

*Full Length Research Paper*

# Opinion of surgical eye patients on preoperative routine HIV screening in a resource-limited economy

Abdulkabir Ayansiji Ayanniyi<sup>5,6\*</sup>, Rashidat Oluwafunke Ayanniyi<sup>1</sup>, Sunday Adeyemi Adefisan<sup>2,5</sup>, Mohammed Jimoh Saka<sup>3</sup> and Mohammed Danfulani<sup>4</sup>

<sup>1</sup>Department of Pharmacology and Therapeutics, College of Health Sciences, University of Ilorin, Kwara State, Nigeria.

<sup>2</sup>Department of Obstetrics and Gynecology, University Teaching Hospital, Ado Ekiti, Ekiti State, Nigeria.

<sup>3</sup>Health Reform Foundation of Nigeria (HERFON) 10, Sakono Street, Wuse II, Abuja, FCT, Nigeria.

<sup>4</sup>Department of Radiology, Usmanu Danfodiyo University Teaching Hospital, Sokoto, Sokoto State, Nigeria.

<sup>5</sup>Department of Ophthalmology, University Teaching Hospital, Ado Ekiti, Ekiti State, Nigeria.

<sup>6</sup>Department of Ophthalmology, College of Health Sciences, University of Abuja, FCT, Nigeria.

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**Despite inherent benefits, routine (HIV) test is still controversial. A cross-sectional survey of 198 preoperative eye patients was carried out at a Nigerian hospital to determine their opinion on preoperative routine HIV screening. Participants comprised 121 (61%) males and 77 (39%) females, mean age 56 years SD 17. Most (77%) had at least primary education. Awareness of HIV/AIDS was high (96%) and radio was the commonest (73%) source of awareness. Just 18% previously had HIV screening, only 37% had positive attitudes towards routine HIV test. Many admitted stigmatization (47%), discrimination (48%) and lack of cure (44%) as challenges of HIV/AIDS. There were no associations ( $p > 0.05$ ) between participants' educational levels and awareness of HIV/AIDS, previous HIV test, consenting to preoperative HIV test. Also, there were no associations between participants' gender and awareness of HIV/AIDS, previous HIV test, but male gender was associated with consenting to preoperative HIV test ( $p = 0.011$ ). Continued support for HIV enlightenment (73%) and funding of research into cure for HIV/AIDS 59% were recommended. Discordance exists in participants' awareness, education and attitudes to routine HIV test. Stigmatization, discrimination and lack of cure still lively HIV/AIDS challenges. Informed consent before preoperative HIV test and continued support for HIV/AIDS are underscored.**

**Key words:** Attitude, informed consent, patient right, preoperative eye patient, routine HIV test.

## INTRODUCTION

If emotions alone can cure a disease, Human Immunodeficiency Virus or Acquired Immunodeficiency Syndrome (HIV/AIDS) deserves one. With emotions lots have been achieved for HIV/AIDS. Billions of dollars have been committed (Shiffman, 2008), 'tight' guidelines have been issued (CDC, 2001; Branson et al., 2006; Wolf et al., 2007), drugs have been manufactured among others (Rang et al., 2003; Adebayo et al., 2003), of course

towards prevention of HIV/AIDS. Unfortunately, since its discovery in early eighties (Gettlieb et al., 1981), curing HIV/AIDS has become a mirage, a tall order. Arguably, emotional handling of HIV/AIDS has led to persisting thorny discrimination and stigmatization of people living with HIV/AIDS by the society.

Emotion driven decisions including guidelines 'legalizing' routine HIV screening no doubt, has polarized the entire HIV/AIDS world into protagonist and antagonist camps (CDC, 2001; Branson et al., 2006; Wolf et al., 2007). While protagonist contends with early detection/treatment culminating in improved quality life and protecting public interest by reducing transmission (CDC,

\*Corresponding author. E-mail : [ayanniyikabir@yahoo.com](mailto:ayanniyikabir@yahoo.com). Tel: +234-8058548765.

2001; Branson et al., 2006; Bayer and Fairchild, 2006; Gostin, 2006), antagonist is wary of backfiring effect of 'compulsory' HIV screening as potential beneficiaries fears discrimination/stigmatization (Wolf et al., 2007; Weiser et al., 2006; Kalichman and Simbayi, 2003; O'Leary et al., 2007), have choice of staying away, defeating the fight against HIV/AIDS. Moreover, 'classic' routine HIV screening bypasses (CDC, 2001) written informed consent which protects patients/physicians and pretest counseling essential for promoting patients information and awareness (Branson et al., 2006; Weiser et al., 2006).

