APPRAISAL OF PARENTS ON PRE MARITAL HIV SCREENING IN A RURAL, NORTHEAST COMMUNITY, NIGERIA.

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ABSTRACT

Background: Sub-Saharan Africa has two-thirds of global HIV/AIDS burden. Nigeria has a prevalence of 4.1%, with transmission mainly through heterosexual intercourse. Sixty percent of new infections with HIV occur within the age group 15-29 years and most marriages especially with respect to females are conducted within this age group. Marriages are usually contracted by parents, therefore their knowledge and attitude to HIV status is deemed important.
Objective: To assess the knowledge and attitude of parents towards pre marital HIV Screening.
Method: A cross-sectional descriptive study was conducted among 400 randomly selected parents in three districts of Bama Local Government Area (LGA) using a 36 item structured questionnaire administered to respondents in their homes.
Results: A total of 397 respondents (99.3%) have heard of HIV/AIDS, radio (67.3%) being the major source. Sexual intercourse (97.3%), the use of contaminated instruments (42.5%), transmission of infected blood and blood products (17.8%) were identified as modes of transmission. However, only 8.5% identified mother to child transmission. Majority (98.8%)were aware that the disease is preventable mostly through faithfulness to partner (68.8%), premarital abstinence (64.8%) and Condom use (17.5%) while avoidance of contaminated instrument (9%)were also identified as modes of prevention. Majority (96.8%) of parents were aware of pre marital HIV Screening. Majority of the parents (97.7%) approve of premarital HIV screening. Many (87.8%) of parents were not aware of the availability of HIV testing facility.
Conclusion: The awareness and knowledge of HIV/AIDS in Bama LGA is high among parents. There was also a high level of awareness of PMHS with a positive attitude of parents toward it.

Keywords: parents, premarital HIV screening,knowledge,attitude, Bama

INTRODUCTION

HIV/AIDS remains one of the most important public health problems in the world. Sub-Saharan Africa has two-thirds of global HIV/AIDS cases and three quarters of all AIDS deaths (1.5 million in 2007). [1] The average life expectancy in Africa is only 50.4 years today because a large fraction of the populace dies young.[2] In Nigeria, it stands at 45 and 46 years for men and women respectively (3). These values are on the decrease because of the prevalence of a wide array of diseases like

HIV/AIDS. It is therefore, necessary to discover effective methods of curbing the spread of this disease. A particular fraction of the nation (between 15-49 years) has been shown to be at increased risk of contracting the disease with a prevalence of 2.3 -5.6%.[3]

The Federal Government of Nigeria through the Federal Ministry of Health (FMOH) made the first attempt to assess the HIV/AIDS situation in Nigeria in 1991. The result showed a HIV prevalence rate of 1.8%. The reports from subsequent surveillance activities revealed a HIV prevalence of 3.8% in 1993, 4.5% in 1996, 5.4% in 1999, 5.8% in 2001, 5.0% in 2003, 4.4% in 2005 and 4.6% in 2008.[4]In a more recent survey the HIV prevalence was report to be 4.1% IN 2010.[5]

Although the percentage of the populace affected may not be the highest in Africa when compared in the same year with countries like Zimbabwe (34%), Zambia (21.5%), South Africa (20%), and Kenya (15%), the equivalent number of people affected in Nigeria is astounding because Nigeria has been recognized as the most populous nation in Africa.[5]The size of Nigeria's population meant that by the end of 2007, there were an estimated 2,600,000 people infected with HIV and approximately 170,000 people died from AIDS in that same year.[1]

No state in Nigeria is exempted from the scourge of this disease. The prevalence in Borno State by 2004 was 3.6 percent.[6] In 2003, Borno State was named as the 4th target state by AIDS Prevention in Nigeria (APIN) as it was found that the recorded values belie the actual situation. The fact that it is a border town with three other countries between which there is free mobility helps with the erroneous impression of low rates. [7] Thus, the battle being fought may actually be greater than it seems. Multiple factors aid the daily spread of HIV/AIDS in the Nigerian setting. These include Poverty, low literacy levels, high rates of casual and transactional unprotected sex in the general population, particularly among youth between the ages of 15-24, low level of male and female condom use, cultural and religious factors, as well as stigma and discrimination.[8]

