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Full Length Research Paper

Knowledge and perception of reproductive health services among in-school adolescents in Ile-Ife, Osun State, Nigeria

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Abstract

Adolescent health needs, behaviors and expectations are unique and routine health care services are not well geared to provide these services. This study explored the perceived reproductive health problems amongst in-school adolescents in Ile-Ife, Nigeria, determined their health seeking behaviors, assessed their knowledge of available reproductive health services and identified existing barriers to its access. In a descriptive cross-sectional study, 392 respondents were recruited by multi-stage sampling and utilized a semi-structured questionnaire for data collection. Most respondents lived with both parents. The mass media, especially the television and radio were found to be their main sources of health information. About two in five of respondents (39.5%) were currently in relationships. One in four (25.5%) were sexually experienced whereas only one in ten (10.7%) had ever tested for HIV. A statistically significant association was found between the respondents' age group and sexual experience (p = 0.02). The most commonly perceived adolescent health problems included menstrual problems, unwanted pregnancy, HIV/AIDs and lack of sexuality education. Most schools attended by respondents had no health facility and the few with clinics had inadequate/unfriendly staff and inadequate drugs. Respondents' most preferred places of seeking healthcare were government hospitals (37.8%) and private hospitals (28.1%). The study showed that the adolescents had little or no access to youth-friendly services even with their preference for government hospitals as their place of choice for seeking healthcare. We recommend that school health services be revamped by government with the aim of improving access to youth-friendly services geared towards their identified health problems.

Keywords: In-school adolescents, reproductive health services, knowledge, perceptions, access.

INTRODUCTION

Adolescence is the period of transition from childhood to adulthood, which starts with the onset of puberty. It comprises the individuals between the ages of ten to nineteen years (WHO). During this important period, a child undergoes biological transition, which is characterized by puberty, related changes in physical appearance and the attainment of reproductive capability, psychological or cognitive transition, which reflects an individual's thinking, and social transition, which is related to rights, privileges and responsibilities of an individual.

Young people are perceived as generally healthy, and are not in need of special health services therefore adolescent health needs, behaviors and expectations are unique and routine health care services are not well geared to provide these services. The reproductive health (RH) services in the family health program are traditionally targeted at married couples (Agampodi et al., 2008). Integrated services delivered through the healthcare system are identified as one of the most effective ways of delivering RH services. This is a huge

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challenge in developing countries due to various cultural and social barriers. In order to provide acceptable services with adequate utilization, in-depth exploration of social and cultural barriers and understanding the needs and expectations of adolescents is a great necessity (Tylee et al, 2007).

Despite about 30 percent of the world population being in the adolescent (10-19) age group, the health needs of adolescents have neither been researched nor addressed adequately; particularly their reproductive health needs are often misunderstood, unrecognized or underestimated. Limited research shows that adolescents are indulging in premarital sex more frequently at an early age (Kumar and Timari, 2003; Joshi and Chauhan, 2011; Baynesa et al., 2011), the incidence of pregnancies among them is rising (Henshaw, 1998; BBC News, 2009), most of them face the risk of induced abortions under unsafe conditions (Bendavid et al., 2011; Okunlola et al., 2011), and contracting sexually transmitted infections including human immunodeficiency virus (HIV) (American Academy of Pediatrics, 2009; CDC, 2009). It is important to create a supportive environment that would positively influence knowledge, attitude, perceptions, skills and behavior of adolescents and also help in increasing access and use of sexual and reproductive health services. This study explored the perceived reproductive health problems amongst in-school adolescents in Ile-Ife, determined their health seeking behaviors, assessed their knowledge of available reproductive health services and identified existing barriers to their accessing such services.

