
Research Article**Knowledge and awareness of HIV/AIDS prevention methods among patients attending surgical outpatient clinic in Sub-Saharan Africa**Adeoti, Moses Layiwola¹, Akanbi, Olusola Olateju^{2*}, Oguntola, Adetunji Saliu³, Onilede, David Adekunle⁴, Omolade, Abiodun Felix⁵, Olaitan, Peter Babatunde⁶^{1,2,3,4,6}Surgery Department, Ladoke Akintola University of Technology, Ogbomosho, Nigeria⁵Abake Medical Centre, Osogbo, Nigeria***Corresponding Author:**

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Abstract: Surgical patients constitute a potential source of retroviral infection to health care workers and other hospital in-patients. Though several studies have investigated different aspect of knowledge of HIV/AIDS, among different target groups of people. The current study investigates the knowledge and prevention methods of HIV/AIDS among patients attending surgical outpatient clinics in a teaching hospital in Sub-Saharan Africa. A 50 item questionnaire was used to obtain relevant data from the patients. A total of 332 patients were included, with mean age of 40.15 (\pm 15.51) years. Most of the patients 329 (99.1%) were aware of HIV/AIDS, however less than half (43.1%) of the patients have comprehensive knowledge about HIV/AIDS. Majority (96.7%) of the patients considered sexual intercourse as the major route of transmission. A large proportion of the patients would not want to engage in any form of contact with HIV/AIDS patients. About 96% of the patients believed that HIV/AIDS is a preventable disease through various methods such as avoidance of needle sharing (79.5%), avoidance of transfusion of unscreened blood (77.4%) among other various methods. Only 64 (19.3%) patients agreed to HIV/AIDS voluntary test and counseling. The main reason for not wanting to be tested among the patients who disagreed is fear of knowing their retroviral status, while 40 (62.5%) out of 64 patients who agreed to voluntary test and counseling will not like to declare their status if positive on account of social stigmatization and community neglect. We thus suggest the need for further enlightenment of the patients in our various clinics most especially in areas of misconception about HIV/AIDS transmission, benefit of voluntary test and declaration of one's status.**Keywords:** Human immunodeficiency virus (HIV), knowledge, surgical patient, prevention

INTRODUCTION

Acquired immune deficiency syndrome (AIDS) is the final spectrum of infectious disease caused by Human immunodeficiency virus (HIV) that is transmitted through contamination of body tissue from infected body fluid of another infected person. The disease often runs a long period of asymptomatic incubation phase varying from 5 to 10 years during which the carrier is dangerously infective to others. The disease is a global health problem of 21st century and presently an incurable disease [1], with Sub-Saharan Africa region bearing the major burden of people living with HIV/AIDS and AIDS related death [2]. Though several drugs and drugs combinations are effective in controlling the disease with possibility of reversing a symptomatic patient to a state of being asymptomatic or preventing an asymptomatic patient from being symptomatic. The disease is incurable with associated stigmatization of patients resultant negative attitudes towards such patients by the society. This makes most of the patients with the disease to hide their status from the care givers and other close relative to avoid been

stigmatized. The same fear often makes some patients to decline to know their status. Knowing the status of an individual is of importance as this allows early recognition of asymptomatic individual to commence early treatment and thus delay the progression of the disease. It also will allows the close associates of the individual and the health professionals to take extra precaution in managing such patients so as to prevent accidental transmission of the disease. Several studies have investigated different aspect of knowledge of HIV/AIDS, attitudes towards people living with HIV/AIDS and prevention methods among different target groups of people such as female students in tertiary institution, commercial sex workers, medical students, and dental students among others [3, 4, 5, 6]. The current study investigates the Knowledge, awareness and attitude towards HIV/AIDS infection and prevention methods among patients attending surgical outpatient clinic in a teaching hospital in sub-Saharan Africa. This study will thus help us to focus HIV AIDS related education further in our surgical outpatients' clinics by initiating and maintaining

positive health behavioral changes towards HIV/AIDS patients in the population.