In Nigeria, a United Nations report in 2006revealed that more than sixty percent of new infections with HIV occur within the age bracket of 15-29 years and most marriages especially with respect to females are conducted within this age group.[9]

Nigerian girls marry relatively young, often to much older men. In North Eastern and Western Nigeria around half of girls are married by age 15 and four out of five girls are married by the time they are 18.[4].Studies have shown that those who are married at a younger age have less knowledge about HIV and AIDS than unmarried women, and are more likely to believe they are low-risk for becoming infected with HIV.[10,11]

Many modes of HIV detection before symptoms arise or afterwards have been developed over the years with increased sensitivity and effectiveness. These have been used to identify the infected before blood donation, on presentation with suggestive symptoms or in more modern times, before marriage. Premarital HIV screening (PMHS) is a subject of controversy in various parts of the world as some deem it another form of discrimination. This is because the infected party would not be permitted to proceed with the marriage. In addition, statistics show a gross proportion of those infected acquire it following marriage via extramarital affairs, implying that such an exercise is a waste of time and resources.[12] Another view highlights that infection after marriage does not refer alone to acquisition via illicit extramarital affairs. An infected spouse-to-be could be responsible for the infection of the other partner following

consummation of the union. The crux of the matter therefore remains as to whether such an infection was actually inevitable.

In the typical Kanuri setting of North Eastern Nigeria, marriages are contracted following intricate procedures. The marriage may be arranged by the parents even from the children's childhood or more recently, the children may make their intentions known to the parents.[13] The background of the intending spouse, usually the male spouse however, is investigated by the parents of the girl to determine his family background, source of livelihood, social habits etc. If found to be satisfactory, the father, being the head of the family grants his approval and permits the groom and his family to make their intentions known. Current changes in cultures and newer trends suggest the grooms within the higher wealth quartiles are less likely to be thoroughly scrutinized before marriages are contracted. These men, according to the 2008 NDHS survey are more likely to engage in high risk sexual behaviors.[4]

In view of this and the presence of similar situations in various regions of the country, the parents are therefore crucial to contracting marriages in Nigeria. Knowledge of this fact could be projected to the prevailing condition of HIV/AIDS spread in Nigeria.

METHODS

The study was conducted in Bama Local government area, which is one of the27 L.G.As in Borno state. Itis bound to the north by Dikwa and Ngala L.G.A Gwoza to the North West and Konduga to the West. The vegetation of the area is Sudan and Sahel savannah with drought resistant trees and Shrubs. The area records a four-month annual rainfall usually from July to October. The hottest period is from March to June with temperature ranging from 36-41 degrees centigrade.

The people are predominantly Muslims, Kanuri by tribe and most of them are farmers. The total population being 269, 986.[14]

The L.G.A is divided into nine districts namely; Bama,Banki, Gulumba, Woloji, DarEl Jamal, Worosoye, Goneri, Yabiri and Amchaka.

The study is a cross-sectional descriptive study, which was community based. It was carried out in Banki, Dar'El Jamal, Wolojidistricts.

A multistage sampling method was used to select respondents for the study. It involves selection from districts, villages, wards and households. Three districts were selected namely; Banki, Dar'El Jamal, Woloji.

A total of 400 respondents were selected using the formula $n= Z^2pq/d^2$[15]Written consent was obtained from the study participant.

Data collection and analysis

A quantitative instrument of data collection was used. A pre tested and validated semi structured questionnaire was administered. The data was collected from September to October 2009.The questionnaire was divided into sections; socio-demographic variables, parental knowledge of HIV/AIDS, modes of transmission, preventive measures and parental attitude towards pre marital HIV screening. It was analyzed using EPI INFO 2002.Data collectors used were medical students from the final year class. They were trained on questionnaire administration. Completed questionnaires were checked for completeness and accuracy by the researcher.

