

## Knowledge gap about HIV/AIDs and stigma associated beliefs in an urban Community in Southwest Nigeria: Implication for social work

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### Abstract

**Objectives:** In Nigeria, over the years, community beliefs regarding HIV strongly influence stigma and discrimination experienced by People Living with HIV (PLHIV). Perception about its transmission has led to loss of income/livelihood, loss of marriage & childbearing options, poor care within the health sector, withdrawal of care-giving in the home, loss of hope & feelings of worthlessness as well as loss of reputation in the society. This study assessed community awareness and perception about HIV/AIDS in Osogbo Local Government, Osun State.

**Materials and Methods:** It is a cross sectional descriptive survey. A total of 449 respondents were selected using multi stage sampling technique.

**Result:** A little less than half i.e 208 (46.3%) believed that HIV can be transmitted through kissing, and 114 (25.4%) through hugging. One hundred and eleven (24.7%) believed that it is an act of God's punishment. Some respondents, 140(31.2%) believed that infected individuals should not get married, 67 (14.9%) will not keep friendship with infected individuals, 76 (16.9%) will not employ infected individual while 333(74.2%) believed infected individuals should be secluded from the society. A little less than half i.e 209 (46.5%) are yet to do HIV test. A significant association was found between occupation, educational status and the perception about PLHIV (p=0.000)

**Conclusion:** There is high level of awareness about HIV among studied respondents. This pattern was however marred with misconceptions together with discriminating and stigmatizing tendencies, which could affect response to HIV scourge prevention. Therefore, continuous health education through health talks and mass media exposure will be helpful to improve misconception about HIV transmission and treatment.

**Keywords:** Community; perception; HIV/AIDS; people living with HIV/AIDS

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## **Le manque de connaissance sur le VIH / sida et la stigmatisation associée croyances dans une Communauté urbaine au sud-ouest du Nigeria: Implication pour le travail social**

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### **Résumé**

**Objectifs:** Au Nigeria, au fil des ans, les croyances de la communauté concernant le VIH influencent fortement la stigmatisation et la discrimination subie par les PVVIH. Perception sur sa transmission a conduit à la perte de revenus / moyens de subsistance, la perte du mariage et de procréation des options, le manque de soins dans le secteur de la santé, le retrait de prodiguer des soins à la maison, la perte d'espoir et un sentiment d'inutilité ainsi que la perte de la réputation dans la société. Cette prise de conscience de la communauté étude a évalué et la perception sur le VIH / SIDA à Osogbo gouvernement local, l'Etat d'Osun.

**Méthodes:** Il est une enquête descriptive transversale. Un total de 449 répondants ont été sélectionnés à l'aide de plusieurs techniques d'échantillonnage de la scène.

**Résultat:** Un peu moins de la moitié à-dire 208 (46,3%) croit que le VIH peut se transmettre par un baiser, et 114 (25,4%) grâce à étreindre. Cent onze (24,7%) croyaient qu'elle est un acte de la punition de Dieu. Certains répondants, 140 (31,2%) croyaient que les personnes infectées ne devraient pas se marier, 67 (14,9%) ne gardera pas l'amitié avec des personnes infectées, 76 (16,9%) ne sera pas employer individu infecté tout en 333 (74,2%) croyaient personnes infectées devraient être isolé de la société. Un peu moins de la moitié à-dire 209 (46,5%) sont encore à faire le test du VIH. Une association significative a été trouvée entre la profession, niveau d'éducation et la perception à propos de PVVIH ( $p = 0,000$ )

**Conclusion:** Il ya un haut niveau de prise de conscience au sujet du VIH est élevée ou bien parmi les répondants étudiés. Cette tendance a toutefois été entachée d'idées fausses avec les tendances discriminatoires et stigmatisantes, qui pourrait influencer sur la réaction à la prévention du fléau du VIH. Par conséquent, l'éducation de la santé continue à travers les pourparlers de la santé et de la masse exposition médiatique sera utile pour améliorer malentendu à propos de la transmission et le traitement du VIH.

**Mots-clés:** Communauté; la perception; VIH / SIDA; les personnes vivant avec le VIH / SIDA

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## INTRODUCTION

The magnitude and burden of the Human Immunodeficiency Virus (HIV)/Acquired Immunodeficiency Syndrome (AIDS) epidemic has exceeded all expectations since its identification about 25 years ago. Globally, an estimated 36 million people are currently living with HIV, and some 20 million people have already died, with the worst of the epidemic centred on sub-Saharan Africa. But just as the spread of HIV has been greater than predicted, so too has been its impact on population structure and economic growth. Sub-Saharan Africa remains the most affected region in the world and it is home to almost 67% of all the people living with HIV while 1.6 million had died of AIDS. People living with HIV (PLHIV) face not only medical problems but also social problems associated with the disease. One of the barriers to reaching those who are infected with HIV/AIDS is stigma and discrimination.

