

KNOWLEDGE OF PUBERTY, SEXUALLY TRANSMITTED INFECTIONS AND SEXUAL BEHAVIOUR AMONG VERY YOUNG MALE ADOLESCENT STUDENTS' IN SOUTH-SOUTH, NIGERIA¹Agofure Otovwe (MPH)*, ²Okande Ji-Barry R. Oghenebriourue (MPH) and ³Okafor N. Rosemary (BSc)

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ABSTRACT

Aim: There is impassable knowledge on the transition between childhood and adulthood among adolescents. This study was designed to investigate the knowledge of puberty, sexually transmitted infections and sexual behaviour among very young male adolescent students in South-South, Nigeria. **Study Design:** A descriptive cross-sectional study was used. **Place and Duration of Study:** Agbor Metropolis in Delta State, Nigeria, between February to April 2015. **Methodology:** The study utilized both quantitative and qualitative methods and was conducted among male adolescent students (10-15 years). The discussants were grouped into ages 10-12 years and 13-15 years. A total of four Focus Group Discussions (FGDs) were conducted among the two groups in two secondary schools in the study area, while a semi-structured questionnaire was used to collect the quantitative data. The qualitative data were analysed thematically for themes and content, while the quantitative data were analysed using SPSS version 15.0. **Results:** The study shows most of the respondents 93(94.90%) have heard of puberty and were able to define puberty 62(66.70%). Furthermore, majority of the respondents have heard of the word HIV 95(96.90%), but none could properly define the correct meaning of the acronym HIV. In addition, 79(80.60%) have heard of STI but few 3(3.10%) have heard of the word contraceptive; while only 28(28.60%) of the respondents have a girlfriend, out of which only 5(5.10%) have had sex. **Conclusions:** The results shows some of the respondents are already sexually active at that young age, therefore more health education programs targeting these group of students should be carried out regularly in secondary schools nationwide.

KEYWORDS: Knowledge, puberty, Sexually Transmitted Infections, Sexual behaviour, Very Young male Adolescent.

INTRODUCTION

Adolescence is the most important period of human life as it marks the beginning of transition between childhood and adulthood. Globally, there are about 1.2 million adolescent in the world today, 90% of these adolescent lives in the lower and middle income countries and are between 10-19 years, 15% of this population are between 10-14 years, often referred to as very young adolescent.^[1] The lives of male younger adolescent are usually characterized by profound biological, cognitive, emotional and social changes associated with the passage through puberty and the majority of male adolescents report the initiation of sexual behaviour during this period.^{[2],[3]} Consequently, this transition between childhood and adulthood usually set the stage for future positive and negative sexual and reproductive health outcomes. At this stage of growth young adolescent begins the process of developing a sexual self concept which influences the combination of physical sexual maturation, age appropriate sexual behaviours and sense of well being.^[4] In addition, male adolescents becomes

pre-occupied with their body changes as it relates with their sexual anatomy and they usually experience spontaneous erection, ejaculation related to masturbation and onset of nocturnal ejaculatory event during sleep (i.e. wet dream).^[4] Further compounding the changes in male adolescents is the fact that boys are subjected to surges of libido-enhancing testosterone from the adrenal cortex and the testes during puberty, thereby multiplying testosterone levels 10 to 20 times for boys while it only doubles for girls.^{[5],[6]} Consequently, this drives the male adolescents to start testing their ability to attract the opposite sex through dating and experimentation of sexual practices which will make them prone to sexual infection. For instance, in a study conducted at Ile-Ife South Western Nigeria on male adolescents aged 15-19 years, 76% of the secondary school youths had been sexually active within the past 12 months, 5% with prostitutes and 56% with more than one partner, but that only 8% had used a condom during that year.^{[7],[8]} Similarly, another study carried out in Rivers state, South-South Nigeria 78.8% of the 768 adolescents aged

14-21 years had been sexually exposed and the mean age at sexual initiation was 15.04 years with 2% of them having initiated sex at the age of 12 years.^{[9],[10]} In addition, both male and female adolescents had often shown varied responses on how their body is developing, for example in a nine-country study of adolescent health in the Caribbean almost one in every five boys and girls ages 10–12 years and 13–15 years said they are worried that their bodies were “developing too fast”, while 3% at 10–12 years and 12% at 13–15 years were worried that their bodies were not developing fast enough.^[4] This situation often results due to improper understanding of the pubertal process and the comparisons among adolescent peers of their body changes without taking into consideration factors such as hormonal levels, hereditary factors and biochemical and physiological make up of each individual. Furthermore, it has been shown that boys typically look to quite different sources of information (and of stimulation) than girls do, for example, they often rely on friends and on sexually explicit magazines, videos or Internet sites rather than on parents, teachers and other legitimate (although not necessarily responsive or well-informed) source.^{[11],[12],[13]}