RESULTS

Atotal of 400 respondents were interviewed. Majority of the respondents were males 278 (69.5%), while the females constituted 122(30.5%), giving a male to female ratio of 2:1. Their socio-demographic variables are presented in table 1.Most of the respondents

were between the ages of 30-39 years (38.8 %). Almost all the respondents were married 394(98.5%). The number of respondents lacking any form of formal education was 41 (10.3%). The respondents who had only Quranic form of education were 185 (46.3%).While those with post primary education were 174(43.6%).Most of the respondents were Muslims333(83.2%) followed by Christians 67(16.8%).

The occupation of the respondents was varied with the majority being traders and farmers. The most common tribe interviewed were kanuris 56.3%.The other tribes;Shuwa, Bura, Hausa, Igbo, Fulani, Marghi, Gamargu, Michika and Mandara collectively accounted for 43.7 percent.

Two hundred respondents (50%) were resident in Banki, whereas 100 (25%) each were resident in Woloji and Dar'El Jamal. Regarding awareness, 397(99.3%) were aware of HIV, while3 (0.7%) were unaware of the disease. Among the males 99.3% and females, 99.1% were aware of HIV/AIDS.

Overall, 267 (67.3%) of the respondents reported receiving information on HIV/AIDS via the radio; 41 (10.3%), through interpersonal communications with friends; 32(8%) through the print media, 22 (5.6%) via the television broadcasts, health workers constituted 16(4%), while the level of awareness created by religious institutions and schools were the least (3% and 1.8% respectively) as shown in Table2.

Majority of the parents 97.9% identified sexual intercourse as a means of HIV transmission. Less than half of the parents 170 (42.8%) recognized the use of contaminated instruments i.e.by patronizing local barbers or manicurists and use of contaminated syringes. Seventy one respondents (17.8%) identified transmission of infected blood and blood products as a means of transmission. Only 34 (8.5%) acknowledged the possibility of transmission from an infected mother to her unborn child. Other modes of transmission identified by parents included the use of public toilets and poor hygiene, which are misconceptions on the mode of transmission of HIV/AIDS. (Table 3).

Table 4 shows the methods of prevention indicated by respondents. The majority of parents were knowledgeable on the cultural teachings of premarital abstinence and marital fidelity (64.8% and 68.8% respectively).Forty parents (17.5%) were aware of the use of condoms as a mode of prevention. It is important that they have such knowledge as quite a number of the youths today are sexually active despite the traditional teachings advocating premarital chastity.

With respect to parental awareness of PMHS. Table 5 shows a high level of awareness among parents in the various districts as 397 parents (96.8%) had heard of PMHS. Banki district was seen to have the highest percentage of parents aware of PMHS. Almost all the respondents approve of PMHS (97.7%) as shown in figure1. Most of the respondents were however unaware of the availability of testing facilities 351 (87.8%).Only 48(12%) were aware of such facilities as shown in Table 6.

