

# HIV/AIDS Knowledge and Attitude among Military Recruits at Depot Nigeria Army, Zaria, Nigeria

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**Abstract** Military personnel have higher HIV/AIDS prevalence than the general population. They tend to be young, single, sexually active and highly mobile and may stay away from their home. This study assessed HIV/AIDS knowledge and attitude among recruits at Nigerian Army Depot in Zaria Nigeria. It was a cross sectional descriptive study carried out February 2011 using 300 structured, self-administered questionnaires. Majority of the respondents (80.3%) were within the age bracket of 20- 24 years with mean age of  $21.8 \pm 2.0$  years, 93% single and 53.3% secondary school graduate. Majority of the respondents (91.0%) have heard of HIV/AIDS, while a lot of them (72.6%) knew those that are victims of the disease. Majority of the respondents (74.3%) also knew that HIV/AIDS was caused by virus. On the overall, only 48.7% of the respondents had good knowledge of the disease. About 80.7% of the respondents would offer assistance to HIV infected people, 62.3% agreed that HIV positive women should not be having babies, while 66.0% believed that HIV/AIDS patients should not be stigmatized against among others. The study revealed amongst others that the recruits had very good knowledge of HIV/AIDS and also good attitudes to it. The recommendations include- aggressive regular HIV/AIDS awareness campaigns, development of attitudinal and behavioural change communication strategies for the recruits in particular, health education by faith based organisations. There is also the need to develop a good practical tool and quality control programs for monitoring and evaluation of the various HIV/AIDS awareness programs in the barracks for enhanced effectiveness and efficiency.

#### Keywords: HIV/AIDS, knowledge, attitude, military recruits, depot zaria, Nigeria

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### 1. Introduction

Acquired immune deficiency syndrome or acquired immunodeficiency syndrome (AIDS) is a set of symptoms and infections resulting from the damage to the human immune system caused by the human immunodeficiency virus (HIV). This condition progressively reduces the effectiveness of the immune system and leaves individuals susceptible to opportunistic infections and tumors. HIV is transmitted through direct contact of a mucous membrane or the bloodstream with a bodily fluid containing HIV, such as blood, semen, vaginal fluid, preseminal fluid, and breast milk. This transmission can involve anal, vaginal or oral sex, blood transfusion, contaminated hypodermic needles, exchange between mother and baby during pregnancy, childbirth, or breastfeeding, or other exposure to one of the above bodily fluids [1].

Sub-Saharan Africa (SSA) contains just over 10% of the world's population but is home to nearly two thirds of the world's HIV/AIDS cases. An estimated 3.2 million people in Africa became newly infected with HIV in 2005, while 2.4 million adults and children died of AIDS. SSA is the epicenter of the HIV/AIDS pandemic and faces an unprecedented devastation. Africa is home to 95% of all mother-to-child transmissions of HIV and claims approximately 15 million orphans. The spread of HIV/AIDS has reversed all progress in health, education, life expectancy, and standards of living that Africa has made since the 1950s. Nigeria is the second most affected country in SSA with HIV, representing 14% of HIV/AIDS cases in this region [1,2].

Among Nigerian military personnel (NMP), HIV prevalence has been reported to be higher than that of the general population, due to their mobile lifestyle and distance from their spouses while on United Nations peace-keeping mission. This is also due to the fact that danger and risk taking are integral parts of their profession. They tend to be young, single, and sexually active and are highly mobile and stay away from their families and home communities for extended periods. NMP are easily influenced by peer pressure rather than social convention and are inclined to feel invincible and take risks. They have more ready cash than other males where they are deployed and hence are surrounded by opportunities for casual and commercial sex. Data on HIV prevalence among the military are difficult to obtain, as governments are often unwilling to disclose high rates, for fear of seeming vulnerable to enemies and coups. For similar reasons, comprehensive HIV testing programs for military personnel in SSA are rare [3].