Despite inherent benefits and 'legalization' in certain society, routine HIV test is still controversial (Gruskin, 2004; Bartlett et al., 2008). There is need to balance protecting the society and respecting the right of patients. While many studies (Akinsola et al., 1997; Umeh, 1998; Osahon, 1999; Owoeye and Ademola, 2003; Adepoju et al., 2007; Nwosu, 2008; Sanya et al., 2008) have been carried out on ocular manifestations of HIV/AIDS in resource limited communities, there is dearth of such study on opinion of eye patients on preoperative routine HIV/AIDS test. Nevertheless, it is of interest that routine preoperative HIV screening has been reported among surgical eye patients in resource limited setting (Onyekwe, 2007). Yet, there are varied reports on attitudes to routine HIV test among non-ophthalmic patients (Orji et al., 2001; Adewole and Lawoyin, 2004; Isezuo and Onayemi, 2004; Iliyasu et al., 2005; Iyanwura and Oloyede, 2006).

The patients are very important stakeholder in health care delivery and their opinion should be sought on important health issues affecting them. The objective of this study was to determine opinion of surgical eye patients on preoperative routine HIV screening in a resource limited community. It is believed that this will assist decision makers to know patients' opinion on routine HIV screening and consider their interest.

## MATERIALS AND METHODS

This is a descriptive cross-sectional study carried out in the eye clinic of University Teaching Hospital, Ado Ekiti, Nigeria among eye patients with diagnosis of surgical ocular conditions between May and December 2008. The participants were drawn from among patients who came for routine eye consultations in the eye clinic and patients who were referred for free eye surgery from five different hospitals across Ekiti State. These include the State hospitals at Ikole, Oye, Ijero, Ikere and Ado Ekiti. Ekiti state where this study was conducted is one of the 36 States in Nigeria and located in the south-western Nigeria. It has a population of about 3 million. Though the literacy level is high, the community is essentially agrarian with some inhabitants in the civil service, teaching, trading and technical works. The only state owned eye clinic is within the State Specialist Hospital at Ado Ekiti, the state capital city, and has been upgraded to a Teaching Hospital in 2008.

The study period included a period of state sponsored free-to-

patients eye care intervention in the State. The aforesaid five hospitals served as screening centres for the free eye care intervention and patients with operable eye conditions were pooled for operation in the hospital where this study was carried out.

The criteria for inclusion of the patients in this study were age 18 years and above, diagnosis of operable eye condition and consenting to participate in the study. The patients that were under 18 years of age, those that refused consent and those that could not comprehend the subject matter due to their mental health including dementia, and mental retardation were excluded from this study. The study was conducted in accordance with the tenets of the Declaration of Helsinki. Each of the participants was interviewed using a prepared questionnaire format. The questionnaire had been previously pretested in the eye clinic among patients who were not included in the analysis.

The questionnaire bordered on participants' socio-demographic characteristics, awareness of HIV/AIDS, mode of knowing about HIV/AIDS, previous HIV test, attitude to preoperative routine HIV test, perceived merits of preoperative routine HIV test and perceived challenges of HIV positive serostatus. Suggestions on how to enhance the care for HIV/AIDS were noted.

The data were collated, entered into SPSS 15.0, and analysed. The test of significant was carried out using Chi square. Statistical significance test was taken at  $p < 0.05$ .

## RESULTS

Of 221 patients having operable eye conditions seen at the eye clinic over the study period, 198 (89.6%) participated in the survey. They comprised of 121 (61%) males and 77 (39%) females with age range, 18 - 85 years, mean, 55.75 and SD, 17.14. Most participants 150 (75.6%) were between 40 - 79 age group. The demographic distribution of participants is shown in Table 1.

Overwhelming majority 190 (96.0%) were aware of HIV/AIDS, while only 8 (4.0%) were not. The mode of awareness on HIV/AIDS including radio as the commonest 144 (72.7%) is shown in Table 2. Despite most participants 142 (71.7%) being aware of inherent benefits of routine HIV screening (Table 3), just 35 (17.7%) had HIV test in the past while only 73 (36.9) would not mind preoperative routine HIV screening before eye surgery (Figure 1). Many participants believed stigmatization, discrimination and lack of cure were still important challenges to HIV/AIDS (Figure 2).

There were no associations between participants' educational levels and awareness of HIV/AIDS ( $p = 0.070$ ), previous HIV test ( $p = 0.289$ ), consenting to preoperative routine HIV test ( $p = 0.387$ ). Also, there were no associations between participants' gender and awareness of HIV/AIDS ( $p = 0.510$ ), previous HIV test ( $p = 0.094$ ), but male gender was significantly associated with consenting to preoperative routine HIV test ( $p = 0.011$ ) (Table 4).

