

ASSESSMENT OF KNOWLEDGE AND SEXUAL BEHAVIOUR AMONG UNDERGRADUATES IN A NIGERIAN TERTIARY INSTITUTION.

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ABSTRACT

BACKGROUND AND INTRODUCTION: The achievement of the Millennium Development Goals (MDGs), particularly goals 5 and 6, is strongly underpinned by the progress that can be made on sexual and reproductive health education of young adults. The large population of young single adults in tertiary institutions in Nigeria and the present dearth of human resources for health necessitates that interventions for this group of individuals are tailored to meet identified gaps in awareness and sexual behaviour. This study sets out to assess the sexual behaviour and practice among single-undergraduates in a tertiary institution in Nigeria.

METHOD: A descriptive cross sectional study was carried out among 410 consenting students selected through a multistage sampling method. Data was collected using a structured self-administered questionnaire and analysed using Statistical Package for Scientific Solutions (SPSS) version 16.0.

RESULTS: Mean age of respondents was 20 + 4.4 years, 228 (55.6%) were females and 182 (44.4%) males. The respondents' awareness of contraceptive devices was 81.7% (335) for condoms and less than 20% knew about other forms of contraception such as intrauterine device, tubal ligation and vasectomy. Over 65.7% (270) opined abstinence and use of condom to be the ideal methods for prevention of HIV/AIDS/STI transmission. The overall mean age at first sexual contact was 14.0+1.4((14.2+1.6) in males and (13.8 +1.2) in females). A Very high proportion of sexually active respondents (93.6%) volunteered they do not routinely use condom in their sexual encounter. Undesired pregnancies occurred in about 11% of females.

RECOMMENDATIONS: There is an urgent need for the establishment of specially designated youth friendly centres in the tertiary institutions in the country, manned with staff appropriately trained in the delivery of reproductive health information and services.

KEYWORDS: Sexual Behaviour, Undergraduates, Tertiary Institution, Nigeria.

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INTRODUCTION

Sex is a phenomenon currently ravaging higher institutions in Nigeria as many students are engaged in premarital and heterosexual relationships on campus.^{3,4} Early, unprotected sexual intercourse among young persons can have negative consequences such as pregnancy and sexually transmitted diseases (STDs), including human immunodeficiency virus/acquired immune deficiency syndrome (HIV/AIDS). These conditions may result in high social, economic, and health costs for affected persons, their children, and society at large.

Sexual health refers to a state of physical, emotional, mental and social well-being in relation to sexuality; it

is not merely the absence of disease, dysfunction or infirmity.¹ It requires a positive and respectful approach to sexuality and sexual relationships, as well as the possibility of having pleasurable and safe sexual experiences, free of coercion, discrimination and violence.^{1,2} Addressing sexual health requires understanding and appreciation of sexuality, gender roles and power in designing and providing services. Understanding sexuality and its impact on practices, partners, reproduction and pleasure presents a number of challenges as well as opportunities for improving sexual and reproductive health care services and interventions.

According to the World Health Organization, reproductive and sexual health issues account for 20% of the global burden of ill-health for women and 14% for men many of whom are in the young adult age bracket.⁵ The risk posed by unprotected sex in young

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people is reflected in disproportionately high rates of sexually transmitted infections and unwanted pregnancies, accounting for more than half of all STIs diagnosed in out-patient clinics. HIV prevalence in Nigerian adults aged 20-24 years is estimated at 10%.⁶ About 358,000 women die annually due to complications related to pregnancy and childbirth, 99% of these deaths occur within the most disadvantaged population groups living in the poorest countries of the world.⁷ Seven in ten sexually active young adults have had a pregnancy test and have had a partner who took a pregnancy test and nearly 2 in 5 young adults report that they or their partner have been pregnant.⁸ Each year, Nigerian women obtain approximately 610,000 abortions, a rate of 25 abortions per 1,000 women aged 15-44.⁷ One major reason why the abortion rate in Nigeria is so high is that only about 6% of women of reproductive age practice birth control.⁹ The rate is much lower in the poor, rural regions of northern Nigeria than in the more economically developed southern regions.⁷

Studies on sexual health behaviour of young people in Nigeria indicate that many adolescents and youths initiate sexual intercourse at an early age and engage in high-risk sexual behaviours.¹⁰ Concerns regarding sexual health of adolescent and young adults have led to increasing intervention for those in the early phase of adolescent life, particularly in-school adolescents. However, little attention has so far been given to young adults within the age range of late adolescents and youths. Young people in institutions of higher learning, who are typically from the age of 18 to 25 years, have particularly been neglected in reproductive health programmes.¹¹ While it is true that older adolescents and youths, potentially have better access to reproductive health information and services, available information shows that their reproductive health knowledge and practice remains poor.¹¹

This study is aimed at investigating the sexual health knowledge and sexual practices of single young adults in tertiary institutions so as to provide information for the design of youth friendly reproductive and sexual health service.