Peacekeeping has become an important role for military forces the world over. National armies are increasingly requested to contribute troops and support staff to war zones and post-conflict milieu. During the past two decades, Nigerian troops have been involved in peacekeeping operations in many countries, including Congo, Côte d'Ivoire, Liberia, Somalia, Eritrea, former Yugoslavia, Sierra Leone, and Sudan among others. The United Nations Department of Peace Keeping Operations (DPKO) recommends that military personnel infected with HIV or other Sexually Transmitted Infections (STIs) are not to be deployed for peacekeeping operations, and that all countries contributing peacekeepers provide their troops with standardized guidelines and training on prevention and control of HIV and other STIs. Although women are often in the minority in military and police forces, more and more women are enlisting in the uniformed services. In Nigeria, for instance, females constitute 6% to 10% of the military. These women are exposed to the same and sometimes even greater pressure as men to enter into casual sexual relationships. Women are also more vulnerable to HIV transmission through sex with infected partners [3].

HIV prevalence figures are unavailable in the public domain for Nigeria's 150,000-strong armed forces, since force-wide HIV testing has not been conducted. Nigeria is Africa's largest contributor of troops including military observers and civilian police to UN peacekeeping missions. Preliminary results from an ongoing study funded by the U.S. Naval Health Research Center found a 15% HIV seroprevalence rate among soldiers on active duty [3]. This study assessed HIV/AIDS knowledge and attitude among Military Recruits at Depot Nigeria Army in Zaria, Nigeria.

# 2. Materials and Methods

#### 2.1. Study Area

Depot Nigerian Army (Depot NA) was established in 1924 and it is presently located in Chindit Cantonment which is in Sabon Gari Local Government Area in Zaria northwest, Kaduna State. It is a military training institution with an approximate permanent staff population of about 700. It trains army recruits on a yearly basis. The geographical coordinates are Easting 61 and Northing 28.

Zaria lies approximately between longitude  $5^{\circ}$  50' and  $8^{\circ}$  30' E. and latitude  $9^{\circ}$  20' and  $11^{\circ}$  30' N at an elevation of 2150 ft. It has an area of 22,000 square meters and an estimated population of about 250,000. It consists of open rolling plains and is watered by the Kaduna affluent of the Niger River and its many tributaries [4]. Temperatures in Zaria range from 15.3 to 36.25°C, and rainfall varies from 0.0 to 816.0 mm/month [5].

#### 2.2. Study Design

The study design was a cross-sectional descriptive in nature to assess HIV/AIDS knowledge and attitude among recruits of NA Depot Zaria, Nigeria carried out February, 2011.

#### 2.3. Study Population

The study population were new recruits undergoing training in Depot NA, Zaria, Kaduna State, Nigeria. The entire recruit intake has a population of about 2,000. The sample included recruits aged 17 - 29 years, recruits of both sexes, married and unmarried and of different religious background.

# **2.4.** Sample Size Determination and Sampling Technique

The minimum sample size for the study was calculated using the formula:  $n = z^2 pq/d^2$  Where; n = minimum sample size, z = standard normal deviate at 95% confidence level = 1.96, p = prevalence from previous study, q = 1 - p, d = precision of accuracy set at 0.05.

According to the 2008 UNAIDS/WHO/UNICEF epidemiological fact sheets update; the prevalence of HIV/AIDS amongst adults aged 15 to 49 is 3.1% in Nigeria [6].

Using the above formula: p=3.1% = 0.031, q=1-p=1-0.031 = 0.969, z=1.96

d= precision = 0.05 level of significance

Hence:  $n = 1.96^2 \times 0.031 \times 0.969/0.05^2$  and  $n = 46 \approx 50$ . However, for greater precision, 300 recruits participated in the study.

The following sampling schemes were used to select 300 recruits aged 17 to 29 years for the study from a population of 2000 recruits:

1. There were eight training companies in Depot NA namely alpha, bravo, charlie, delta, echo, foxtrot, golf and hotel, each having a total number of 250 recruits. Using a simple random sampling by balloting without replacement six training companies were selected. These companies were bravo, charlie, delta, echo, golf and hotel. The six companies formed the six strata for the next sampling scheme.

2. All the recruits in the six selected companies were listed to form a sampling frame.

3. Using a table of random numbers, fifty recruits were randomly selected from each of the six companies (strata) giving a sample size of 300.