METHOD

This prospective study was carried out in Ladoko Akintola University of Technology Teaching hospital Ogbomoso in South Western region of Nigeria. The study enrolled 332 consented patients who attended our clinics over a 6 months period, having been counseled and informed of the nature of the study and made to know that refusal to participate in the study will in no doubt affect their management. A 50 item questionnaire with both open- and closed ended questions were used to obtain relevant data from the patients. The patients were asked to fill the questionnaires in the absence of the investigators except in few instances where the patients could not read or write. Such patients were assisted by a designated unit registrar. The data obtained included patients’

demographic characteristics, questions to assess the depth of knowledge of the patients on causative agent of AIDS, transmission, attitude towards screening and patients living with HIV/AIDS, and knowledge of preventive measures. Each response on the questionnaires were assigned a score of one point when correct and zero when wrong. A score above the mean score were considered to be good comprehensive knowledge. The results were analyzed with SPSS version 20 presented in the form of tables and charts. The test of significance was by chi-square, while p value of less than 0.05 was considered to be statistically significant.

RESULTS

The study recruited a total of 332 patients over a period of 6 months. The age range of the patients was 15 to 81 years with a mean age of 40.15 (± 15.51) years with age distributions shown in figure 1.

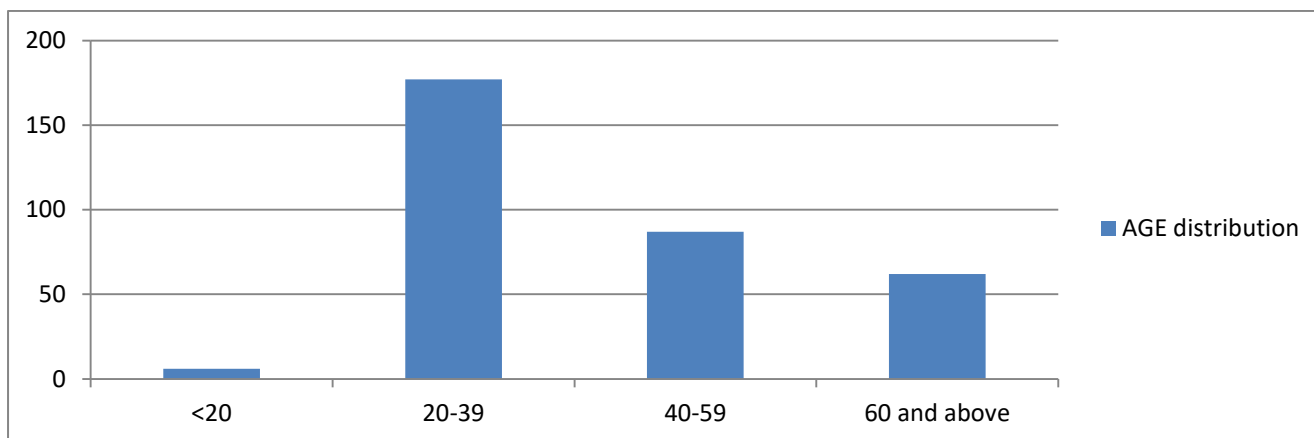


Fig-1: Showing the age distribution of our patients

One hundred and twenty eight (38.55%) patients were males while 204 (61.44%) were females given male to female ratio of 1:1.59. Three hundred and

six, 7, 10 and 9 patients were Yoruba, Hausa, Igbo and other tribes respectively. The other sociodemographic characteristics of our patients are as shown in Table 1.

Table 1 Showing the Sociodemographic characteristics of our patients

Parameters	Frequency	Percentage
Marital status		
Single	56	16.9
Married	264	79.5
Divorced/Widowed	12	3.6
Occupation		
Nil	71	23.8
Unskilled	29	8.73
Artisan	125	37.65
Professionals	107	32.22
Education		
None	28	8.4
Primary	43	13
Secondary	79	23.8
Tertiary	182	54.8

On assessment of awareness of HIV/AIDS 329 (99.1%) patients were aware of the disease. Further

assessment of extent of knowledge of our patients on HIV/AIDS showed that 189 (56.9%) of the patients

have poor comprehensive knowledge about HIV/AIDS while 143(43.1%) patients have a good comprehensive knowledge about the disease. The score on knowledge assessment ranges from 9 points to 36 points with a mean score of 26.22 (± 5.74) out of maximal obtainable score of 50 points. Assessment of effects of socio demographic factors on depth of knowledge on HIV/AIDS showed that only educational level shows a

significant statistical difference (p<0.001) while age group, occupation, sex and ethnicity show no significant statistical difference.

