total of 12 wards and an estimated population of about 250,000.<sup>6</sup> The inhabitants are mainly Yoruba speaking, and majorly small-scale traders; 53.4% are Christian, 46.% Muslim, and 0.5% Traditionalist. HIV prevalence in Osun State is below the national average for Nigeria, which was 4.1% in 2011.<sup>7</sup>

### Study design

This study was descriptive in nature and utilized a cross-sectional survey method to gather information about community attitude towards the reproductive rights and sexual life of PLWHA in Olorunda Local Government Area, Osun State, Nigeria.

### Sample size estimation

The Leslie Fischer's formula for calculating sample size for a population greater than 10,000<sup>8</sup> was used, with the confidence interval (CI) set at 95%, normal deviation  $Z = 1.96$ ,  $d = 0.05$  and the assumption that 67%<sup>9</sup> of the target population has a negative attitude regarding the reproductive rights of PLWHA. A minimum sample size of 340 was obtained using the formula  $n = Z^2pq/d^2$ , and an anticipated 10% nonresponse rate was added to the minimum calculated sample size to obtain a total minimum sample size of 374. A total of 450 respondents were surveyed.

## Sampling technique

In a multistage sampling technique, simple random sampling (employing simple balloting) was utilized to select a third of the wards in Olorunda Local Government Area of Osun State, Nigeria (giving two urban and two rural wards as designated by the local council). Based on the enumeration areas used for the 2006 Nigerian national census,<sup>6</sup> a total sampling of all the enumeration areas in the selected wards was done. Systematic random sampling technique was then employed to select streets from each enumeration area and houses on the streets. In each house selected, all consenting adults (18 years and above) were interviewed until the sample size was completed.

## Study instrument

A semistructured standardized and pretested questionnaire was administered to the respondents to gather information about their sociodemographic characteristics, knowledge about HIV, attitudes towards the sexual life of PLWHA, and attitudes towards the fertility desires of PLWHA. Questionnaires were administered by trained research assistants who could speak both English and the local Yoruba language. A vernacular version of the questionnaire was prepared and was back translated for the purpose of validity.

## Data management

Data were collated manually, checked for errors, and entered into the computer. The Statistical Package for Social Sciences (SPSS) software (IBM Corporation, Armonk, NY, USA), version 15 was used for analysis. Bivariate analysis was done using Chi-square test statistics to test association between two categorical variables. CI was set at 95% and *P*-value at 0.05.

## Ethical consideration

Ethical clearance was obtained from the Research Ethical Review Committee of LAUTECH Teaching Hospital, Osogbo, Nigeria. Permission to conduct the study was obtained from the Olorunda local government area authority and the community leaders. Informed consent was sought and obtained from each respondent.

## Results

A total of 450 respondents were surveyed, but only 425 respondents completed the questionnaire, giving a 94.4% response rate. The age of the respondents ranged from 18 years to 70 years; 48.0% were between 21 years–30 years old (mean age 28.7 years  $\pm$  2.2 years). Two hundred and

**Table 1** Sociodemographic characteristics of respondents (n = 425)

| Characteristics                       | n (%)      |
|---------------------------------------|------------|
| Age                                   |            |
| ≥20 yrs                               | 88 (20.7)  |
| 21–30 yrs                             | 204 (48.0) |
| 31–40 yrs                             | 83 (19.5)  |
| 41–50 yrs                             | 20 (4.7)   |
| 51–60 yrs                             | 21 (4.9)   |
| 61–70 yrs                             | 9 (2.1)    |
| Sex                                   |            |
| Male                                  | 212 (49.9) |
| Female                                | 213 (50.1) |
| Marital status                        |            |
| Single                                | 203 (47.8) |
| Ever married                          | 222 (52.2) |
| Educational status                    |            |
| No formal education                   | 51 (12.0)  |
| Primary school                        | 60 (14.0)  |
| Secondary                             | 155 (36.5) |
| Postsecondary (OND, HND)              | 64 (15.1)  |
| Tertiary                              | 95 (22.4)  |
| Occupation                            |            |
| Unemployed/housewife                  | 26 (6.1)   |
| Students                              | 139 (32.7) |
| Unskilled labor; eg, farming, trading | 115 (27.1) |
| Skilled labor; eg, driver, artisan    | 121 (28.5) |
| Professional; eg, teacher, nurse      | 24 (5.6)   |
| Religion                              |            |
| Christianity                          | 227 (53.4) |
| Islam                                 | 196 (46.1) |
| Traditional                           | 2 (0.5)    |
| Residential area                      |            |
| Urban                                 | 283 (66.6) |
| Rural                                 | 142 (33.4) |

**Abbreviations:** HND, Higher National Diploma; OND, Ordinary National Diploma; yrs, years.

twelve respondents were male (49.9%), 203 (47.8%) were single, and 139 (32.7%) were students. Seventy-four percent of respondents had at least secondary education, and 12.0% had no formal education (Table 1).