In Nigeria, over the years, community beliefs regarding HIV strongly influence stigma and discrimination experienced by PLHIV. From earlier sensitization, community members learned about HIV as a killer disease caused by promiscuity with no cure. These beliefs strongly influence enacted stigma and health seeking behaviour including testing and disclosure. Cultural issues (gender inequality, ignorance, mis-information) make women more susceptible to contracting HIV/AIDS as they are less likely to be able to negotiate with their partners infected with HIV/AIDS. Since the beginning of HIV/AIDS epidemic, perception about PLHIV has contributed to its transmission. This has led to loss of income/livelihood, loss of marriage & childbearing options, poor care within the health sector, withdrawal of care-giving in the home, loss of hope & feelings of worthlessness as well as loss of reputation in the society. The fear of rejection can discourage clients from knowing their HIV status through HIV testing and counselling. A study on knowledge, attitude and perceived benefits and risk of HIV testing among pregnant women in rural India showed that 85% of respondents were concerned about confidentiality and disclosure of their HIV status because of fear of negative reactions from their

husbands, parents and community.

Thus uptake of voluntary HIV screening, disclosure of status as a result of stigma and discrimination can dissuade PLHIV from seeking care and thus promoting HIV spread. Nigeria's HIV prevalence is estimated at 4.1% according to NAARHS survey of 2011 which is a population based survey. In 2008, the prevalence among the pregnant women was 4.6% which could be considered a progress from 5.8% in 2001. Therefore, it is imperative to continue to build and sustain awareness of HIV and AIDS from all perspectives. Discrimination is an indication of perception which also indirectly emanates from acquired knowledge about a disease condition. This study was therefore designed to determine the public knowledge about HIV and their perception towards people living with HIV/AIDS in this population.

## MATERIALS AND METHOD

The study was carried out in Osogbo metropolis of Osun State, located in the South-West zone of Nigeria. It is inhabited mainly by people of the Yoruba tribe of Nigeria. Their major occupation include trading and farming while their major religions are Christianity, Islam and the traditional worshippers. HIV prevalence of 2.5% reported for the city is lower below the national average of 4.1%. There is a General and Teaching Hospital in the metropolis both offering services in HIV prevention, care and support. The target population is made up of adult men and women in Osogbo within the age group of 18-65 years of age while non residents were excluded from the study.

Using Leslie Fischer's formula, a minimum sample size of 456 was estimated, this was adjusted for non response, with a total of 501 respondents recruited for the study using a multistage sampling technique. Ten wards out of 15 wards were randomly selected using simple random sampling by balloting, the enumeration areas (EAs) used for the 2006 national population census were used to delineate wards into communities. Two communities were randomly selected per ward, then two streets per community. From the streets, houses were selected using systematic random technique of

one in three, starting with the odd numbered house on the right and even numbers on the left. All adults 18-65 years in the selected houses were interviewed and this continued until allocated questionnaires were exhausted. In case of left over questionnaires per street and/or per community, another EA was chosen randomly and the procedure repeated.

Research instruments were pre-tested semi-structured interviewer administered questionnaires. This consisted of the socio-demographic characteristics of the respondents, awareness and knowledge about HIV/AIDS, perception about HIV/AIDS and perception about PLHIV. The questionnaire prepared in English, was translated to Yoruba and back translated to English, to reduce inter-observer variation in interpretation during the interview.

#### Data Management:

Data collected were checked manually for errors & then double entered and analyzed using the SPSS version 15. Relevant frequency tables were generated. Discrete variables were expressed as percentages. For multivariate analysis involving confidence intervals, the 3 levels of education (primary, secondary and tertiary) were grouped as educated against the non educated participants. Also the professional and skilled workers were grouped together as 'Professionals' while other occupation were grouped as non professionals. In addition to multivariate analysis using the regression model, the chi-square test was used to test for association between discrete variables on the contingency tables and statistical significance was accepted at  $p$  values  $< 0.05$ .

Ethical clearance was obtained from LAUTECH Teaching Hospital ethical review committee.