Three hundred and three (91.26%) of our patients believe that HIV/AIDS is contacted mainly through sexual intercourse figure 2.

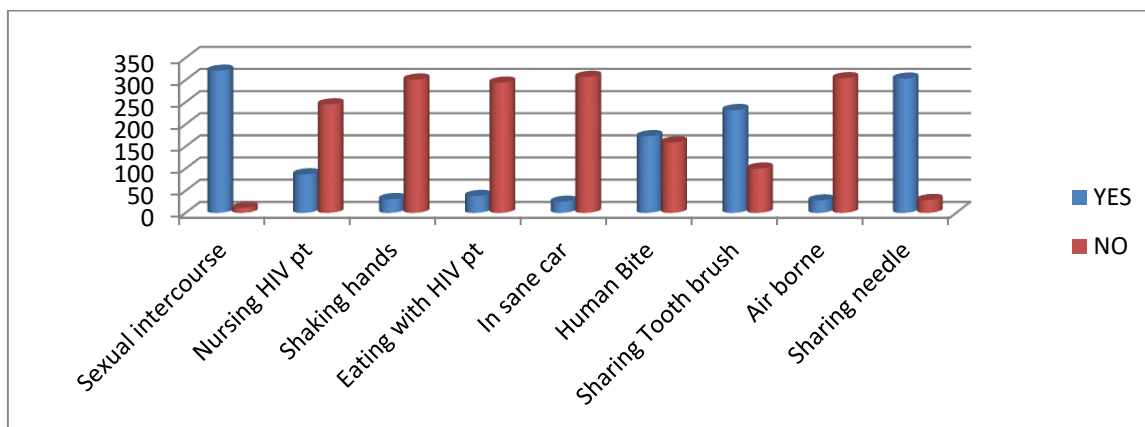


Fig-2: Showing possible mode of HIV/AIDS transmission according to patients

Assessment of attitude of patients to people living with HIV/AIDS (PLWHA) revealed high level of negative attitude towards such patients, as a large proportion of the patients would not want to even engaged in any form of contact with HIV/AIDS patients as a large proportion of the patients would not want to be in the same car (84%), share office (90.7%), sleep on the same bed (86.7%) or marry (98.8%) HIV/AIDS patients.

Three hundred and seventeen (95.5%) patients believed that HIV/AIDS is a preventable disease. Two hundred and forty six of our patients believed that knowledge about HIV/AIDS will help reduce/ prevent HIV/AIDS transmission[7], while 33 patients believed it will not be helpful and not sure respectively. Further assessment of patients' knowledge on prevention and control of HIV/AIDS transmission showed that majority of our patients believed that avoidance of needle and sharp sharing is the best method of prevention figure 3.