MATERIALS AND METHODS

Description of study area

The study was carried out in six randomly selected public secondary schools and one private secondary school in Ile-Ife in Ife Central Local Government Area (ICLGA) of Osun State, Nigeria. Osun State is in the South Western region of Nigeria. The State has thirty Local Government Areas and one Area office in Modakeke, Ile-Ife. Ile-Ife is the seat of the Obafemi Awolowo University and the Obafemi Awolowo University Teaching Hospitals Complex (OAUTHC). The population of ICLGA according to the 2006 national census was 167,254. There are twenty-four (24) public and eighteen (18) private secondary schools in Ile-Ife. OAUTHC provides healthcare services through its many hospital units to residents of Osun State and its environs. It has a Department of Community Health that provides community healthcare services through the Urban Comprehensive Health Centre, Eleyele, Ile-Ife. In Ile-Ife, there are 10 Primary Health Centres, 1 Comprehensive Health Centre which is an arm of the Obafemi Awolowo University Teaching Hospitals Complex, 1 State Health Facility, 1 Teaching Hospital, 42 private hospitals and 1 missionary hospital (Seventh Day Adventist Hospital). The Obafemi Awolowo University (OAU) also has a health centre within its premises to provide health services to its student population and staff of the institution. Services rendered by these health institutions include: treatment of common ailments, immunization, growth monitoring, maternity services, family planning as well as nutrition counseling and rehabilitation. The Comprehensive Health Centre also offers school health services while the Teaching Hospital renders highly specialized health services.

Study design

This is a descriptive cross-sectional study which utilized quantitative method of data collection.

Sample size determination

A minimum sample size of 384 was calculated using the formula (Araoye, 2003) for estimating single proportions in population greater than 10,000 with the expression, $N = z^2 pq/d^2$ and a prevalence of adolescent's knowledge of reproductive health services of 50%. Altogether, 402 students were recruited into the study but 392 questionnaires were returned appropriately filled.

Sampling technique

Multistage sampling method was employed in recruiting the study subjects

Stage1: 6 (6 of 24 = 25 %) public schools and 1(1 of 18 = 6%) private school were selected by simple random sampling (ballot method)

Stage 2: an arm each was selected for each class of the selected schools by simple random sampling (ballot method)

Stage 3: from each selected class, students were further selected by systematic random sampling using appropriate sampling interval to recruit the desired number of students per class from the class register.

Research instrument and data collection

A pre-tested self-administered semi-structured questionnaire was used to collect information from the study participants. The questions were in four sections as follows: Socio-demographic characteristics of respondents, sexual behavior of respondents, perceived reproductive health problems and reproductive health needs of adolescents and health-seeking behavior of respondents. This section also captured respondents'

Table 1. Socio-demographic characteristics of respondents (N = 392)

Characteristic	Frequency (%)
Age group	
≤ 14years (early adolescence)	122 (31.1)
≥ 15 years (late adolescence)	270 (68.9)
Gender	
Male	165 (42.1)
Female	227 (57.9)
Marital status	
Single	391 (99.7)
Separated	1 (0.3)
Religion	
Christianity	294 (5.1)
Islam	83 (21.2)
Traditional	7 (1.8)
Non-response	3 (0.8)
Tribe	
Yoruba	344 (87.8)
Igbo	35 (8.9)
Other	13 (3.3)
Class	
Junior Secondary School	117 (29.8)
Senior Secondary School	275 (70.2)
Family setting	
Monogamous	258 (65.8)
Polygamous	134 (34.2)
Mother's educational level	
None	24 (6.1)
Primary	29 (7.4)
Secondary	159 (40.6)
Post-secondary	171 (43.6)
Non-response	9 (2.3)
Who student lives with	
Father only	24 (6.1)
Mother only	53 (13.5)
Both parents	266 (67.9)
Alone	7 (1.8)
With sibling/other relatives	29 (7.4)
With family friend/peers	8 (2.1)
Non-response	5 (1.3)

suggestions for improving the reproductive health status of adolescents.

Data analysis

Quantitative data collected from the study was analyzed using Statistical Package for Social Sciences (SPSS) version 16. Univariate analysis was done to generate frequency tables while bivariate analysis utilizing Chi square test statistics was employed to describe associations between two categorical variables and compare proportions with p-value set at $\leq$ 0.05 at a confidence interval of 95%.