In a related development, apart from the challenges young adolescents are confronted with due to the changes taking place in their body; a large percentage are also faced with the risk of pregnancy and contacting STIs including HIV/AIDS due to their risky sexual behaviour. For example, studies carried out in South-South Nigeria shows that in Cross River State a little more than one fifth of the sexually active adolescents have more than one sexual partner^{[10],[14]} while in Delta State about one-third of the sexually active adolescents have had more than one sexual partner.^[15]

Therefore, this study was designed to determine the knowledge of puberty, sexually transmitted infections and sexual behaviour among very young male adolescent students' 10-15 years in South-South, Nigeria.

METHODOLOGY

Study Design

This study is a descriptive cross sectional survey using both qualitative and quantitative method of data collection. The study focused on very young male adolescents (10-15 years) in two secondary schools; Brain trust a private secondary school and Ime-Obi a government Secondary School, Agbor, Delta State.

Study Area

The area of the study is Brain trust and Ime-Obi Secondary School, Agbor, Delta State of Nigeria. The school is located in Ika South Local Government Area of Delta State.

Study Population

The study focused on very young male adolescents in two secondary schools; Brain trust and Ime-Obi Secondary School, Agbor, Delta State.

Inclusion Criteria

The study focused on very young male adolescent students in JSS 1-3 between 10-15 years of age.

Exclusion Criteria

Male adolescents below 10 years and above 15 years were not included in the study. Senior secondary class were not also included in the study.

Sample size determination

For the quantitative study a sample size of 100 was calculated using the formula for sample size determination for single proportion; while a total of 20 students from both schools were used in generating the qualitative data.

Sampling Technique

A random sampling through balloting was used to select two schools a private and a government secondary school namely; Brain Trust Secondary School and Ime-Obi Secondary School. Four Focus Group Discussions (FGDs) were used to obtain the qualitative data. Two Focus Group Discussions with five respondents each were conducted between respondents of ages 10-12 years in Brain Trust Secondary School and Ime-Obi Secondary School while two FGDs with five respondents each were conducted between respondents of ages 13-15 years in Brain Trust Secondary School and Ime-Obi Secondary School. Purposive sampling was used to select the respondents in the Focus Group Discussions.

Furthermore, random sampling technique was used to collect the quantitative data, 50 students from each school were randomly picked in the classroom. Students in Junior Secondary School 1-3 were used for the study. Students in each of the classes were asked to stand and those students within the age bracket were randomly selected and given questionnaire to fill. The filled questionnaires were immediately retrieved from the respondents after filling. A total of 100 questionnaires were distributed but only 98 were deemed fit for analysis giving a response rate of 98%. Both the FGD and the questionnaire distribution were done concurrently so as to prevent those that took part in the FGD from partaking in filling the questionnaire.

Instruments for data collection

Data collection in the study was carried out using focus group discussion guide which was adapted from save the children formative research guide on very young adolescent boys and a semi structured questionnaire which was developed. The Focus Group Discussion (FGDs) was carried out among very young female adolescent student using a FGD interview guide. The FGD was conducted to assess respondent's knowledge on differences between sexes, fertility awareness, romance and sexual attraction, while a semi-structured questionnaire was self administered to obtain information on the respondent socio-demographic

characteristics, knowledge of puberty, STI and sexual behaviour.

Data collection technique

The participant consented to the use of tape recorder during the focus group discussion. The use of a voice recorder allowed the capture of their responses clearly during the discussion. The questionnaire administered were monitored properly and ensured that questions were read out for easy understanding since they are very young adolescent.

Data analysis

To ensure the validity and reliability of the instrument, the qualitative guide was pretested in Amai mixed secondary school. Cronbach Alpha test reliability was used to determine the reliability of the instrument. The Cronbach Alpha Reliability statistics gave 0.703. Data generated were analysed using SPSS (Statistical Product

and Service Solution) version 15.0 manufactured by IBM incorporated. Descriptive statistics were used to evaluate frequency distribution, while chi-square test were performed to test for association between variables of interest with level of significance set at $p < 0.05$. In addition, responses from the focus group discussion were transcribed by maintaining the context of the responses. Important findings were summarized, narrated and incorporated in the result.

RESULTS

Quantitative findings

According to Table 1, 29(29.6%) of the respondents were 13years old, and 62(63.3%) were in JSS 2. Similarly, almost half 47(48.0%) of these respondents had fathers who attained tertiary education and 44(44.9%) of these respondent had mothers who were traders.