#### 2.5. Data Collection Tool

Using closed-ended, structured, self-administered questionnaire, data were collected on socio-demographic characteristics, HIV/AIDS and attitude among the recruits. The questionnaire comprised of three sections namely A, B and C. Section A was on socio-demographic characteristics; section B was on knowledge of HIV/AIDS and section C was on attitude.

#### 2.6. Pretesting of Questionnaire

A pretest was done with 30 recruits from the two companies that were not selected for the study namely alpha and foxtrot companies with the aim of ascertaining their level of understanding of the questionnaire. Necessary explanations were given on how to complete the questionnaires. Based on the outcome of the pretest, no adjustment was made as the questionnaire was easily understood by the recruits.

#### 2.7. Data Analysis

The retrieved questionnaires were sorted out and analyzed using the Statistical Package for Social Sciences (SPSS) software version 15.0. Statistical calculations using chi-square mean, median, mode, standard deviation and percentages were done. P-value of < 0.05 was taken to be statistically significant.

#### **2.8. Ethical Considerations**

Permission was obtained from the Commandant of Depot NA, Zaria and also all the participants gave informed consent to voluntarily take part in the study. Strict precautions were taken to ensure confidentiality throughout the duration of the study. The instruments used (i.e. questionnaires and database entries) were coded and names were not included. A few direct risks to participants included embarrassment from the sensitive nature of the questions, particularly since the interviewer was also a military personnel and he also discussed with them.

### 2.9. Limitations of the Study

The study topic being a very sensitive one some people were not willing to give complete or correct responses. The socio-cultural characteristics of the study area, people's values, norms and educational background impacted on the responses of the recruits and affected getting adequate cooperation from them.

## 3. Results

A total of 300 questionnaires were distributed to the recruits and all the respondents returned their completed questionnaires giving a response rate of 100%.

# **3.1.** Socio-demographic Characteristics of the Respondents

There were 79 females and 221 males, giving a male/female ratio of 2.8:1. The respondents' ages ranged from 17 to 29 years. The mean age was 21.8 years; the median age was 22.0 years, the mode was 22.0 years and the standard deviation was 1.9. Most respondents (80.3%) were between 20 to 24 years of age. Majority of the respondents, 279 (93.0%) were single, while 215 (71.7%) were Christians and 84 (28.0%) were Muslims while only one (0.3%) respondent practices traditional religion. Majority of the respondents were from the Hausa/Fulani ethnic group, 100 (33.3%), followed by those from the minority ethnic group 72 (24.0%) and those from Igbo extraction 67 (22.3%). Majority of the respondents 160 (53.3%) were secondary school graduates, 85 (28.3%) attended tertiary institutions, while 16 (5.3%) had no formal education. Majority of them, 192 (64.0%), resided in urban areas (Table 1).

#### 3.2. Knowledge of HIV/AIDS

Variable	Frequency	Percent
Age( in years)		
17 - 19	26	8.7
20 - 24	241	80.3
25 - 29	33	11.0
Total	300	100.0
Sex		
Male	221	73.7
Female	79	26.3
Total	300	100.0
Marital Status		
Single	279	93.0
Married	17	5.6
Divorced	2	0.7
Widowed	2	0.7
Total	300	100.0
Religion		
Christianity	215	71.7
Islam	84	28.0
Traditional religion	1	0.3
Total	300	100.0
Ethnicity		
Hausa/Fulani	100	33.3
Igbo	67	22.3
Yoruba	61	20.3
Others	72	24.0
Total	300	100.0
Educational Level		
No formal	11	3.7
Quranic	20	6.7
Incomplete primary	5	1.7
Complete primary	16	5.3
Incomplete secondary	34	11.3
Complete secondary	134	44.6
Incomplete tertiary	24	8.0
Tertiary	56	18.7
Total	300	100.0
Residence		
Urban	192	64.0
Rural	108	36.0
Total	300	100.0

#### Table 2. Respondents' knowledge of HIV/AIDS (n = 300)

Table 2. Respondents knowledge of HI (AIDS (II = 500)		
Knowledge item	Frequency	Percent
Those that have heard of HIV/AIDS	273	91.0
Those that know HIV/AIDS patients	218	72.6
Causes of HIV/AIDS		
Germ (Virus)	223	74.3
American invention against sex	134	44.7
Untreated staphylococcus infection	128	42.6
Sleeping with a menstruating woman	91	30.3
Sleeping with a widow/widower	74	24.6
Witchcraft	38	12.7
Do not know	21	7.0

