



Awareness on HIV/AIDS amongst residents of two Local Government Areas in Lagos State

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Abstract

Background: This study assessed the knowledge, attitude, beliefs and practices in two local governments in Lagos State on HIV/AIDS. A baseline survey was done five years previously.

Methods: A cross sectional survey of two local government areas in Lagos State, Nigeria was conducted. Study participants were selected using a multi-stage sampling technique. A total of 400 participants were surveyed using a structured, pre-tested, interviewer-administered questionnaire over a two-week period. Data entry and analysis were carried out using Epi-Info 6 and Microsoft excel.

Results: Over 90% of participants had heard about HIV/AIDS with the most frequent source of information being the mass media (radio and television). It was observed that a great proportion of respondents (93.3%) were of the belief that HIV/AIDS exists. However, less than 50% attested to the use of condoms with all sex partners. A higher educational level appeared to be significantly associated with greater awareness about HIV/AIDS ($P < 0.05$)

Conclusion: The enormous level of awareness about HIV and AIDS did not appear to translate into safer sexual practices. There is need for a multi-pronged approach in the dissemination of information on the prevention and control of HIV/AIDS.

Keywords: HIV/AIDS, Awareness, Prevention

Introduction

HIV/AIDS is now a global pandemic occurring throughout the world in every region. In year 2007, over 2.5 million adults and children became infected with HIV resulting in an estimated total of 33 million persons living with HIV worldwide.¹ Sub-Saharan Africa accounted for about 71% of new HIV infections as at 2008.² Nigeria has the second largest number of people living with HIV in the continent; after South Africa.³ Tremendous efforts have been underway to promote global resource allocation in the bid to scale-up HIV/AIDS intervention.⁴ In the United States of America, HIV prevention activities have been shown to result in a decline in the incidence of this burdensome health condition.⁵ On the other hand, it appears that there are insufficient HIV/AIDS programmes in Africa.⁵ For example, only 25% of rural regions in Ivory Coast are said to have programmes on HIV/AIDS.⁶

Evidence-based prevention strategies such as community-based educational programmes have been known to be useful in the promotion of health related interventions^{7, 8} because such messages can be further disseminated to the larger population. In addition, a good grasp of the magnitude of community reaction to HIV/AIDS is essential for the design and development of local interventions.⁹ The success of intervention programmes may be assessed by parameters such as increased awareness about HIV/AIDS and sero-status as well as declining mortality due to increased access to drugs and appropriate treatment.¹⁰

In Bali, Indonesia, an appraisal of a two-day educational programme for peer educators amongst female sex workers on AIDS, sexually transmitted infections, use of condoms and condom negotiation revealed significantly higher levels of knowledge on AIDS ($P < 0.05$).¹¹ Population data from health programs are useful for designing, monitoring and evaluating on-going interventions.

Lagos State is the commercial nerve centre of Nigeria with an active HIV/AIDS

control agency which is responsible for coordinating and monitoring all activities pertaining to HIV/AIDS within the State. Some interventions regarding the prevention and control of HIV and AIDS in Lagos State over the last five years include awareness raising using various Information, Education and Communication (IEC) materials and the mass media, provision of voluntary, counselling and testing centres, strengthening health systems to provide health services to persons living with HIV&AIDS, social support groups and provision of medications. This survey was conducted to assess awareness and practices regarding HIV/AIDS across the State.

Materials and methods

This is a cross-sectional study which was conducted over a 2-week period in year 2007 on the knowledge, attitude and behavioural practices of the people of Lagos State as regards HIV/AIDS.

Although Lagos State is the smallest State in Nigeria, it has the highest population of 17 million out of a national estimate of 150 million. Lagos State is divided into 20 Local Government Areas (L.G.As) out of which 2 were selected by balloting.

Sample size determination

$$n = \frac{Z^2 pq}{d^2}$$

Where n = sample size

d = precision; 2%

Z = confidence limits of the survey (z=1.96)

P = Prevalence of HIV/AIDS in Lagos State (3.3% as at 2005)

Proportion = 0.033

q = (1-P) = 96.7% = 0.967

$$n = \frac{(1.96)^2 (0.033)(0.967)}{0.02^2}$$

$$= 306.4$$

The calculated minimum sample size was 306. However, the sample size was set at 400 to reduce sampling errors and improve accuracy.