MATERIALS AND METHODS:

This study was carried out in Ambrose Alli University, Ekpoma, Edo State, South-South, Nigeria. The university was established in 1981 with its catchment areas being Edo, Delta, Ondo States among other States of the federation, and has a total population of about 14,000 students both part-time and regular programmes as at the time of the study. The survey is a cross sectional descriptive study which was carried out between July and August, 2011.

A sample size of 400 was determined using the Cochran formula $N = Z^2 pq / d^2$. With 10% none response rate in view, a total of 440 students were surveyed. Four hundred and ten of the students (response rate of 93%), however, participated in the study. Respondents were selected in the study using multistage sampling technique by stratifying the student hostels into male, females and mixed and five hostels were selected while the questionnaires were administered to occupants of the hostel using the simple random method. A self administered semi-structured questionnaire pre-tested among Students of University of Benin, Benin City, Edo state was used to collect required information and data was analyzed using computer software: Statistical Package for Scientific Solution (SPSS) version 16.0.

RESULTS:

A total of four hundred and ten (410) single students were surveyed, 228 (55.6%) were females and 182 (44.4%) were males. The age range was between 16 and 35 years. The Mean age was 20 + 4.4 years. The median age was 21.2 while the modal age group was 21.5 years. Majority of the respondents were within 25 years of age (89.7%) and Christians by religion (95.6%).

Awareness regarding contraceptive practice was high (100%) with greater number (81.7%) of the respondents being aware of condoms as a type of contraceptive, followed by oral pills (53.1%) with the least being traditional methods (0.2%). Also their awareness about permanent contraceptives methods were low, tubal ligation (10.0%) and vasectomy (7.6%). Majority of the respondents were aware that HIV is transmitted sexually (86.7%), this was followed by gonorrhoea (57.6%) and syphilis (56.3%) while very few knew about other forms of sexually transmitted infections (Bacteria vaginosis, lymphogranuloma venerum and chancroid). The commonest methods of prevention of STI/HIV as mentioned by respondents were: use of condoms during sexual intercourse (65.7%), abstinence (65.7%), faithfulness to one partner (54.7%) and proper use and disposal of used syringes/blades (52.4%).

The commonest source of information about reproductive health were from television (90.5%), peers (87.5%), internet (85.1%), school (79.0%), print media (78.8%), and radio (76.6%). While the least were from seminar, programmes and churches (12.9%). About eighty-two percent (337) of respondents agreed to ever having sexual intercourse in their life time, of these, only about 41.7% were sexually active in the last three month prior to the survey while only 6.4% were using condom for all their sexual encounter. A high proportion (93.6%) of respondents volunteered they did not use condom at every sexual encounter.

The mean, median and modal ages at first intercourse were 14.0 + 1.4, 14.4 and 13.9 respectively. The commonest type of sexual intercourse practiced was penile/vaginal intercourse, 162(95.0%) while the least practiced was oral sex 3(1.5%). More females had their first sexual debut before the age of fourteen compared with their male counterparts, while more males (35.5%) had their first exposure at the age of 14-17 years than their female (35.0%) ($X^2 = 24.51$, $df=2$, $p=0.000$). (Table IV). However, the mean age (in years) at first sexual exposures for males and females were 14.2+ 1.6 and 13.8+ 1.2 respectively.

In the last three months to the survey, 171 respondents were sexually active. The desired outcome of their sexual encounter were reported as unwanted pregnancy(10.9%); and sexually transmitted infection (23.4%). The majority (65.7%) of the respondents claimed that they had neither unwanted pregnancy nor sexually transmitted infection.

Most (91.2%) of the respondents who had unwanted pregnancy volunteered that they proceeded to have induced abortion while a smaller proportion (8.8%) were still pregnant as at the time of the survey. In terms of number of sexual partners, generally most respondents claimed they keep only one partner 87(51.1%) as at the time of this survey but more females keep a single partner as against their male counterparts who keep more than one partner; ($X = 7.34$, $df = 2$, $P = 0.025$) (Table IV).