Ethical considerations

The principals of the schools were duly informed and approval was granted for administration of the questionnaire on their students. Informed verbal consent was obtained from each participant and participation was voluntary.

RESULTS

Table 1 shows the socio-demographic information of the study participants. There were 392 respondents in all with one hundred and twenty-two (31.1%) of them aged

Figure 1. Affiliation of respondent with a social organization (N = 392)

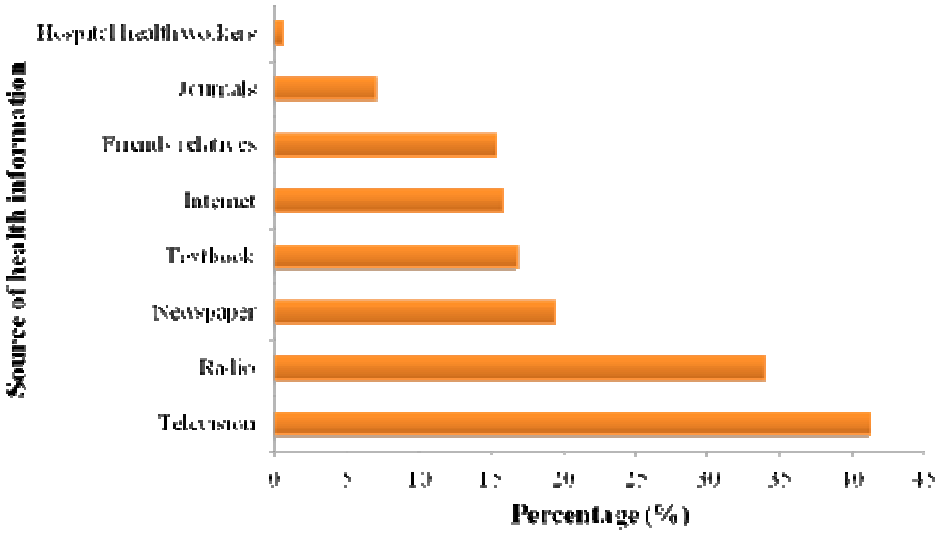

Figure 2. Sources of health information among respondents

*Multiple responses allowed

fourteen years or less. The mean age was 15.35 years, and the modal age of the respondents was 16 years.

Most respondents were female (57.9%) and majority were single (99.7%). The respondents were mainly Christians (76.9% of them), while 83 (21.2%) of them were Muslims. Also, majority (87.8%) of them were Yoruba, and 258 (65.8%) of them belonged to monogamous families. Mothers of 24 (6.1%) of the respondents had no formal education.

Figure 1 shows the affiliation of respondents with social organizations. About two-thirds of the respondents did not belong to any social organization while about a quarter of them belonged to their schools' literary and debating society.

Figure 2 highlights the fact that the television and radio are the most important sources of health information among the respondents (41.3% and 33.9%) respectively.

Table 2 shows sexual behavior of respondents. About 2/3 of the respondents found it easy to relate with the opposite sex, more than 1/3 (38.5%) of them discussed freely about sexual matters with friends and about ¼

Table 2. Sexual behavior of respondents

Sexual behavior	Frequency (%) N = 392
Finds it easy to relate with opposite sex	255 (65.1)
Discusses freely about sexual matters with friends	151 (38.5)
Currently in a relationship	155 (39.5)
Ever had sexual intercourse	100 (25.5)
Ever used a condom (n=100)	78 (78.0)
Used condom at last intercourse (n=100)	69 (69.0)
Used condom regularly in the last 6 months (n=100)	47 (47.0)
Sexuality education taught in your school	218 (55.6)
Ever tested for HIV/AIDS	42 (10.7)

Table 3. Relationship between age group of respondents and sexual intercourse experience

Age group	Ever had sexual intercourse		Total (%) (N = 392)	Statistical indices
	Yes (%)	No (%)		
≤ 14 years (early adolescence)	22 (18.0)	100 (82.0)	122 (100.0)	χ^2 =5.212 df = 1 p = 0.024 (statistically significant)
≥ 15 years (late adolescence)	78 (28.9)	192 (71.1)	270 (100.0)	
Total	100 (25.5)	292 (74.5)	392 (100.0)	

(25.5%) had experienced sexual intercourse. Although 55.6% of respondents alleged that sexuality education is taught in their school, only 42 (10.7%) had ever tested for HIV/AIDS.