Table 3.	Respondents	knowledge	of th	e mode	of	transmission	of
HIV/AID	(n = 300)						

HIV/AID (n = 300)		
Knowledge item	Frequency	Percent
Mode of transmission		
Transfusion of infected blood	281	93.6
Sharing of contaminated or used injection	273	91.0
needles and syringes		
Sharing of clippers/razor blades	264	88.0
Bisexual intercourse	260	86.7
Mother to child during breast feeding	248	82.7
Mother to child	201	67.0
Homosexual intercourse	190	63.3
Mother to child during delivery	184	61.3
Kissing	100	33.3
Sharing cutleries/eating utensils	93	31.0
Mosquito bite	81	27.0
Sharing towels	41	13.7
Caring for an infected person	38	12.7
Toilet seat	37	12.3
Sharing of clothes of an infected person	35	11.7
Other means	34	11.3
Hand shake	28	9.3
Sleeping in same room with an infected person	27	9.0

All the respondents had some knowledge of HIV/AIDS. Majority of the respondents (91.0%) have heard of HIV/AIDS, while a lot of them (72.6%) knew those that are victims of the disease. Majority of the respondents (74.3%) also knew that HIV/AIDS was caused by virus.

Table 3 showed majority of the respondents (95.0%) knew how HIV/AIDS can be transmitted; through infected blood transfusion (93.6%) and unprotected bisexual/ heterosexual intercourse (86.7%).

Majority (65.7%) knew that a healthy looking individual can be a carrier (Table 4).

Variable	Frequency	Percent
Can a healthy looking person have HIV/AIDS		
Yes	197	65.7
No	88	29.3
Not sure	15	5.0
Total	300	100.0
Signs and symptoms of HIV/AIDS		
Falls sick frequently	258	86.0
Progressive weight loss	258	86.0
Skin rashes	249	83.0
Persistent fever	246	82.0
Chronic cough	231	77.0
Rashes in the mouth	220	73.3
Frequent watery stool for more than one month	208	69.3
A child not growing well	200	66.7
Night sweats	174	58.0

Table 5. Respondents knowledge on how HIV/AIDS can be avoided (n = 300)

Knowledge item	Frequency	Percent
Using condom every time you have sex	264	88.0
Avoiding unscreened blood transfusion	257	85.7
Not sharing razors, clippers, needles	255	85.0
Faithfulness to one's partner	244	81.3
Avoiding sex with casual partners such as commercial sex workers	238	79.3
Proper sterilization of all equipment used for surgery	230	76.7
Not reusing needles and syringes	226	75.3
Advising infected mothers not to breastfeed their babies	217	72.3
Having sex with only one uninfected person	213	71.0
Not having sex at all	208	69.3
Vaccination	156	52.0
Washing thoroughly after sex	109	36.3
By taking herbal preparations	109	36.3
Always having sex with people who look healthy	106	35.3
Avoiding contact (e.g., touch)	99	33.0
Having sex with virgins only	97	32.3
Using spiritual preparations/charms/prayers	95	31.7
Taking tablets after sex	94	31.3
Having sex with people you have known for a long time	93	31.0

A significant percent (88.0%) knew that consistent use of condom was a preventive measure, while an appreciable number of them (69.3%) believed that abstinence was a way of avoiding getting infected with the virus (Table 5).

Table 6. Respondents' knowledge on cure for HIV/AIDS				
Knowledge item	Frequency	Percent		
Can HIV/AIDS be cured? (n=300)				
No	195	65.0		
Yes	105	35.0		
Total	300	100.0		
HIV can be cured by (n=105)				
Modern medication	44	41.9		
Some traditional healers (herbalist/TBAs)	25	23.8		
Having sex with someone who has just started	24	22.9		
menstruating	10	9.5		
Having sex with virgins	2	1.9		
Having sex with old women	105	100.0		
Total				

Thirty five percent (35.0%) of them believed that HIV/AIDS can be cured though they do not seem to know how (Table 6).