Table 1: Socio-Demographic Characteristics of Parents in Bama L.G.A, 2009

DEMOGRAPHIC VARIABLES	LOCATION Banki (n=200)	Dar'El Jamel (n=100)	Woloji (n=100)	TOTAL (N=400)
AGE				
20-29	43(21.5)	39(39.0)	27(27.0)	**109(27.3)**
30-39	75(37.5)	29(29.0)	31(31.0)	**135(33.8)**
40-49	62(31.0)	17(17.0)	29(29.0)	**108(27.0)**
>50	20(10.0)	15(15.0)	13(13.0)	**48(12.0)**
SEX				
Female	43(21.5)	50(50.0)	29(29.0)	**122(30.5)**
Male	157(78.5)	50(50.0)	71(71.0)	**278(69.5)**
MARITAL STATUS				
Divorced	4(2.0)	0(0.0)	2(2.0)	**6(1.5)**
Married	196(98.0)	100(100.0)	98(98.0)	**394(98.5)**
LEVEL OF EDUCATION				
None	22(11.0)	10(10.0)	9(9.0)	**41(10.3)**
Primary	27(13.5)	13(13.0)	5(5.0)	**45(11.3)**
Qu'ranic	81(40.5)	54(54.0)	50(50.0)	**185(46.3)**
Secondary	50(25.0)	13(13.0)	19(19.0)	**82(20.5)**
Tertiary	20(10.0)	10(10.0)	17(17.0)	**47(11.8)**
OCCUPATION				
None	10(5.0)	25(25.0)	2(2.0)	**37(9.3)**
Civil Servant	28(14.0)	10(10.0)	17(17.0)	**55(13.8)**
Driving	8(4.0)	1(1.0)	4(4.0)	**13(3.3)**
Farming	19(9.5)	37(37.0)	23(23.0)	**79(19.8)**
Mechanic	10(5.0)	1(1.0)	2(2.0)	**13(3.3)**
School Teacher	2(1.0)	3(3.0)	11(11.0)	**16(4.0)**
Tailoring	10(5.0)	3(3.0)	7(7.0)	**20(5.0)**
Trading	99(49.5)	17(17.0)	24(24.0)	**140(35.0)**
TRIBE				
Fulani	8(4)	2(2.0)	1(1.0)	**11(2.8)**
Hausa	20(10.0)	2(2.0)	2(2.0)	**24(6.0)**
Igbo	19(9.5)	0(0.0)	0(0.0)	**19(4.8)**
Kanuri	102(51.0)	41(41.0)	82(82.0)	**225(56.3)**
Mandara	4(2.0)	14(14.0)	2(2.0)	**20(5.0)**
Marghi	6(3.0)	1(1.0)	4(4.0)	**11(2.8)**
Shuwa-Arab	12(6.0)	20(20.0)	6(6.0)	**38(9.5)**
Others	29(14.5)	20(20.0)	3(3.0)	**52(13.2)**
RELIGION				
Christian	56(28)	7(7.0)	4(4.0)	**67(16.8)**
Islam	144(72.0)	93(93.0)	96(96.0)	**333(83.2)**

Table 2: Sources of Information on HIV By Parents In Bama L.G.A, 2009

Information sources	Frequency	Percentage
Radio	267	67.3
Friends	41	10.3
Print media	32	8.0
Television	22	5.6
Health workers	16	4
Religious institutions	12	3
Schools	7	1.8
Total	**397**	**100**

Table 3: Knowledge of Modes of Transmission of HIV/AIDS Identified by Parents in Bama L.G.A, 2009

RESPONSE	*FREQUENCY	PERCENTAGE
Sexual Intercourse	389	97.3
Use of Contaminated Instruments	170	42.5
Infected Blood And Blood Produc	71	17.8
Vertical Transmission	34	8.5
Others	3	0.75

***multiple Responses Were Allowed**

Table 4: Modes of Prevention of HIV/AIDS Identified by Parents in Bama L.G.A, 2009

MODE OF PREVENTION	*FREQUENCY	PERCENTAGE
Using condoms	70	17.5
Being faithful to partner	259	64.8
Abstinence	275	68.8
Avoiding use of contaminated instruments	36	9.0
Others	7	1.8

***multiple responses allowed**

Table 5: Distribution of Awareness of Parents on PMHS in Various Districts in Bama L.G.A, 2009

AWARENESS OF PMHS	**LOCATION** Banki *(% of population)*	Dar'El Jamel *(%)*	*Woloji(% of population)*	**TOTAL**
Aware	197(98.50)	93 (93.00)	94 (96.90)	384 (96.80)
Not Aware	3(1.5)	7 (7.00)	3 (3.10)	13(3.20)
TOTAL	200	100	97	397

Table 6: Distribution of Parental Awareness of Availability of a HIV Testing Facility in the Various Districts of Bama LGA, 2009

Availability of Testing facility	**Banki**	**Dar'El Jamel**	**Woloji**	**TOTAL**
Available	36 (18.0)	4 (4.0)	7(7.2)	47 (11.9)
Not available	164 (82.0)	96 (96.0)	89 (91.8)	349 (87.8)
Donot know	0 (0.0)	0 (0.0)	1 (1.0)	1 (0.3)
TOTAL	200	100	97	397