Table 3 shows that the proportion of respondents who had experienced sexual intercourse increased with the age of the respondents. The difference in respondents' age in relationship to sexual experience (across the age groups) was statistically significant (p = 0.003).

Table 4 shows that respondents perceived menstrual problems, unwanted pregnancy, HIV/AIDS and sexually transmitted infections (STIs) as the most important adolescent reproductive health problems. Perceived reproductive health needs of adolescents by respondents included sexuality education (26.6%), counseling (20.7%) and screening for HIV/AIDS (11.0%). About 1/3 of them (34.2%) opined that pre-marital sex was not morally right while a similar proportion did not see anything wrong with it.

Table 5 shows that only 77 (19.9%) of the respondents schools had a clinic, 88.3% of which had visited such school clinic. However, nearly half of those whose school had a clinic mentioned inadequate staff strength and non-availability of drugs as shortcomings of the school clinic while 26.0% of them said staff members were unfriendly.

Table 6 shows respondents' recommendation on ways of improving the quality of adolescents' reproductive health. These included parental counseling of adolescents (22.7%), provision of good healthcare and counseling services by government (33.2%).

DISCUSSION

Findings from this study highlight an important point made by the World Health Organization (WHO) that a great number of young people engage in behaviors that jeopardize not only their current state of health, but often their health for years to come (WHO, 2011). For instance, about a quarter of these adolescent respondents affirmed to have experienced sexual intercourse whereas only 10.7% of them had ever tested for HIV/AIDS. Furthermore, off the 100 adolescents (25.5%) who admitted to have experienced sexual intercourse, only about two-thirds used condom in their last sexual intercourse while less than half of them used condoms regularly in the last six months. Even though these figures are higher than the national average of 35% for condom use prevalence among Nigerian reproductive age group(15-49 years) (IBBSS, 2007), it is still a low condom use prevalence considering that this is a high risk group that is prone to risky sexual behaviors.

The study found that nearly a third (28.9%) of subjects aged 15 years or older had experienced intercourse, with a statistically significant association of sexual intercourse experience with increasing age, a finding similar to that of Noble et al. (1996). This is a pointer to the fact that late adolescents need special reproductive services and care. Furthermore, results showed that about a third of respondents did not see anything wrong with pre-marital sex because they perceived it as normal, simply fun or that it does not matter. A similar proportion was silent on the matter. This agrees with the findings of McdDevitt and

Table 4. Respondents' perceptions about adolescent reproductive health problems/needs (*N = 392)

Characteristic	Frequency (%)
Perceived reproductive health problems of adolescents	
Menstrual problems	97 (24.7)
HIV/AIDS	94 (24.0)
Unwanted pregnancy	85 (21.7)
STIs (e.g.vaginal/penile discharge, genital itching, genital sore)	78 (19.9)
Pimples	28 (7.1)
Skin problems	24 (6.1)
Female circumcision	13 (3.3)
Masturbation	7 (1.8)
Perceived reproductive health needs of adolescents	
Sexuality education	104 (26.6)
Counseling	81 (20.7)
Screening for HIV/AIDS	43 (11.0)
Contraceptives	24 (6.1)
Safe abortion	30 (7.7)
Treatment of sexually transmitted disease	29 (7.4)
Perceived appropriate source(s) of RH information	
Sexuality education in school	124 (31.6)
Television	59 (15.1)
Parents	54 (13.8)
Radio	53 (13.5)
School clinic	46 (11.7)
Youth friendly club	35 (8.9)
Peers/friends	23 (5.9)
Internet	11 (2.8)
Pornographic materials	6 (1.5)
Perception about premarital sex (N =392)	
It is not morally right	134 (34.2)
It is normal	58 (14.8)
It is necessary	29 (7.4)
It is just fun	28 (7.1)
It does not matter	20 (5.1)
No response	123 (31.4)

* multiple responses allowed

a Kenyan Demographic and Health survey who reported that in many sub-Saharan countries, first sexual activity takes place before marriage (National Council for Population and Development, 1993; McDevitt 1996). This lack of moral barrier predisposes them to increased high risk sexual behavior in the presence of low use of protective means. This free and loose attitude towards premarital sex ought to be an integral subject of intervention in many sexuality education programmes for the schools.