Table 7. Knowledge score $(n = 300)$				
Category Frequency Percent				
Very good	146	48.7		
Good	137	45.7		
Fair	13	4.3		
Poor	4	1.3		
Total 300 100.0		100.0		
Table 7 showed majority of the respondents (48.7%)				

had very good knowledge of HIV/AIDS, while only about 1.3% had poor knowledge of it.

Table 8. Respondents' Attitude towards HIV/AIDS				
Variable	Frequency	Percent		
HIV cannot be gotten after having sex only				
once:				
Agree	78	26.0		
Disagree	213	71.0		
Undecided	9	3.0		
Total	300	100		
Having multiple sexual partners is a proof				
of manhood:				
Agree	109	36.3		
Disagree	166	55.3		
Undecided	25	8.3		
Total	300	100		
HIV is a punishment from God:				
Agree	166	55.3		
Disagree	111	37.0		
Undecided	23	7.6		
Total	300	100		
Sex is not enjoyable with condoms:				
Agree	173	57.7		
Disagree	102	34.0		
Undecided	25	8.3		
Total	300	100		
Once you love someone you have to prove it				
by having sex with him/her:				
Agree	101	33.7		
Disagree	185	61.7		
Undecided	14	4.6		
Total	300	100		
HIV/AIDS patients should be isolated:				
Agree	93	31.0		
Disagree	179	59.7		
Undecided	28	9.3		
Total	300	100		

Majority of them (78.0%) believed that it could not be gotten after having sex only once. One hundred and sixty six (55.3%) believed that having multiple sexual partners was not a proof of manhood. One hundred and seventy three (57.7%) believed that sex was not enjoyable with condoms and 31% believed that HIV/AIDS patients should be isolated (Table 8).