Awareness of the reality and causes of HIV/AIDS was very high, with only 5.4% and 11.3% not aware of its existence

**Table 2** Knowledge of respondents (n = 425) about HIV transmission

| Knowledge of route of transmission | Yes n (%)  | No n (%)   | I don't know n (%) |
|------------------------------------|------------|------------|--------------------|
| Mosquito bite                      | 143 (33.6) | 216 (50.8) | 66 (15.6)          |
| Handshake or hugging               | 119 (28.0) | 273 (64.2) | 33 (7.8)           |
| Sharing of sharp objects           | 404 (95.0) | 11 (2.6)   | 10 (2.4)           |
| Blood transfusion                  | 411 (96.7) | 3 (0.7)    | 11 (2.6)           |
| Sexual intercourse                 | 417 (98.1) | 3 (0.7)    | 5 (1.2)            |
| Multiple sexual partners           | 412 (96.9) | 3 (0.7)    | 10 (2.4)           |
| Pregnant mother to child           | 321 (75.5) | 64 (15.1)  | 40 (9.4)           |
| Breastfeeding                      | 297 (69.9) | 53 (12.5)  | 75 (17.6)          |

or not knowing at least one of its causes, respectively. Table 2 shows respondents' knowledge of the various means through which HIV can be transmitted. A significant number of respondents believed HIV/AIDS could be transmitted by sharing sharp objects (404, 95.0%), blood transfusion (411, 96.7%), unprotected sexual intercourse (417, 98.1%), and multiple sexual partners (412, 96.9%). Furthermore, 321 (75.5%) and 297 (69.9%) respondents believed HIV/AIDS could be transmitted through pregnant mother to child and breastfeeding, respectively. However, 143 (33.6%) and 119 (28.0%) respondents had the misconception that HIV could be transmitted through mosquito bite and through casual physical contact (such as handshakes or hugging), respectively.

Table 3 shows the assessment carried out on the various discriminating and stigmatizing attitudes PLWHA experience from community members. The majority of respondents showed positive attitudes towards PLWHA. Two hundred and fifty-seven (60.5%) respondents signified they would eat from the same plate as PLWHA. Almost 80% of the respondents also signified that they would comfortably sit together in social gatherings (77.9%) and shake hands (74.4%) with PLWHA.

Table 4 shows the perception of respondents about the reproductive and sexual rights of PLWHA. Although 286 (67.3%) correctly opined that PLWHA have sexual feelings like uninfected people, 258 (60.7%) respondents were of the opinion that PLWHA have no right to continue having sex, while 224 (52.7%) respondents said that PLWHA should not bear children and 273 (64.2%) alleged that even if safer sex techniques were provided, they would not continue to have sex with an HIV-positive spouse. However, the issue of retroviral drugs for the prevention of mother-to-child transmission positively affected the opinion of some respondents; 287 (67.5%) respondents signified that it is acceptable for PLWHA to become pregnant because there is a drug to prevent mother-to-child transmission of HIV.

Table 5 shows the association between respondents' sociodemographic characteristics and their attitudes

**Table 3** Assessment of discriminating and stigmatizing attitudes of respondents (n = 425) against PLWHA

| Variables                            | Yes<br>n (%) | No<br>n (%) |
|--------------------------------------|--------------|-------------|
| Hugging                              | 296 (69.7)   | 129 (30.3)  |
| Eating together from the same plate  | 257 (60.5)   | 168 (39.5)  |
| Sitting together in social gathering | 331 (77.9)   | 94 (22.1)   |
| Handshake                            | 316 (74.4)   | 109 (25.6)  |
| Sleeping together in the same room   | 271 (63.8)   | 154 (36.2)  |

**Abbreviations:** PLWHA, people living with HIV/AIDS; HIV, human immunodeficiency virus; AIDS, acquired immunodeficiency syndrome.