## RESULTS

### Socio-demographic status of respondents:

Majority of the respondents 188 (41.9%) fall within the age group 21-30 years, with a mean of 33.5 ( $\pm$  1.7) years. Two hundred and seventy two (60.6%) of them were females, 236 (52.6%) of them are professionals, while 340 (75.7%) had tertiary education. The predominant religion is Christianity 321(71.5%), 265 (59%)

are married, 410 (91.3%) are of the Yoruba tribe, 186 (41.4%) earn income of less than 100 dollars a month (\$ equivalent ?) and 268 (59.7%) reside in a flat type of accommodation.

**Table 1** shows that a large percentage of the respondents i.e 438 (97.6%) have heard of HIV/AIDS, while 435 (94.7%) of them know that HIV exists. In terms of mode of transmission, only 204(45.4%), 295 (65.7%), 271(60.4%), and 272(60.6%) knew that HIV/AIDS cannot be transmitted through kissing, hugging, toilet sharing and sharing of cup respectively while 254 (56.6%) knew the symptoms of those infected with HIV/AIDS disease. In addition, 219 (48.8%) knew HIV/AIDS is not curable.

**Table 2** shows that 111 (24.7%) of respondents believe that HIV/AIDS is an act of God's punishment. Two hundred and nine (46.5%) are yet to do HIV test. Also, 130 (29%) of the respondents believe that PLHIV are promiscuous, 357 (79.5%) believe that PLHIV can still live a normal life, 140(31.2%) believed that infected individuals should not get married. . Also, 67 (14.9%) will not keep friendship with infected individual, 76 (16.9%) cannot employ infected individual, 215 (47.9%) cannot allow himself/herself to be treated by infected individual while 333(74.2%) believed that infected individuals should be secluded from the society.

**Table 3** shows cross tabulations of socio – demographic status with perception towards PLHIV. There was significant association between educational and occupational status with perception towards PLHIV. ( $P < 0.005$ ). Compared to the non-professional, the professional participants were about twice more likely to know the symptoms of HIV/AIDS (OR=0.6587, 95%CI=0.5010-0.8660,  $p=0.012$ ), and about three times more likely to say that condoms prevents HIV/AIDS (OR=0.3056, 95%CI=0.2244-0.4164,  $p=0.001$ ). While going for HIV testing have no practice differences among both groups (OR=0.9649, 95%CI=0.7424-1.2540,  $p=0.7360$ ), the non-professionals are about 4 times likely to say that

PLWHAs should be secluded from the society (OR=4.9859, 95% CI=3.6471-6.8161, p=0.1119). Compared to the uneducated, the educated participants were about twice more likely to know the symptoms of HIV/AIDs (OR=1.8544, 95% CI=1.3804-2.4910, p=0.013), about 3 times more likely to have done HIV testing (OR=2.7164, 95% CI=2.0438-3.6102, p=0.2024) and about twice less likely to say that PLWHAs should be secluded from the society (OR=0.6648, 95% CI=3.3670-5.1516, p=0.4971). However, no difference in belief among the two groups exists as regards belief that the use of condoms prevent HIV infection (OR=0.9606, 95% CI=0.6185-1.1947, p=0.6105). Compared to the non-professional and uneducated, the professional and educated participants were about twice each more likely to know the symptoms of HIV/AIDs.

## DISCUSSION

In this study, misconceptions about HIV transmission is high as significant proportions of respondents said HIV could be transmitted through kissing, hugging, toilet sharing and sharing of cup etc. This supports several other studies with similar misconceptions.

Though a lot of emphasis had been laid on enlightening the populace about HIV including primary prevention, many people do not have first hand information about causes and modes of transmission of HIV/AIDs. Another contributing factor is cultural and religious influences. Thus knowledge gaps need to be bridged, as this will have an effect on the respondents' attitude to people living with HIV/AIDs, their acceptance of these groups of people as well as their care for them. A good knowledge about HIV would go a long way in addressing the scourge of the disease, though many studies including ours, have reported respondents having an idea of the correct modes of transmission of HIV. This high awareness could explain why a significant third of the respondents said or believed that HIV/AIDs can be prevented through sex education, condom use and abstinence. Similarly, about half of the respondents knew of symptoms commonly associated with HIV infection. This is better when compared to a study in which a large

proportion held misconceptions regarding symptoms (21).

In addition, a little less than half of our respondents knew HIV/AIDs is not curable; this is low when compared to another study in which almost all respondents agreed that there is no cure for the disease. This knowledge about HIV is important for success or otherwise of preventive and control measures of HIV. Likewise, knowledge is a prerequisite for change in behaviour according to study on HIV/AIDs awareness and sexual practices among undergraduates in Enugu, South-Eastern, Nigeria.