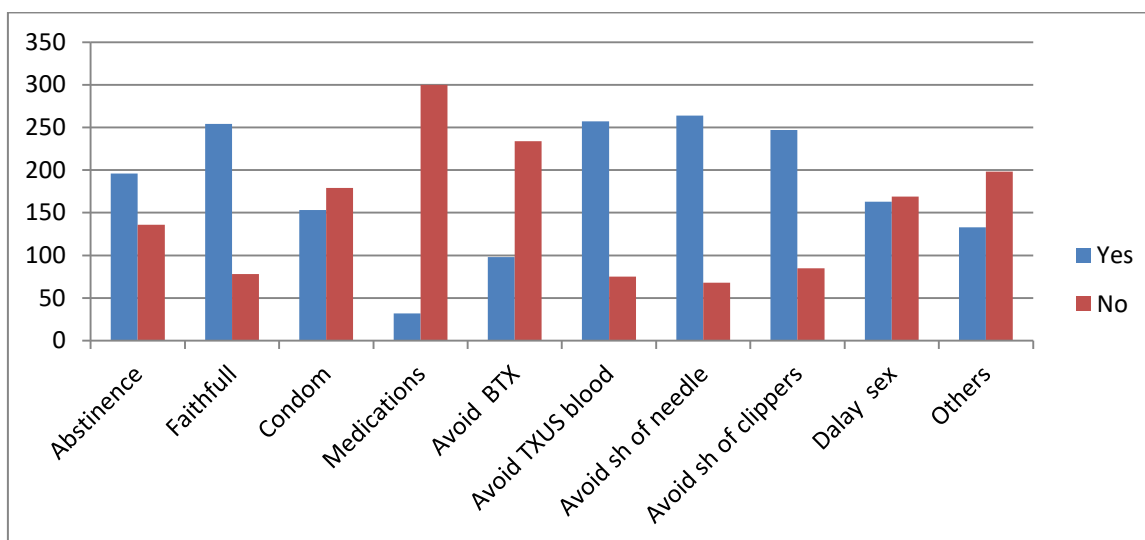


Figure 3: View on different method of prevention of HIV/AIDS transmission
 BTX: Blood transfusion
 TXUS: Transfusion of unscreened blood

On HIV/AIDS voluntary test and counseling 249 of our patients were previously tested for HIV/AIDS following our routine pre operative test and

counseling and 5 patients claimed to be positive. However 7 (2.8%) were actually positive based on our unit record given a minimum number of denial of 2

(28.6%) patients out of 7 patients about their HIV/AIDS status. Two hundred and ninety two (88%) patients believed that voluntary test and counseling can help in preventing HIV/AIDS transmission. However on whether to willingly subject themselves to voluntary testing and counseling for HIV/AIDS test, only 64 (19.3%) patients agreed to HIV/AIDS voluntary test and counseling. The main reason for not wanting to be tested among the patients who disagreed is fear of knowing their retro viral status, while 40 (62.5%) out of 64 patients who agreed to voluntary test and counseling will not like to declare their status if positive on account of social stigmatization and community neglect.

Two hundred and thirty seven and 162 of the patients believe that HIV/AIDS can be transmitted from mother to child and from health personnel to patients respectively.

DISCUSSION

Patients attending surgical outpatients' clinics are potential source of risk of HIV/AIDS transmission to health care workers and other patients in the course of their care. Awareness about the knowledge of HIV/AIDS and its prevention will assist in reducing such risk, as HIV/AIDS is a highly infectious disease with no cure as at now. Our study assesses the awareness and knowledge of HIV/AIDS, attitude towards people living with HIV/AIDS and its prevention among patients attending surgical outpatients' clinics in our teaching hospital. Majority of our patients were of Yoruba ethnicity, this skewed pattern in favour of Yoruba is due to the fact that the study was carried out in south western Nigeria a region populated mainly by the Yoruba ethnic race.

Majority (99%) of our patients were aware of HIV/AIDS a finding similar to previous study on awareness [7, 8]. This high level of awareness is possibly due to intensity of campaign and public enlightenment programs over the years engaged by both government and nongovernmental organization in Nigeria. However this study shows that awareness is not synonymous with knowledge as good comprehensive knowledge was recorded in less than half of the recruited patients.

About 264 (80%) patients were not sure of the causative agent of AIDS, a highly disappointing figure but consistent with other reports on knowledge of causative agent [9, 10, 11, 12].

On assessment of the knowledge of our respondents on transmission of HIV/AIDS, most of our respondents believe that the disease is contacted mainly through sexual intercourse while others think otherwise a belief that support previous report on mode of HIV/AIDS transmission 7 especially in Nigeria and

[13] Sub-Saharan Africa [1] and linked to promiscuity in about 11% of our patients. On sharing of needle, tooth brush, comb and clippers about 97 %, 68% and 95 % respectively of our respondents considered sharing of such to be dangerous. About 83% and 57% of the patients are aware that transmission from mother to child and transmission from health care worker to patients is a possibility respectively. Majority of the respondents believe that eating together, shaking hand, boarding the same vehicle and sharing office with HIV/AIDS patients were safe while some still have previously documented misconception about this [14, 15].