DISCUSSION:

The study revealed that basic awareness about contraceptive practice was high and majority (81.7%) of the respondents knew more about condoms than other types of contraceptives. This findings is similar to that reported in a study done in Ethiopia and another in Ekpoma among female undergraduates where the results revealed that the students had a high level of knowledge of contraception,^{12,13} but was however not consistent with findings in a study carried out in Iran where awareness was lower.¹⁴

The respondents' awareness of sexually transmitted infections was also high: AIDS gonorrhoea and syphilis were 86.6%, 57.6% and 56.3% respectively. These results were also similar to the results gotten from a study done in Iran.¹⁴ The reason for this high awareness found in this survey is likely because all our respondents were students in a tertiary level of learning and might have been exposed to reproductive health information prevalent in mass media campaigns and internet services that are readily available and accessible, though the quality and correctness of the information on the subject matter is for further

researches. The methods used for preventing HIV infection by respondents in our survey differed from the result obtained in a study done in Iran¹⁴, where majority of the students believed that adhering to moral principles and religion was major method of prevention of HIV transmission.¹⁴ However, there is a wide differences amongst the percentage of respondents who identified using condom as a means of prevention of HIV in the two studies. The observed differences may not be unconnected with the impact of religion in the Middle-East and the rapid penetration of western culture and globalization in our study area.

The mean, median and modal age at sexual debut found in this survey was similar to that reported among females adolescents in Calabar, Nigeria in 2004 by Etuk SJ., Ihejiamazu EC., and Etuk IC., but higher than finding among students of university of Ilorin in 2005,¹⁵ and findings in Nnewi, among secondary school students in 2010.¹⁶ Also, further analysis revealed that females initiate sexual intercourse earlier in life than their male counterparts, $P<0.05$. This findings is consistent with report from the Nigeria demographic health survey of 2003¹⁷ and 2008¹⁸ where a large proportion of teenage girls initiated sexual intercourse earlier than their male counterparts. Generally it has been reported that the age of initiation of sexual activities has decreased in Nigeria from 1999 to 2008.¹⁸ It is worthy of note that the age of initiation of sexual intercourse in this survey was slightly high when compared with other survey because our respondents were tertiary students and it has been found that the likelihood of early sexual debut generally decrease with increase in level of education for both young men and women.¹⁶ Age at first sexual encounter is an important indicator of both exposure to risk of pregnancy and exposure to STIs. Young people who initiate sex at an early age are considered to be at a higher risk of becoming pregnant or contracting STI than young people who delay initiation of sexual activity, but consistent use of condoms can also reduce these risks.

The results from this study regarding the source of information on sexuality were consistent with most reported sources of information in Nigeria.^{3,4,13,15,19} This is however not surprising as most families hardly discuss issues relating to sexuality. The results gotten from a study in Tanzania⁸ were not consistent with the finding in this study, where most of the reproductive health information was gotten from other sources besides their families, friends and classroom lectures and teachers. The reason for this discrepancy could be attributed to the relatively higher level of urbanization of the country compared to studied population. Our major source of worry is that 87.5% of respondents got

their information from peers and friends who may not have adequate knowledge on the subject, sexual health. Finding on sources of information from this survey was however higher than the survey done for adolescent girls in Calabar, Nigeria, were only 51.2% of the respondents got their information from Peers and friends⁴ who may not have the correct and good knowledge of the subject matter thereby likely passing inappropriate information to their friends with an overall negative effect on the receivers of the knowledge. Also, internet (85.1%) is increasing as a source of information to youths and young adults as it has made information available to anyone who seeks for it. This is commendable but the information in the internet should be scrutinized by recognized authorities in the various fields so as not to give wrong information to youths as its access is global and control may be difficult.

Life time sexual activity in the study is slightly higher than that findings by Okafor II and Obi SN in Enugu, Nigeria in 2005²⁰ and Duru CB, Ubajaka C, Nnebue CC, Ifeadike CO, Okoro OP in Nnewi in 2010.¹⁶ Among the respondents who reportedly had history of pregnancy, 91.2% of them agreed to have had induced abortion while a very few (8.8%) did not procure induced abortion. The proportion of induced abortion in this survey was quite high and the consequent problem may be enormous as most of our female young adult easily procure unsafe abortion. In Nigeria women obtain approximately 610,000 abortions, a rate of 25 abortions per 1,000 women aged 15-44.⁷ The rate is much lower in the poor, rural regions of northern Nigeria than in the more economically developed southern regions⁷ where the research was carried out. The true incidence of possibilities of acquiring sexually transmitted diseases are usually underreported probably because the secrecy surrounding them. It is however very sad to note that despite the numerous campaign programmes against the practice of unsafe and casual sexual intercourse, our youths, even those in higher institution of learning still indulge in the act. This, if not properly addressed, with the necessary programmes such as the establishment of youth friendly centres in the tertiary institutions across the country, manned with staff appropriately trained in the delivery of reproductive health information and services with aggressive campaigns to curtail the unsafe sexual behaviour among our youths, it will be too difficult to combat the aftermath consequences.