A quarter of respondents believe that HIV/AIDs is an act of God's punishment, such misconceptions was supported by similar studies. The issue of misconception is an important one that needs to be addressed by HIV prevention programmers as it has been shown to serve as a barrier to uptake of HIV preventive measures and it also engenders discriminating and stigmatizing behaviours.

Rights of HIV/AIDs victims to employment, marriage could be violated by one-eight and one quarter of respondents respectively who believed they should not be employed nor married. This supports similar findings from another study. By this, PLWHA has been considered as constituting potential threat to society. These discriminatory attitudes against PLWHAs may also not be unconnected with misconceptions about some non-modes of transmission of HIV including physical contacts like handshake and hugging. There are several reasons for the stigmatization towards PLWHAs among the general population. According to a study done in India, in-accurate information regarding HIV/AIDs transmission with wrong perception of HIV/AIDs leads to irrational behaviour that fuels the epidemic.

This would also make 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. 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. There was significant association between education and perception towards PLWHAs as reported in this study. The logistic regression also suggested more friendly and human approach to the issue of social life of PLWHAs by the educated and professional group when compared to the uneducated and non professionals. This suggests that these group of people are less likely to discriminate against PLWHAs. In a similar study, respondents with less than secondary school education had a discriminatory attitude toward HIV positive people. This indicates that education is important in the society in order to have the right perspective to life and issues in the society.

### CONCLUSION

The level of awareness about HIV is high among studied respondents. This pattern was however marred with misconceptions together with discriminating and stigmatizing tendencies, which could affect response to HIV scourge prevention and control. Since awareness is key to the prevention of HIV/AIDS, there is an urgent need to increase the level of awareness about HIV/ AIDS, especially among the low socio - economic and low educational status within the community using all methods of mass media and intensive information, education and communication (IEC) activities by use of local folk media.

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**Table 1: Awareness and knowledge of respondent of HIV/AIDS**

| N = 449<br>VARIABLES                        | FREQUENCY (PERCENTAGE) |            |            |
|---|------------------------|------------|------------|
|   | YES                    | NO         | NOT SURE   |
| Ever heard of HIV/AIDS                      | 438(97.6%)             | 10(2.2%)   | 1(0.2%)    |
| HIV/AIDS exist                              | 425 (94.7%)            | 11(2.4%)   | 13(2.9%)   |
| HIV/AIDS can be transmitted through kissing | 208(46.3%)             | 204(45.4%) | 37(8.2%)   |
| Hugging                                     | 114(25.4%)             | 295(65.7%) | 40(8.9%)   |
| Toilet sharing                              | 129(28.7%)             | 271(60.4%) | 49(10.9%)  |
| Sharing of cup and spoon                    | 132(29.4%)             | 272(60.6%) | 45(10%)    |
| Know any symptoms of HIV/AIDS               | 254(56.6%)             | 151(33.6%) | 26(5.8%)   |
| Know anyone with HIV/AIDS                   | 46(10.2%)              | 376(83.7%) | 19(4.2%)   |
| HIV/AIDS is curable                         | 102(22.7%)             | 219(48.8%) | 128(28.5%) |
| It is a spiritual attack                    | 40(8.9%)               | 332(73.9%) | 78(17.4%)  |
| It is inheritable                           | 88(19.6%)              | 291(64.8%) | 70(15.6%)  |



**Table 2: Perception of the respondents about HIV/AIDS/ PLWHA**

| N=449<br>VARIABLES                         | FREQUENCY(PERCENTAGE) |            |            |
|--|-----------------------|------------|------------|
|  | YES                   | NO         | NOT SURE   |
| <b>Perception about HIV/AIDS</b>           |                       |            |            |
| HIVAIDS is an act of God's punishment      | 111(24.7%)            | 245(54.6%) | 68(15.1%)  |
| Child can get HIV/AIDS by circumcision     | 381(84.9%)            | 17(3.8%)   | 35(7.8%)   |
| Sex Education help prevent HIV/AIDS        | 373(83.1%)            | 32(7.3%)   | 20(4.5%)   |
| The awareness about HIV/AIDS is adequate   | 128(29.6%)            | 267(59.5%) | 53(10.9%)  |
| The use of condom prevents HIV/AIDS        | 290(64.6%)            | 80(17.8%)  | 79(17.6%)  |
| Abstinence is the best means of prevention | 310(69%)              | 70(15.6%)  | 69(15.4%)  |
| Done HIV testing before                    | 240(53.5%)            | 209(46.5%) |            |
| <b>Perception about PLHIV</b>              |                       |            |            |
| PLHIV are promiscuous                      | 130(29%)              | 172(38.3%) | 147(32.7%) |
| PLHIV can still live a normal life         | 357(79.5%)            | 57(12.7%)  | 35(7.8%)   |
| You can live with PLHIV                    | 380(84.6%)            | 40(8.9%)   | 29(6.5%)   |
| Suicide is the best option for PLHIV       | 50(11.1%)             | 370(82.4%) | 29(6.5%)   |
| You can keep friendship with PLHIV         | 340(75.7%)            | 67(14.9%)  | 42(9.4%)   |
| You can employ PLHIV                       | 315(70.2%)            | 76 (16.9%) | 52(11.6%)  |
| You can allow PLHIV to treat you           | 162(36.1%)            | 215(47.9%) | 72(16.0%)  |
| PLHIV can get married                      | 245(54.6%)            | 140(31.2%) | 64(14.2%)  |
| PLHIV should be secluded from society      | 74(16.5%)             | 333(74.2%) | 42(9.3%)   |