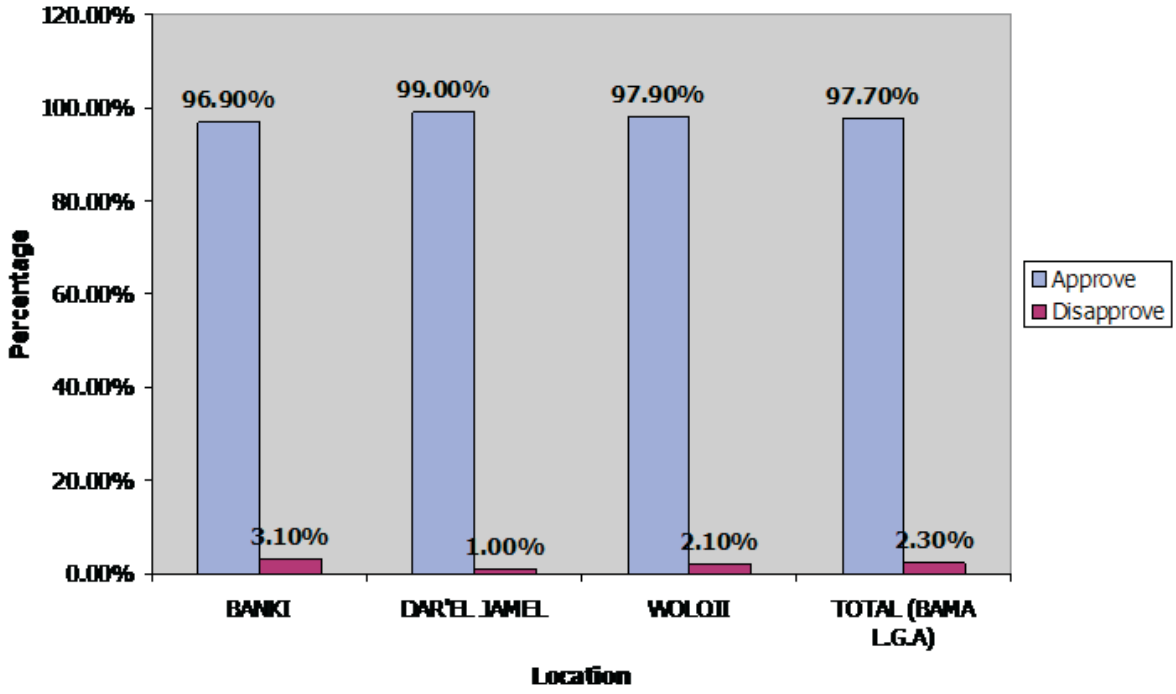

Figure 1: Parental Attitude Towards PMHS in Various Districts of Bama L.G.A, 2007

DISCUSSION

The aim of this study was to assess the knowledge and attitude of parents towards pre marital HIV screening. In addition, their awareness of HIV testing facilities in their locality was assessed. Theresult of the study revealed that majority of the respondents mainlyKanuri,Muslims Traders with a high proportion having only Quranic education. Thisis in keeping with the demographic profile of the state. Virtually all respondents are aware of HIV/AIDS. This shows that there has been a progressive increase in the awareness of HIV/AIDS over the years, as these rates are higher than those reported in other studies.[16,17] This is probably due to increase in the multiple health outreach programmes put in place by the government and various non-governmental organizations through both the print and electronic media.Majority of them identified radiosthe major source of information. This is consistent with the findings of other researchers, who also reported mass media as a primary source of information.[17, 18] There has been an increase in both private and publically owned FM stations that transmit messages in local languages. This is also coupled with the fact that radios are relatively affordable in terms of costs, running shows and spots. They also have the ability to reach large audiences at the same time and so, play a vital role in information dissemination. The role of relatives and friends cannot be over looked as they may be an important source of disseminating information on HIV/AIDS. The use of such interpersonal communication would be especially useful in regions where there is restriction in the movement of females. This view is further highlighted by Nwagwa in his study on the effectiveness of sources of HIV/AIDS awareness in Nigeria.[19]

Many faith-based organizations see immoral behavior as being the cause of HIV/AIDS epidemic and so they decline involvement in prevention and intervention programmes.This study revealed that religious organizations were among the least sources of awareness on HIV. This is similar to studies reported by other workers.[20,21]