The participants recommendations included continue support for public HIV/AIDS enlightenment campaigns 145 (73.2%) and continue support for funding of research

**Table 1.** Demographic distribution of participants (n = 198).

| Age     | n  | Vocation      | n  | Marital status | n   | Educational level   | n  |
|---------|----|---------------|----|----------------|-----|---------------------|----|
| < 20    | 6  | Teaching      | 21 | Married        | 170 | Tertiary            | 80 |
| 20 - 29 | 14 | Civil service | 35 | Single         | 22  | Secondary           | 34 |
| 30 - 39 | 13 | Schooling     | 15 | Widow          | 5   | Primary             | 38 |
| 40 - 49 | 34 | Trading       | 30 | Widower        | 1   | No formal education | 46 |
| 50 - 59 | 38 | Artisan       | 16 |                |     |                     |    |
| 60 - 69 | 38 | Farming       | 28 |                |     |                     |    |
| 70 - 79 | 40 | Pensioner     | 36 |                |     |                     |    |
| 80 - 89 | 15 | Others        | 17 |                |     |                     |    |

n connotes sample size, No connotes number of participants.

**Table 2.** Distribution of mode of knowing HIV/AIDS by participants (n = 198).

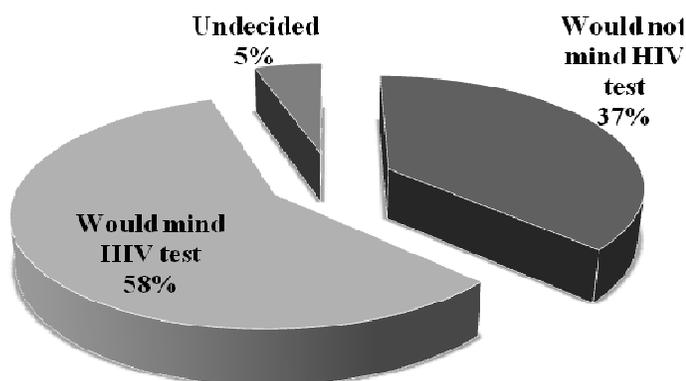
| Mode                         | n   | %    |
|------------------------------|-----|------|
| Radio                        | 144 | 72.7 |
| Television                   | 82  | 41.4 |
| Newspaper                    | 50  | 25.3 |
| People                       | 55  | 27.8 |
| Know HIV positive individual | 15  | 7.6  |

No connotes number of participants; % connotes percentage of participants. There was multiple mode of knowing HIV/AIDS by some participants.

**Table 3.** Distribution of merits of preoperative routine HIV screening by participants (n = 198).

| Merits   | n   | %    |
|--|-----|------|
| Help to seek medical help on time  | 142 | 71.7 |
| Help to take precautions to protect spouse/society                                     | 107 | 54.0 |
| HIV individual can serve as morale booster for others who might have similar challenge | 72  | 36.4 |
| Can assist the health care personnel   | 57  | 28.8 |

No connotes number of participants: % connotes percentage of participants.

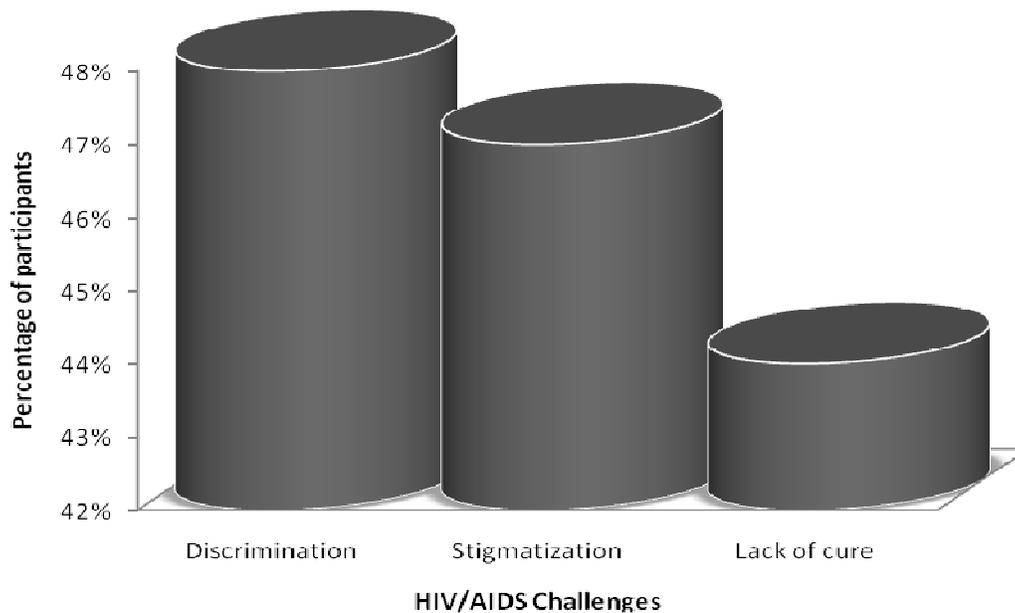
**Figure 1.** Distribution of attitude to routine HIV test by participants (n = 198).

into cure for HIV/AIDS 117 (59.1%).