**Table 3: Bi and multivariate analysis involving some socio-demographic data and perception towards PLHIV**

| VARIABLE                     | FREQUENCY (PERCENTAGE) |                 | Statistics     |    |          |
|------------------------------|------------------------|-----------------|----------------|----|----------|
|                              | POOR PERCEPTION        | GOOD PERCEPTION | X <sup>2</sup> | Df | P values |
| <b>N=449</b>                 |                        |                 |                |    |          |
| <b>Age group ( in years)</b> | 13(9.5%)               | 10              | 4.657          | 5  | P=0.142  |
| Less than 20                 |                        |                 |                |    |          |
| 21-30                        | 58 (42.3%)             | 82(46.1%)       |                |    |          |
| 31-40                        | 34(24.8%)              | 39(24.8%)       |                |    |          |
| 41-50                        | 24(17.5%)              | 10(20.2%)       |                |    |          |
| 51-60                        | 5(3.6%)                | 10(5.6%)        |                |    |          |
| 61 and above                 | 3(2.2%)                | 1(0.3%)         |                |    |          |
| <b>Gender</b>                |                        |                 | 6.207          | 6  | P=0.253  |
| Male                         | 55(40.1%)              | 76(42.7%)       |                |    |          |
| Female                       | 82(59.9%)              | 102(57.3%)      |                |    |          |
| <b>Occupation</b>            |                        |                 | 27.256         | 3  | P=0.142  |
| Professional                 | 63(46.0%)              | 101(56.7%)      |                |    |          |
| Unskilled                    | 13(9.5%)               | 2(1.1%)         |                |    |          |
| Artisan                      | 11(8.0%)               | 8(4.5%)         |                |    |          |
| Trader                       | 11(8.0%)               | 4(2.2%)         |                |    |          |
| Farmer                       | 3(2.2%)                | 0(0%)           |                |    |          |
| Schooling                    | 33(24.1%)              | 53(29.8%)       |                |    |          |
| Unemployment                 | 3(2.2%)                | 10(5.6%)        |                |    |          |
| <b>Educational Status</b>    |                        |                 | 16.987         | 2  | P=0.001  |
| Primary                      | 11(8.0%)               | 5 (2.8%)        |                |    |          |
| Secondary                    | 33 (24.1%)             | 23 (12.9%)      |                |    |          |
| Tertiary                     | 90(65.7%)              | 150(84.3%)      |                |    |          |
| Uneducated                   | 3(2.2%)                | 0(0.0%)         |                |    |          |

**Regression of education, occupation and some selected knowledge and perception variables**

|   | Non-Professional occupation (constant=professional group) | Tertiary education (constant=uneducated) |
|---|---|--|
| Know any symptoms of HIV/AIDS                   | OR=0.6587, 95%CI=0.5010-0.8660, p=0.012                   | OR= 1.8544, 95%CI=1.3804-2.4910, p=0.013 |
| Agreed that the use of condom prevent HIV/AIDS  | OR=0.3056, 95%CI=0.2244-0.4164, p=0.001                   | OR=0.9606, 95%CI=0.6185-1.1947, p=0.6105 |
| Have done HIV testing before                    | OR=0.9649, 95%CI=0.7424-1.2540, p=0.7360                  | OR=2.7164, 95%CI=2.0438-3.6102, p=0.2024 |
| Said that PLHIV should be secluded from society | OR=4.9859, 95%CI=3.6471-6.8161, p=0.119                   | OR=0.6648, 95%CI=3.3670-5.1516, p=0.4971 |

OR-Odds Ratio, CI+ Confidence interval