**Table 4** Perception of respondents (n = 425) towards the reproductive rights of PLWHA

| Variables   | Negative<br>perception<br>n (%) | Positive<br>perception<br>n (%) |
|---|---------------------------------|---------------------------------|
| PLWHA have no right to continue having sex  | 258 (60.7)                      | 167 (39.3)                      |
| PLWHA should not get married  | 209 (49.2)                      | 216 (50.8)                      |
| PLWHA should not bear children  | 224 (52.7)                      | 201 (47.3)                      |
| PLWHA should continue having sex using safer techniques   | 195 (45.9)                      | 230 (54.1)                      |
| I will continue having sex using safer sex techniques with my spouse even if he/she discloses to me that he/she is HIV positive | 273 (64.2)                      | 152 (35.8)                      |
| It is all right for PLWHA to become pregnant because there is a drug to prevent MTCT of HIV                                     | 138 (32.5)                      | 287 (67.5)                      |
| PLWHA still have sexual feelings like uninfected people   | 139 (32.7)                      | 286 (67.3)                      |

**Abbreviations:** HIV, human immunodeficiency virus; AIDS, acquired immunodeficiency syndrome; MTCT, mother-to-child transmission; PLWHA, people living with HIV/AIDS.

towards the reproductive and sexual rights of PLWHA. There was significant association between gender, marital status, educational status, occupation, and residential area of respondents and their attitudes towards the reproductive rights of PLWHA ( $P < 0.05$ ).

## Discussion

The studied population exhibited a very high level of awareness of the existence of HIV/AIDS, and also a high level of knowledge of the various routes of transmission of the virus. This corroborates other studies in which knowledge of HIV transmission was significantly high among studied respondents.<sup>10–12</sup> However misconceptions about some routes of transmission still existed in about a third of the respondents, who erroneously believed that mosquitoes (33.6%) and casual physical contact such as handshakes or hugging (28.0%) could transmit the disease. Such misconception is an important one that needs to be addressed by HIV prevention programs, as it has been shown to serve as a barrier to uptake of HIV preventive measures and also engenders discriminating and stigmatizing behaviors.<sup>5,13–15</sup>

Assessment of respondents' discriminating and stigmatizing behaviors and attitudes towards PLWHA showed that between a quarter and a third of the respondents have discriminating and stigmatizing attitudes towards PLWHA on all five items raised. These attitudes became more pronounced concerning the issue of reproductive and sexual rights of PLWHA. The study showed that a significant proportion of respondents (more than half) opined that PLWHA have no rights to continue

**Table 5** Association between respondents' (n = 425) attitude towards the reproductive health of PLWHA and their sociodemographic data

| Variable                           | Negative attitudes<br>n (%) | Positive attitudes<br>n (%) | Chi-square<br>P-value | Remarks |
|------------------------------------|-----------------------------|-----------------------------|-----------------------|---------|
| Age in years                       |                             |                             |                       |         |
| ≤20                                | 27                          | 61                          | $\chi^2 = 3.09$       | NS      |
| 21–40                              | 72                          | 215                         | $P = 0.21$            |         |
| >40                                | 18                          | 32                          |                       |         |
| Sex                                |                             |                             |                       |         |
| Male                               | 31 (14.6)                   | 181 (85.4)                  | $\chi^2 = 35.32$      | S       |
| Female                             | 86 (40.4)                   | 127 (59.6)                  | $P < 0.0000001$       |         |
| Marital status                     |                             |                             |                       |         |
| Single                             | 33 (19.4)                   | 170 (80.6)                  | $\chi^2 = 28.47$      | S       |
| Ever married                       | 88 (39.6)                   | 134 (60.4)                  | $P = 0.0000001$       |         |
| Educational status                 |                             |                             |                       |         |
| Less than secondary education      | 59 (53.2)                   | 52 (46.8)                   | $\chi^2 = 49.44$      | S       |
| Secondary education or higher      | 58 (18.5)                   | 256 (81.5)                  | $P < 0.0000001$       |         |
| Occupation                         |                             |                             |                       |         |
| Unemployed                         | 15 (57.7)                   | 11 (42.3)                   | $\chi^2 = 59.42$      | S       |
| Student                            | 13 (9.4)                    | 126 (90.6)                  | $P < 0.00000001$      |         |
| Unskilled labor                    | 54 (47.0)                   | 61 (53.0)                   |                       |         |
| Skilled labor                      | 32 (26.4)                   | 89 (73.6)                   |                       |         |
| Professional                       | 3 (12.5)                    | 21 (87.5)                   |                       |         |
| Religion                           |                             |                             |                       |         |
| Christianity                       | 54 (23.8)                   | 173 (76.2)                  | $\chi^2 = 3.42$       | NS      |
| Others (eg, Islam and traditional) | 63 (31.8)                   | 135 (68.2)                  | $P = 0.07$            |         |
| Residential area                   |                             |                             |                       |         |
| Urban                              | 47 (16.6)                   | 236 (83.4)                  | $\chi^2 = 50.62$      | S       |
| Rural                              | 70 (49.3)                   | 72 (50.7)                   | $P < 0.0000001$       |         |