Sampling method

A multistage sampling technique was used in the selection of respondents for the survey

1. Two L.G.As (Ikeja and Eti-Osa) were

randomly selected by balloting from the available 20 L.G.As in the State. Each L.G comprised of an average of 20 wards that are further broken down into settlements and communities.

2. Ten (10) wards were randomly selected by balloting from the selected LGAs.
3. Using an estimated sample size of 400 with a distribution of approximately 200 per L.G.A, households were selected in each ward through the systematic random sampling method with a sampling interval of 2 calculated from the formula $K = N/n$ (400/200). Therefore, every second household was selected and one individual from each household interviewed. All male or female head of households over 18 years of age were eligible to participate in the study.

Study Instrument

This was a structured interviewer-administered questionnaire consisting of open-ended and closed questions providing information on demographic details of respondents, knowledge, attitudes and beliefs on HIV/AIDS, as well as behavioural practices related to HIV/AIDS. Ethical consideration and confidentiality were addressed adequately given the sensitive nature of the subject matter. Data entry and analysis were carried out with the aid of EPI-Info version 6.04 and Microsoft excel. Differences in proportions were compared using the Chi-square test and the

significance level was set at $P < 0.05$

Results

The bio data of respondents revealed a male preponderance of over 50% (Table 1). It was also observed that respondents who had completed their secondary education constituted the majority, whilst less than 10% had no formal education. Over 95% of all the participants had heard about HIV/AIDS. Sexual intercourse was the most commonly known mode of transmission. The mass media (radio and television) constituted the most frequent sources of information. Furthermore, majority (93%) are of the belief that HIV/AIDS exists.

Concerning the clinical features of HIV/AIDS, more respondents seemed to know that HIV/AIDS is characterised by weight loss, frequent illness, cough and skin rashes amongst other features. A similar finding was also noted on awareness about modes of prevention in which more respondents appeared more knowledgeable on precautionary measures such as mutual fidelity, regular use of condoms, avoidance of extramarital sex, sharing of sharps and blood transfusion. (Table 2)

Analysis of educational level versus knowledge of HIV/AIDS revealed that significantly more of the educated respondents were aware of HIV/AIDS ($P=0.009$, Table 3). However, less than 40% of the respondents reported the use of condom with all sex partners. (Table 4)

Table 1: Respondents' bio data

BIODATA	No. (%)
	N= 400
Sex	
Male	207 (51.6)
Female	193 (48.3)
Educational level	
None	28 (7.0)
Some primary	31 (7.8)
Primary completed	66 (16.5)
Some secondary	41 (10.3)
Secondary completed	131 (32.8)
Tertiary	101 (25.3)

Table 2: Awareness about HIV/AIDS

Awareness	(N=400)No. (%)
Heard about HIV/AIDS	
Yes	387 (96.8)
No	13 (3.2)
Belief that HIV/AIDS exists	
Yes	373 (93.3)
No	20 (5.0)
Don't know	7 (1.7)
Mode of transmission (N = 387)	
Sexual intercourse	354 (91.5)
Sharp objects	266 (68.7)
Blood transfusion	203 (52.5)
Mosquito bites	34 (8.8)
Others	12 (3.1)
Clinical features	
Weight loss	281(72.6)
Frequent illness	237 (61.2)
Cough	128 (33.1)
Skin rashes	97 (25.1)
Others	60 (15.5)
Mode(s) of prevention	
Mutual fidelity	146 (37.7)
Regular condom use	285 (73.6)
Avoid sex outside marriage	192 (49.6)
Avoid sharing sharp objects	194 (50.1)
Avoid blood transfusion	124 (32.0)
Others	27 (7.0)
Source(s) of information	
Relations	31 (8.0)
Friends	162 (41.9)
Newspaper	104 (26.9)
Radio/TV	348 (89.9)
School	58 (15.0)
Health Facility	53 (13.7)

Discussion

The awareness level about HIV/AIDS was high with over 95% reporting that they had heard of HIV/AIDS. This finding is not surprising considering the worldwide pandemicity of HIV/AIDS and the massive propaganda using all forms of communication in the quest to halt the trend in global prevalence. Several methods have been

deployed in the prevention and control of this health condition ranging from advocacy, awareness campaigns, provision of voluntary counselling and testing centres as well as access to antiretroviral therapy. A Demographic Health survey in Cambodia conducted to evaluate knowledge about HIV/AIDS in years 2000 and 2005 showed extremely high awareness rate in 2000 (94.8%) and virtually a full-blown awareness by 2005 (98.5%).⁹