## DISCUSSION

Many a time findings from elsewhere are extrapolated for use in entirely dissimilar setting with little attention to the feelings of the community. This study attempted at knowing the opinion of surgical eye patients on preoperative routine HIV screening in a resource limited community. The findings should be useful gauge of preoperative eye patients' concerns and their interest can be respected.

Most participants were of age 40 year and above, this could be based on the selection criteria including adult with operable eye conditions. Moreover, most operable



**Figure 2.** Distribution of challenges of HIV seropositivity by participants (n = 198).

**Table 4.** Associations between HIV parameters and participants' demography.

| Test parameters                   |                   | $\chi^2$ | P     |
|-----------------------------------|-------------------|----------|-------|
| Awareness of HIV/AIDS             | Gender            | 0.433    | 0.510 |
|                                   | Marital status    | 0.270    | 0.966 |
|                                   | Occupation        | 12.988   | 0.449 |
|                                   | Educational level | 7.065    | 0.070 |
| Previous HIV test                 | Gender            | 2.813    | 0.094 |
|                                   | Marital status    | 4.482    | 0.214 |
|                                   | Occupation        | 22.767   | 0.045 |
|                                   | Educational level | 3.760    | 0.289 |
| Attitude to preoperative HIV test | Gender            | 9.051    | 0.011 |
|                                   | Marital status    | 3.627    | 0.727 |
|                                   | Occupation        | 27.576   | 0.380 |
|                                   | Educational level | 6.330    | 0.387 |

$\chi^2$ , Chi square; P, P-value.

eye conditions especially cataract are common in the age above 40 years especially in resource-limited society (Onyekwe, 2007).

This study suggests the effectiveness of various HIV/AIDS public enlightenment campaigns as 96% of the participants admitted being aware of HIV/AIDS. The high level of participants' awareness of HIV is not peculiar to this study as it has been reported among other studied

populations (Odujinrin and Akinkuade, 1991; Fawole et al., 1999; Anochie and Ikpeme, 2003).

The radio appeared to be the most effective mode of transmitting message on HIV in this study as more participants confirmed being aware of HIV through radio relays. This could be because radio is affordable and powerable with battery which could make it user friendly in resource-limited society. On the other hand, other mode of

transmitting messages on HIV including television, newspapers, and people had complementary roles in this study as previously observed (Ayanniya and Fadamiro, 2009; Anochie and Ikpeme, 2003).

It is remarkable that contrary to findings from many other studies (Iyaniwura and Oloyede, 2006; Dandona et al., 2001; Sannapaneni et al., 2005; Yun et al., 2007; Al Shafae et al., 2008) on health conditions where literacy level is associated with positive attitude especially increase level of awareness, this study finds no significant association ( $p > 0.05$ ) between participants' educational levels and HIV awareness, previous HIV test, and positive attitude to preoperative routine HIV test. This observed 'uniform level of awareness' across educational cadres could be consequential of success of HIV/AIDS public enlightenment campaigns over the years. On the other hand lack of significant association between education and previous HIV test, and response to preoperative routine HIV test should be attitudinal.

The observed negative attitudinal response to preoperative routine HIV test among majority of the participants might be borne out of fear of challenges such as discrimination (Wolf et al., 2007), stigmatization (Wolf et al., 2007; Weiser et al., 2006; Kalichman and Simbayi, 2003; O'Leary et al., 2007; Iyaniwura and Oloyede, 2006) and lack of cure (Adebayo et al., 2003; Weiser et al., 2006) for HIV/AIDS, should they test positive to HIV. Of course, many participants admitted aforesaid as lively challenges of HIV/AIDS.

Moreover, people fearing others knowing about their HIV positive serostatus (confidentiality) are a known barrier to HIV test (Iyaniwura and Oloyede, 2006). On the other hand, cost of HIV test can influence attitude to the test. Though, this study bothered not on participants' attitude should the test be made free but a similar study among youths indicated positive attitude towards routine HIV test as about 80% would like to do the test if it were free (Iyaniwura and Oloyede, 2006).

This study shows that participants' attitude to routine HIV test is at variance with knowledge. The majority of the participants has negative attitude despite admitting merits of early knowledge of positive serostatus from preoperative routine HIV test. Moreover, the participants' recommendations including support for public HIV/AIDS enlightenment campaigns and funding of research into cure for HIV/AIDS suggests knowledge of the reality of HIV/AIDS among the participants. Up till date, there is no cure yet for HIV/AIDS, so far every effort is towards prevention of HIV/AIDS.

In conclusion, discordance exists in participants' awareness, education and attitudes to routine HIV test. Stigmatization, discrimination and lack of cure are still lively HIV/AIDS challenges. Informed consent before preoperative HIV test and continued support for HIV/AIDS are underscored.

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