About 43% of or respondents believe that the disease is curable a similar finding reported by World Health Organization [16]. This erroneous belief has been ascribed to stem from suppression of the disease by ARV drugs. This erroneous belief is a cause for concern as it has been implicated as potential factors in spreading of the disease [7].

On issue of voluntary test and counseling, despite the effectiveness of voluntary test and counseling in preventing spread of HIV/AIDS, by making a non reactive patient to be more proactive in reducing risky behaviors and also making a reactive patients to take precaution to prevent spread to partner. Our study surprisingly shows poor knowledge of patients on the benefit and advantages of knowing ones status as few (19%) of our patients will voluntarily agree to retroviral test to know their status. However majority (63%) of those who agreed for voluntary test will not like to disclose their status if positive, a finding noted in our study which is similar to 56% of our patients who denied their retroviral status based on our record findings. Though about 88% of our patients agreed that voluntary screening through voluntary test and counseling can help prevent HIV/AIDS. However, most (93%) of the patients who agreed with preventive role of voluntary screening in prevention will not agree for such screening. The main reason given for disagreeing with voluntary test is fear of knowing their status and exposure of their status if positive which will lead to social stigmatization, a previously documented reason [1]. About 28% of our of patients who are positive deny their retroviral status. This high level of denial among patients is a cause for concern as this group of patients are a potentially dangerous source of infection to health care workers and other patients especially in a centre where retroviral is not routinely screened for.

Our study findings suggest that awareness and knowledge base of our patients is not sufficient to motivate our patients for voluntary test and counseling as reported previously [7].

About 96% of the patients believed that HIV/AIDS is a preventable disease through various methods. Majority of the patients believed that avoidance of needle sharing, transfusion of unscreened blood, faithfulness to partner and complete abstinence from pre marital sex top the list among others (figure 3). One hundred and forty six of the patients believed that knowledge of HIV/AIDS will be of help in prevention of HIV/AIDS spread while 3 and 17 patients believed it will not be useful and not sure respectively. Despite the recognition of consistent use of condom as the best weapon at hand to prevent spread of HIV/ADS especially in a region where sexual intercourse remain the major mode of transmission, there have been report of poor compliance with use of condom among young people [13] and in Sub-Saharan Africa [17, 18]. Limited use of condom in Sub-Saharan Africa as barrier method to prevent transmission of HIV may be reflections of their belief on the role of condom in preventing transmission of the disease as less than half (46.1%) of our patients believed that it can truly prevent the transmission of the disease. Though faithfulness, abstinence were considered as reliable method to prevent spread of the disease, the challenge comes from the percentage of the population who actually comply with this as previous study has shown poor compliance with this methods [1] thus making consistent use of condom as barrier method a realistic method of prevention especially in the Sub-Saharan Africa.

This study further confirm findings from previous studies about negative attitude of people towards people living with HIV/AIDS [19, 20, 21, 22] a phenomenon that translates to the physical demonstration of stigmatization. The negative attitudes of our patients as shown in this study is a reflection of poor comprehensive knowledge about the disease, as more than half of our patients have poor comprehensive knowledge of HIV/AIDS. This study further demonstrates that awareness is not synonymous with in depth knowledge, similar findings noted in other several studies in other disease states.

Based on the outcome of our study we advocate the need to further strengthen and increase the scope of education on HIV/AIDS in our various clinics to all our patients irrespective of risk group as most previous education on HIV/AIDs were directed more to high risk groups. This will help to increase level of awareness more and correct some misconceptions about HIV/AIDS.

CONCLUSION

Our study has shown that surgical patients' knowledge on HIV/AIDS is below average and not acceptable. The patients lack vital essential knowledge in some areas. We thus suggest the need for further enlightenment of our patients in our various clinics

most especially in area of misconception about HIV/AIDS transmission, benefits and advantages of voluntary screening and declaration of one's status.

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