The commonest sexual practices observed in this study was penile/vaginal sex, this is in tandem with results reported in most surveys in our regions were heterosexual intercourse is prevalent¹⁶⁻¹⁸ as opposed to some developed countries where homosexual

intercourse is relatively present due to State legislations.¹⁶⁻¹⁸ This could explain partly why there was obvious increase in unwanted pregnancy reported in this survey. Also of note is that most sexually active respondents keep only one sexual partner (51.1%) but more males keep two or more partners, than their females counterparts (<0.05). This is consistent with finding in both 2003 and 2008 Nigeria demographic health survey (NDHS) where a much larger proportion of men than women reported having two or more sexual partners.^{15,17-18} Having more than one sexual partners could expose a person to risk of contracting STIs and HIV and unwanted pregnancy. The polygamous nature of men is a known problem and efforts should be channeled towards encouraging males to be faithful to one partner as this will help to reduce the antecedent problems.

The consistent use of condom among the sexually active was very low, as only 6.4% of the respondents used condoms at all times. This low use is consistent with finding in the NDHS 2003 and 2008.^{17,18} There has been many known factors found to militate against condom use among young adults,¹⁶ but low use can increase the risk of STIs/HIV transmission and unwanted pregnancy and their consequent effects. This problem is grave as HIV is ravaging many nations and so there is need to increase efforts in programmes that will bring about better knowledge and attitudinal change among our youths as there are still misconceptions in the knowledge about AIDS.²¹ This is the first basic step towards curbing this menace in our society.

In conclusion, though respondents' knowledge of reproductive health was good but their practice of reproductive health did not reflect the knowledge they had. There is therefore need to implement persistent behavior modification program that will align the knowledge with the practice and thus reduced risk of STIs and unwanted pregnancies in young people. A reasonable starting point will be to establish youth friendly centres. Sexual health education should be incorporated into the tertiary school curriculum and educators of the subject of methods of HIV/AIDS prevention and other contraceptive devices should go beyond educating students about condoms and abstinence alone.

Table I: Socio-demographic characteristics of respondents:

Characteristics	Frequency	Percentage(%)
	N=410	100%
Age:		
16-20	155	37.8
21-25	213	51.9
26-30	36	8.8
31-35	6	1.5
Mean =20 \pm 4.4 years.	Median = 21.2years.	Mode = 21.5 years.
Gender:		
Male	182	44.4
Female	228	55.6
Religion:		
Christianity	392	95.6
Islam	6	1.5
Traditional	4	1.0
Others	8	1.9

Table II : Awareness and Knowledge of respondents about sexual practices: different types of contraceptives methods, Sexually Transmitted Diseases and Awareness of methods of prevention of HIV transmission*

Contraceptives methods mentioned by respondents:

Contraceptives	Frequency	Percentage(%)
Condoms	336	82.0
Pills/OCPs	303	73.9
Natural/Rhythm methods	120	29.3
Withdrawal method	84	20.2
Injectables	65	15.9
Tubal ligation	41	10
Norplants	31	7.6
Vasectomy	31	7.6
IUCD	30	7.3
Traditional methods	1	0.2

Sexually Transmitted Diseases:

HIV/AIDS	355	86.7
Gonorrhoea	237	57.6
Syphilis	232	56.3
Others *	63	15.4

Methods of preventing HIV:

Using condoms	270	65.7
Abstinence	270	65.7
Faithfulness to one partner	224	54.7
Proper use and disposal of syringes/blades/sharps.	215	52.4
Others **	8	1.9

Key:

* Multiple response question applicable.

Table III: Sexual behaviour, Practices and Outcomes

Ever having sexual intercourse (n=410)

Variables	Frequency	Percentage
Yes	337	82.2
No	73	17.8

Using condom for all their sexual encounters (n=171)

Yes	11	6.4
No	160	93.6

Major form of sex practiced (n=171)

Penile/Vaginal	162	95.0
Anal	6	3.5
Oral	3	1.5

Number of sexual partners at present (n=171)

None	29	16.8
1	87	51.1

≥ 2	55	32.1
Outcome of sexual encounter in the past three month (n=171)		
Unwanted pregnancy	19	10.9
STIs	40	23.4
No reported outcome	112	65.7
Outcome of the unwanted pregnancy in the last three month (n=19)		
Induced abortion	17	91.2
Still pregnant	2	8.8

Table IV: Comparison of sexual practices between males and females respondents

Variables	Male n(%)	Female n(%)	Statistics/ P-value
Age at first sexual encounter for males and females.			
Age(Yrs)			
<14	44(13.0)	101(29.9)	$\chi^2 = 24.51$
14-17	61(18.1)	42(12.5)	d = 2
>17	49(14.5)	40(11.9)	P=0.000...
Number of sexual partners			
None	9(5.2)	20(11.6)	$\chi^2 = 7.34$
1	42(25.8)	45(26.3)	df = 2
≥ 2	34(19.8)	21(12.3)	p = 0.025*

* Significant at p<0.05

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