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Variable         Frequency         Percent           HIV/AIDS patients should not be treated as they will all die:         -         -           Agree         59         19.7           Disagree         230         76.6           Undecided         11         3.7           Total         300         100           HIV/AIDS patients should be labeled:         -         -           Agree         88         29.3           Disagree         198         66.0           Undecided         14         4.7           Total         300         100           HIV positive pregnant women should not         -         -           continue having babies subsequently         -         -           Agree         187         62.3           Disagree         93         31.0           Undecided         20         6.7           Total         300         100           HIV positive women should take         -         -           antiretroviral drugs:         -         -           Agree         212         70.7           Disagree         60         20.0           Undecided         28         9.3 <th colspan="4">Table 9. Respondents' Attitude towards patients with HIV/AIDS</th>	Table 9. Respondents' Attitude towards patients with HIV/AIDS			
they will all die:           Agree         59         19.7           Disagree         230         76.6           Undecided         11         3.7           Total         300         100           HIV/AIDS patients should be labeled:         4         4           Agree         88         29.3           Disagree         198         66.0           Undecided         14         4.7           Total         300         100           HIV positive pregnant women should not continue having babies subsequently         62.3           Disagree         93         31.0           Undecided         20         6.7           Total         300         100           HIV positive women should take antiretroviral drugs:         Agree         212         70.7           Disagree         60         20.0         0         00           HIV positive women should take antiretroviral drugs:         4         4         4           Agree         230         76.7         0         50         100           HIV/AIDS patients should be supported by the society:         4         4         6         6         6         6         6         6 <th>Variable</th> <th>Frequency</th> <th>Percent</th>	Variable	Frequency	Percent	
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Disagree         93         31.0           Undecided         20         6.7           Total         300         100           HIV positive women should take antiretroviral drugs:         300         100           Agree         212         70.7           Disagree         60         20.0           Undecided         28         9.3           Total         300         100           HIV/AIDS patients should be supported by the society:         4           Agree         230         76.7           Disagree         50         16.7           Undecided         20         6.6           Total         300         100           Offer of assistance to HIV infected people:         4.6           Agree         242         80.7           Disagree         44         14.7           Undecided         14         4.6	continue having babies subsequently			
Undecided         20         6.7           Total         300         100           HIV positive women should take antiretroviral drugs:         300         100           Agree         212         70.7           Disagree         60         20.0           Undecided         28         9.3           Total         300         100           HIV/AIDS patients should be supported by the society:         4           Agree         230         76.7           Disagree         50         16.7           Undecided         20         6.6           Total         300         100           Offer of assistance to HIV infected people:         4         4           Agree         242         80.7           Disagree         44         14.7           Undecided         14         4.6	Agree	187	62.3	
Total         300         100           HIV positive women should take antiretroviral drugs:	Disagree	93	31.0	
HIV positive women should take antiretroviral drugs:           Agree         212         70.7           Disagree         60         20.0           Undecided         28         9.3           Total         300         100           HIV/AIDS patients should be supported by the society:         4           Agree         230         76.7           Disagree         50         16.7           Undecided         20         6.6           Total         300         100           Offer of assistance to HIV infected people:           Agree         242         80.7           Disagree         44         14.7           Undecided         14         4.6	Undecided	20	6.7	
Agree         212         70.7           Disagree         60         20.0           Undecided         28         9.3           Total         300         100           HIV/AIDS patients should be supported by the society:         Kernel         Kernel           Agree         230         76.7           Disagree         50         16.7           Undecided         20         6.6           Total         300         100           Offer of assistance to HIV infected people:         Agree         242           Agree         242         80.7           Disagree         44         14.7           Undecided         14         4.6	Total	300	100	
Agree         212         70.7           Disagree         60         20.0           Undecided         28         9.3           Total         300         100           HIV/AIDS patients should be supported by the society:         230         76.7           Agree         230         76.7           Disagree         50         16.7           Undecided         20         6.6           Total         300         100           Offer of assistance to HIV infected people:         Agree         242         80.7           Disagree         44         14.7         Undecided         14         4.6	HIV positive women should take			
Disagree         60         20.0           Undecided         28         9.3           Total         300         100           HIV/AIDS patients should be supported by the society:         230         76.7           Agree         230         76.7           Disagree         50         16.7           Undecided         20         6.6           Total         300         100           Offer of assistance to HIV infected people:         Xagree         242         80.7           Disagree         44         14.7         Undecided         14         4.6	antiretroviral drugs:			
Undecided         28         9,3           Total         300         100           HIV/AIDS patients should be supported by the society:         230         76.7           Agree         230         76.7           Disagree         50         16.7           Undecided         20         6.6           Total         300         100           Offer of assistance to HIV infected people:         242         80.7           Disagree         44         14.7           Undecided         14         4.6	Agree	212	70.7	
Total         300         100           HIV/AIDS patients should be supported by the society:           Agree         230         76.7           Disagree         50         16.7           Undecided         20         6.6           Total         300         100           Offer of assistance to HIV infected people:           Agree         242         80.7           Disagree         44         14.7           Undecided         14         4.6	Disagree	60	20.0	
HIV/AIDS patients should be supported by the society:Agree23076.7Disagree5016.7Undecided206.6Total300100Offer of assistance to HIV infected people:Agree24280.7Disagree4414.7Undecided144.6	Undecided	28	9.3	
the society:         76.7           Agree         230         76.7           Disagree         50         16.7           Undecided         20         6.6           Total         300         100           Offer of assistance to HIV infected people:         80.7           Disagree         44         14.7           Undecided         14         4.6	Total	300	100	
Agree         230         76.7           Disagree         50         16.7           Undecided         20         6.6           Total         300         100           Offer of assistance to HIV infected people:         Agree         242         80.7           Disagree         44         14.7         Undecided         14         4.6	HIV/AIDS patients should be supported by			
Disagree         50         16.7           Undecided         20         6.6           Total         300         100           Offer of assistance to HIV infected people:         242         80.7           Disagree         44         14.7           Undecided         14         4.6	the society:			
Undecided         20         6.6           Total         300         100           Offer of assistance to HIV infected people:         242         80.7           Agree         242         80.7           Disagree         44         14.7           Undecided         14         4.6	Agree	230	76.7	
Total300100Offer of assistance to HIV infected people:Agree24280.7Disagree4414.7Undecided144.6	Disagree	50	16.7	
Offer of assistance to HIV infected people:Agree24280.7Disagree4414.7Undecided144.6	Undecided	20	6.6	
Agree         242         80.7           Disagree         44         14.7           Undecided         14         4.6	Total	300	100	
Agree         242         80.7           Disagree         44         14.7           Undecided         14         4.6	Offer of assistance to HIV infected people:			
Undecided 14 4.6		242	80.7	
	Disagree	44	14.7	
Total 300 100	Undecided	14	4.6	
	Total	300	100	