In Nigeria, between80-85 percent of HIV infections are as a result of heterosexual intercourse. This mode of transmission was most widely identified in this study. In 2003, National HIV/AIDS and Reproductive Health Survey (NARHS) results showed that 74.2 percent of those in rural areas recognized sexual intercourse with an infected partner as a mode of transmission.[22]This study has higher rates most likely due to an increase in public enlightenment programmes through broadcast media. This is very important as most effective prevention programmes include information on such interventions as abstinence, delay in sexual debut and mutual fidelity. The least identified method of transmission in this study is through vertical transmission at 8.5%. This is significantly lower than the NDHS survey, were 44% and 56% of rural women and men were aware of transmission through breastfeeding.[4] Studies in Nigeria; Maiduguri[23] and Kano[24] show slightly higher rates than in those seen in these studies.

More than half the population knew that being faithful to a HIV negative partner and abstinence from pre marital sex were ways of preventing transmission of the disease. This was similar to findings of other studies.[24,25]A much lower proportions of respondents were aware that condom use is a means of preventing HIV (17.5%). This is significantly lower than National figures in the NDHS.[4] As in this study, workers in other African countries have cited that condom use as preventive measure was identified as a preventive measure by only a small proportion of study subjects.[26,27] Condom use has been identified as a means of preventing the transmission of HIV and other STIs they are therefore, an integral and essential part of comprehensive

prevention and care programmes and their promotion must be accelerated. Cultural traditions of Male dominance and older men's preferences for younger women contribute to women's vulnerability in this part of the country. Studies have shown that most infections in young women are as a result of unprotected sex[28] and reflect the power in balance that limits the woman's ability to negotiate or control sexual interactions, especially with older men. A study by Bettinger et al reviewed the link between parental supervision and disease acquisition. The study reported that parental involvement has a positive effect especially with respect to sexually transmitted diseases.[29]

The attitude of parents is largely receptive towards pre-marital screening, but a small proportion still has a negative attitude. This will continue in helping to drive the disease underground if care is not taken.

Although parents were aware of premarital HIV screening andexhibit a positive attitude towards PMHS, they are grossly unaware of availability of testing facilities in their locally. There is therefore a gap in access to these facilities as peoples knowledge of their HIV status is considered a key motivating factor for behavior change and is a critical linkage to care, treatment and support services for infected individual's andVCT is the gate way to long term management and treatment of HIV.

Umeora et a proposed "that screening apparently healthy individuals, such as couples intending to marry, and who are otherwise not members of a group considered at high risk for HIV infection, can serve an important role in HIV detection in the general population".[30]In Thailand, Brown et alrecognized that the parents do play a crucial role in convincing their children to volunteer for PMHS and should be included in counseling programs.

The study also promotes the use of media efforts to emphasize the high levels of infection in the country, to encourage young women to request premarital testing and to promote discussion of these issues among couples and their parents.[31]

If parents have so much say in the contraction of marriages and inquire in to the background of the intending suitor, why not include PMHS as an important consideration before agreeing to the union. Over the years, experience and research have shown that these parents take the brunt when their children die from HIV-related illnesses. The grandchildren are eventually left for the grandparents to cater for at a time when they may lack sufficient finance and resources to sustain the grandchildren. The grief of the loss of a child is enormous and difficult to bear. More so, when one realizes that it was not a necessary or inevitable loss. It could have been prevented by a simple test to detect HIV infection and stop its spread.

In conclusion, the awareness and knowledge of HIV/AIDS in Bama LGA is high among parents. There was also a high level of awareness of PMHS with a positive attitude of parents toward it. It is therefore recommended that, Borno State Action Committee on AIDS (BOSACA) and Bama Local Government Action Committee on AIDS should increase enlightenment on PMHS in the Bama LGA via health campaigns carried out by trained health personnel.BOSACA should also endeavor to create awareness in the Local government area on VCT sites were PMHS could be performed and establish more VCT centers run by properly trained staff. There is also a need to engage the religious institutions on the importance of PMHS, as they are important in contracting marriages in this part of the world.

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