The health seeking behavior of the study respondents leaves much to be desired as only a minority of them had ever screened for HIV despite the ravaging effects of this disease on this priceless group of individuals. There is need to include behavioural communication change programs in the intervention packages for this high risk group.

Very few, less than two percent of the study participants correctly perceived female genital mutilation as a reproductive health problem of adolescents. This agrees with the reports of Toubia (1993) and Heise (1993). This finding leaves much to be desired as these respondents and their contemporaries will be future parents who may go ahead and mutilate their female children if nothing is done to correct this misconception that is rife among these adolescents.

Mass media, especially the television and radio may find significant usefulness in passing reproductive health messages across to adolescents since this study found these media to be their main source of health information,

Table 5. Health-seeking behavior of respondents

Characteristic	Frequency (%) (N =392)
Does respondents' school have a clinic?	
Yes	77 (19.6)
No	315 (80.4)
Ever visited the school clinic?	**(n = 77)**
Yes	68 (88.3)
No	9 (11.7)
Shortcomings of your school clinic	**(n = 77)**
Inadequate staff	33 (42.9)
No drugs	32 (41.6)
Unfriendly staff	20 (26.0)
No privacy	11 (14.3)
No confidentiality	11 (14.3)
Favorite place for seeking healthcare	**(N =392)**
Government hospital	148 (37.8)
Private hospital	110 (28.1)
Chemist	51 (13.0)
Traditional healing centre	9 (2.3)
No response	74 (18.9)

*multiple responses allowed

Table 6. Respondents' suggestions for improving reproductive health of adolescents (N = 392)

Suggestion	Frequency (%)
What parents/families can do	
Giving counseling/advice	89 (22.7)
Provide good care	28 (7.1)
Give sex/health education	12 (12.1)
Pray and teach them the word of God	4 (1.0)
What the school can do	
Provide counseling services	59 (15.1)
Provide good adolescent-friendly health facilities/workers	40 (10.2)
Give sexuality/health education	27 (6.9)
Separate boys from girls	1 (0.5)
Provide contraceptives	1 (0.5)
Pray and teach word of God	1 (0.5)
What the community/government can do	
Provide good healthcare services and counseling services	130 (33.2%)

as a radio in Kenya was instrumental to clients' visits to youth clinics (Kiragu et al., 1998).

This study agrees with the findings of Agampodi et al., 2008 which highlighted adolescent health needs, behaviors and expectations as unique and that routine health care services are not well geared to provide these services. The dearth/absence of youth-friendly health services is clear from this study. This may impact negatively on the affected group with subsequent future implications. Also, the fact that most of the respondents do not belong to any social organization is not desirable as such organizations are of the reputation of impacting positively on the reproductive health and overall health of young people.

CONCLUSION

This study shows clearly that the in-school adolescents in Ile-Ife have a dire need for access to reproductive health services, especially in the areas of health counseling and sexuality education. Youth-friendly and adolescent

reproductive health services are clearly lacking in Ile-Ife. There is a dire need for a buy-in by governments at all levels in adopting the Comprehensive Sexuality Education for adolescents. Exploiting the technique of peer education cannot be overlooked as this has proven to be effective time and again. Engaging the regular mass media such as the radio and television in sexuality education might prove extremely beneficial since the group of respondents in this study significantly depended on them for health information. Building capacity for adolescent-friendly services is crucial as adolescents form a sizable number in our population and have need for well-tailored reproductive health services provided by competent health workers.

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