TABLE 3: Educational level versus knowledge of HIV/AIDS

Educational level	Heard of HIV/AIDS	
	Yes No (%)	No No (%)
≤Primary	115 (29.7)	10 (76.9)
≥Secondary	272 (70.3)	3 (23.1)
Total	387 (96.8)	13 (3.3)

Yates Corrected = 10.94, P = 0.0009

TABLE 4: use of condom with all sex partners

Use of condom	No (%)
Yes	179 (44.8)
No	156 (39.0)
No response	65 (16.3)
Total	400 (100.0)

An assessment of awareness of the mode of transmission in the present study revealed that more than half (>50%) of respondents recognise that unprotected sexual exposure, sharing of sharps and blood transfusion constitute modalities for the spread of HIV. In comparison, a Kaiser study in the United States of America showed that 37% of Americans believe that HIV is transmissible through kissing; whilst 22% and 16% reported that HIV can be contacted through the sharing of a drinking glass with an infected person and touching the toilet seat of an infected person respectively.¹²

Over half of the respondents displayed awareness regarding two of the listed possible clinical presentation of persons living with HIV/AIDS. In a study in Oyo State Nigeria which aimed at evaluating a training programme on HIV/AIDS awareness for Primary Health Care workers, less than 35% of trainees could mention at least four clinical features of AIDS pre-training. This proportion was said to have increased to almost double (70.8%) post training.¹³

In the area of preventive measures for

HIV/AIDS, 73.6% of respondents reported that regular use of condoms is relevant in the prevention of this condition. This finding is similar to the Cambodian study in which 66.3% and 87.4% agreed that condoms are useful in the prevention of HIV/AIDS in 2000 and 2005 respectively.⁹

It is however interesting that <15% of respondents attested to hearing about HIV/AIDS from health care institutions. Health care personnel should play a key role in the constant provision of correct and adequate health information on topical health issues. However, the most popular sources of information about HIV/AIDS were the mass media and friends. This may reflect the effect of mass enlightenment of this topical health condition. Despite the probability that institutions such as schools and health care facilities tend to provide an accessible audience for health information, less than 20% of respondents in the present study obtained information alluded to hearing about HIV/AIDS from schools and health care facilities. Studies have shown that schools (especially primary) constitute a major location

for the largest proportion of young persons.¹⁴ Schools also provide an avenue for intervention of diverse nature as a result of their stable and predictable hours of operation.¹⁵

Despite the fact that a great proportion (93.3%) believe that HIV/AIDS exists, fewer respondents reported using condom with all sex partners as a form of prevention. It has been reported that in spite of increasing awareness about HIV/AIDS, there is an illusion regarding personal vulnerability because people seem to be in denial about being at risk of getting infected with HIV.¹⁰ Gallant and Maticka assessed school-based programmes in sub-Saharan Africa and reported that in most of the programmes, attitude towards the use of condom and perception on personal risk were not very encouraging.¹⁴

Following an educational interventional programme, Fawole et al in a Nigerian study also reported no advancement in practice as regards use of condoms with sexual partners.¹⁶ Finally, a Kuwaiti study on knowledge and attitudes towards HIV/AIDS by family physicians showed that as high as 90% of the physicians objected to the use of condom as a preventive measure against HIV transmission.¹⁷ In a sampled population of commercial sex workers in Lagos, about 24.7% of respondents use condoms regularly in every sexual act.¹⁸ This is despite the report that HIV transmission in Nigeria is largely adduced to unprotected heterosexual intercourse.¹⁹

Limitations

Absence of a control population to assess the effect of past interventions in the control of HIV/AIDS across the State. However, this study is important because it serves as a baseline for the evaluation of subsequent interventions.

Conclusion

In order to drastically reduce transmission of HIV, reverse global trends and achieve national and global targets in the prevention and control of HIV/AIDS, there is an urgent need to increase the proportion of the public who have correct knowledge about HIV/AIDS, promote positive attitudes,

behaviour and life skills to enable individuals protect themselves adequately.

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