About 80.7% of the respondents would offer assistance to HIV infected people, 62.3% agreed that HIV positive women should not be having babies, while 66.0% believed that HIV/AIDS patients should not be labelled (Table 9).

Table 10. Attitude score

Table 10. Attitude Score				
Category Frequency Percent				
Good	279	93.0		
Poor	21	7.0		
Total	300	100.0		

# 4. Discussion

HIV infection has become a common problem in Nigeria and it is spreading rapidly into the various segments of the society in general and NMP in particular. Apart from having serious social and security implications, it has a drastic and devastating economic impact on the family, society and nation. Thus it is important to take immediate steps to minimize the further spread of this disease.

Results of the present study provided baseline data with respect to the knowledge, attitude to HIV/AIDS and it is a pilot study and as such there is paucity of literature pertaining to this kind of study amongst NMP.

In this study, the aetiology of HIV/AIDS was correctly known to 74.3% of the respondents. Majority of them (91.0%) have heard about HIV/AIDS while a lot of them (72.6%) knew those that are victims of it. This is comparable to 71.0% found in a study by Ugboga et al on

Nigerian naval personnel [7] and 91.2% found in another study done by Adewale et al amongst undergraduate students of the University of Ibadan [8] However, it is in contrast to the figure of 40.0% found in a study done by Ernest E. On HIV/AIDS and the military which is an important KAP survey of the Nigerian Armed Forces (NAF). [3] This is probably due to the positive impact of the various campaigns against HIV/AIDS in the media, armed forces program on HIV/AIDS control (AFPAC) and other agencies.

The study also revealed that the respondents had good knowledge of the modes of transmission of HIV. Majority of them (93.6%) knew that it can be transmitted through infected blood transfusion while 86.7% knew that it can be gotten through unprotected heterosexual/bisexual intercourse as shown in Table 3. This is, however, dissimilar to a study done by Ekong on HIV/AIDS in the military in which it was found that only 40.0% of the respondents' had good HIV transmission and prevention knowledge, while 25.0% had poor knowledge of HIV/AIDS. [3] This can be explained by the fact that the general population including the military is becoming more aware of HIV/AIDS through various educational and enlightenment campaigns through the print and electronic media and other means such as IEC materials. The activities of AFPAC in the various Nigerian army (NA) barracks have equally helped.

Majority of the respondents (65.7%) knew that healthy looking individuals can be a carrier. It shows that they have good knowledge of the signs and symptoms of the disease. This is similar to a study conducted by Sudha et al on the awareness, attitudes and beliefs of the general public towards HIV/AIDS in Hyderabad, India, in which 64.75% of 800 respondents knew that healthy HIV reactive person can transmit the infection to others [9].

As shown in Table 5, majority of the respondents (88.0%) knew that consistent and correct use of condom is a preventive measure, while an appreciable number of them (69.3%) believed that abstinence is a way of avoiding getting infected. This is an improvement over the KAP study done on HIV/AIDS and the NAF by Ekong in which it was found that only 40.0% of the respondents had good HIV transmission and prevention knowledge and 25.0% had poor knowledge of HIV/AIDS.<sup>3</sup> The differences could be due to the fact that the Nigerian military has been proactive in addressing this issue through the several HIV education programs, but more targeted education and health policies are desperately needed in order to improve upon this [7].

The wrong perception about the cure for HIV/AIDS is evident in Table 6 where a significant number of the respondents (35.0%) believed that it can be cured while 65.0% believed that it had no cure. However, there is discordance between their knowledge of HIV/AIDS having a cure and how it can be cured. This is exemplified by an appreciable number of them (14.7%) believing that it can be cured by the use of modern medication. This is in contrast to the figure of 52.1% found among Nigerian naval personnel by Ugboga et al and that of 30.0% found among urban adolescent girls in south Delhi, India by McManus et al. [7,10]. This shows that more needs to be done by the military authorities to improve on this.