**Abbreviations:** NS, not significant; PLWHA, people living with HIV/AIDS; HIV, human immunodeficiency virus; AIDS, acquired immunodeficiency syndrome; S, significant.

having sex, to get married, or to bear children, even with safer sex techniques. This sexual and reproductive discrimination is in line with findings in a survey done in South Africa in which more than half of the respondents thought that PLWHA should not be sexually active, while less than a third thought PLWHA should have children and about three-quarters believed they should get married to another infected person.<sup>9</sup> In another related study, about 42% of respondents exhibited discriminatory attitudes in at least five out of the 20 relevant items.<sup>16</sup> These studies corroborate our findings. Stigma and discrimination has been found to deter individuals from finding out their status and rights, and it inhibits those who know they are infected from disclosing their status, from taking action to protect others, and from seeking treatment and care for themselves. This fact was well displayed in this study; about two-thirds of the respondents alleged that they would discontinue having sex with an HIV-positive spouse even with safer sex techniques. We concluded that discriminatory attitudes towards PLWHA are common and cover different aspects of their lives. Intervention programs are thus warranted, and an integrated approach is required.<sup>17</sup>

These discriminatory attitudes against PLWHA may be connected with misconceptions about some non modes of

transmission of HIV, including mosquito bites and casual physical contact such as handshakes and hugging. The stigma toward PLWHA among the general population could be caused in part by such inaccurate information about the transmission of HIV, which creates irrational behavior and misperceptions of personal risks.<sup>18</sup> In a study by Lau and Tsui<sup>19</sup> logistic regression analysis demonstrated that misconceptions about HIV transmission routes remained strongly associated with discriminatory attitudes toward PLWHA; hence, health education and awareness campaigns for the populace in order to clarify misconceptions are necessary. The importance of such campaigns has been demonstrated by notable improvements in the level of acceptance of PLWHA coupled with an increase in knowledge about HIV/AIDS and a substantial reduction in negative perceptions about PLWHA in an intervention study carried out in Hong Kong.<sup>20</sup> In addition to education programs, there is an urgent need to put in place a behavioral communication change intervention program, because stigma and discrimination constitute one of the greatest barriers to dealing effectively with the HIV epidemic.

This study showed that the attitude towards the reproductive and sexual life of PLWHA among respondents vary according to sociodemographic characteristics such



as gender, marital status, educational status, occupation, and residential area. There was a significant association between the educational status of the respondents and their attitude towards reproductive health of PLWHA; the higher their educational status, the higher the chances of them having a positive attitude towards PLWHA. This indicates that education plays an important role in shaping people's perspective of life and societal issues, a finding that is similar to reports from other studies.<sup>17,21</sup>

## Conclusion

This study has shown that, despite high awareness of HIV/AIDS and high knowledge of transmission routes, the attitude of many respondents towards PLWHA and their reproductive and sexual rights was still negative. These findings suggest that the sexual and reproductive health rights of HIV-infected women and men may be an important target as part of efforts to reduce HIV/AIDS-related stigma. Misconceptions also persist about some routes of transmission. A need to redirect policy guidelines towards resolving community stigmatization and discrimination against PLWHA needs to be addressed. Stigma reduction programs should address knowledge gaps, such as fears of casual contact and transmission through mosquitoes. Creating new awareness about the reproductive health rights of PLWHA in the community is also important, especially in the rural areas. Health policies and services are required to reinforce the reproductive rights of HIV-infected individuals in countries where HIV is prevalent.

## Disclosure

The authors report no conflict of interest in this work.

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