As depicted in Table 7, the study shows that the respondents' knowledge score of the epidemiology of

HIV/AIDS was good with 48.7% of the having very good knowledge, while 45.7% have good knowledge of it. This is partially due to the fact that HIV/AIDS education is incorporated in their training curriculum but there is still a great room for improvement. Most of the respondents (72.6%) actually knew PLWHA within their circle of acquaintance. Regular strong educational campaigns to increase the awareness about HIV/AIDS and propagate methods of safe sex in military training institutions such as Depot NA is imperative especially as the prevalence rate of HIV/AIDS amongst NMP is higher than that of the general population. These institutions will have to teach their personnel not merely about sex, but educate them about value systems and healthy behaviour. Special strategies are needed for personnel with little or no formal education and they should be approached through youthgroups, peers education etc in the various cantonments and training institutions.

The attitude of the respondents towards HIV/AIDS shows that majority of them (71.0%) believed that it can be gotten after having sex only once, 36.3% believed that having multiple sexual partners is a proof of manhood, while 57.7% believed that sex is not enjoyable with condoms. This is consistent with the fact that danger and risk taking are integral parts of the military profession. However, a lot of work needs to be done to educate them thereby leading to both attitudinal and behavioural changes. The study also revealed that majority of the respondents had good attitude towards HIV/AIDS, however, more still needs to be done to further improve on it.

## 5. Conclusion

The study is a pilot one which focussed on the recruits of Depot NA as the institution serves as an entry point into the soldier cadre of the NA. It trains low cadre personnel which forms the bulk of the population of the Nigerian military. The study gave an insight into the knowledge base of these recruits with respect to their attitude to HIV/AIDS. The importance of this study cannot be overemphasised as studies of this nature are rare in the military due to its peculiar nature. Moreover the prevalence of HIV/AIDS amongst the NMP is generally presumed to be higher than that of the general population due to the several factors earlier enumerated in this study.

The study revealed amongst others that the recruits had very good knowledge of HIV/AIDS and also good attitudes to it.

### Recommendations

Based on the findings of this study, the following were recommended to the Depot NA authorities in particular and the military authorities in general in order to further improve on the knowledge and attitude to HIV/AIDS:

- 1. Aggressive HIV/AIDS awareness campaigns should be carried out on a regular basis to further increase the level of awareness of the recruits with respect to HIV/AIDS by the management.
- 2. Development of attitudinal and behavioural change communication strategies for the recruits in particular

and NMP in general with respect to HIV/AIDS. They should be educated that having sex with virgins does not lead to the cure of AIDS but rather constitute rape and/or paedophilia, as the case may be, which are grievous crimes against humanity.

- 3. Social mobilization and sensitization meetings with commanders, religious and opinion leaders in the various military establishments on the need for teaching HIV/AIDS in churches, mosques, officers' messes, soldiers' clubs and schools.
- 4. Youth friendly centres should be established in all the medical units of the NA barracks. This should provide enabling environment for youth counselling, voluntary confidential counselling and testing of HIV and public enlightenment programs. The authorities and soldiers should be involved actively as these recruits are posted out to various military establishments around the country upon passing out from Depot NA.
- 5. Integration of HIV/sex education with appropriate information on responsible and safe sex into the general study curriculum of the recruits in Depot NA. This is very important as it serves as a portal of entry for soldiers into the army.
- 6. Recruits/soldiers should be encouraged to form peer groups that can advocate for safe sex in the barracks.
- Ensure regular efficient procurement and distribution of IEC materials to the recruits and soldiers in order to enhance and update their HIV/AIDS knowledge base.
- 8. There is need to develop a good practical tool and quality control programs for monitoring and evaluation of the various HIV/AIDS awareness programs in the barracks for enhanced effectiveness and efficiency.
- 9. There is the need for the government and the military authorities to encourage and promote more HIV/AIDS related research amongst its personnel as the outcome will be very beneficial to the system.

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