Table 1: Socio-demographic information

Variable	Frequency	Percentage
Age		
10years	10	10.2
11years	14	14.3
12years	19	19.3
13years	29	29.6
14years	20	20.4
15years	6	6.1
Type of school		
Ime-Obi	49	50.0
Brain Trust	49	50.0
Which class are you		
JSS1	10	10.2
JSS2	62	63.3
JSS3	26	26.5
Fathers' highest level of education		
Primary	7	7.1
Secondary	43	43.9
Tertiary	47	48.0
Others	1	1.0
Mothers' highest level of education		
Primary	10	10.2
Secondary	44	44.9
Tertiary	43	43.9
Others	1	1.0
Respondents fathers' occupation		
Civil servant	23	23.5
Artisan	5	5.1
Business man	70	71.4
Respondents mothers' occupation?		
Civil servant	11	11.2
Business women	42	42.9
Others	1	1.0
Trader	44	44.9

Table 2 shows that majority of the respondents, 93(94.90%) affirmed that they have heard of puberty, while 62(66.70%) said puberty is the stage which marks the beginning of sexual maturation and 55(59.10%)

identified deep voice as a sign of puberty in boys. This shows that some of the respondents had knowledge of puberty

Table II: Knowledge of reproductive health among respondents

Variable	Frequency	Percentage
Have you heard of puberty?		
Yes	93	94.9
No	5	5.1
If yes what is puberty?		
Puberty is the stage which marks the beginning of sexual maturation	62	66.7
Puberty is a stage where the body changes	26	28.0
Don't know	5	5.4
What is your source of information on puberty?		
Parents	24	25.81
Friends	7	7.53
School	45	48.39
Hospital/Clinic	15	16.13
Mass media	2	2.15
List the signs of puberty in boys?		
The hair grows in different part of the body	18	19.4
Deep voice	55	59.1
Bears grow on the body	10	10.8
Pimples	1	1.1
Don't know	9	9.7

As shown in Table 3, majority 95(96.90%) have heard of the word HIV, while 89(93.70%) of the respondent "defined it as human immune virus" and 79(80.60%) of the respondent were aware of STI. In addition, 30(37.97%) correctly identified HIV/AIDS as a type of

STI, while few 3(3.10%) have heard of the word contraceptive and 30(39.97%) affirmed that STIs can be transmitted through sexual intercourse. Furthermore, 72(73.50%) exhibited good knowledge of puberty and STI.

Table III: Knowledge of STI among respondents

Have you heard about the word HIV?		
Yes	95	96.9
No	3	3.1
What is your source of information on the word HIV?		
Parents	25	26.32
Friends	15	15.79
School	45	47.37
Hospital/Clinic	5	5.26
Mass media	5	5.26
If yes what is the full meaning of HIV?		
Human Immune Virus	89	93.7
Human Infection Virus	2	2.1
Don't know	4	4.2
Have you heard of STI?		
Yes	79	80.6
No	19	19.4
What is your source of information on the word STI?		
Parents	10	12.66
Friends	10	12.66
School	35	44.30
Hospital/Clinic	13	16.46
Mass media	11	13.92

If yes which of the following is a type of STI?		
Gonorrhoea	25	31.65
Syphilis	15	18.99
HIV/AIDS	30	37.97
Genital herpes	6	7.59
Cancroids	3	3.79
How can STIs be transmitted?		
Through sexual intercourse	30	37.97
Through touching	9	11.39
By eating with an infected person	18	22.78
By sharing a sharp object with an infected person	22	27.85
Have you heard of contraceptive?		
Yes	3	3.1
No	95	96.9
Poor knowledge of puberty & STI	26	26.5
Good knowledge of puberty & STI	72	73.5

As shown in Table 4, twenty eight of the respondents (28.60%) affirmed to have a girlfriend while seventy (71.40%) do not have a girlfriend. Few of the respondents 5(5.10%) have had sex and 93(94.90%) have not. Also, 2(40.0%) of the respondents agreed to have

had sex one month ago while 2(40.0%) attested to have had sex three months ago and 1(20.0%) had sex at the age of 11 years and 15 years respectively.

Table IV: Sexual behaviour and relationship experience

Variable	Frequency	Percentage
Do you have a girl friend?		
Yes	28	28.6
No	70	71.4
Have you ever had sex?		
Yes	5	5.1
No	93	94.9
If yes, when last did you have sex?		
1 month ago	2	40.0
1 month ago	1	20.0
3 month ago	2	40.0
How old were you when you had sex?		
11 years	1	20.0
12 years	1	20.0
13 years	1	20.0
14 years	1	20.0
15 years	1	20.0
Where you physically, forced, hurt, raped or threaten into having sex?		
No	5	100.0
Have you kissed or romanced a girl before?		
Yes	21	21.4
No	77	78.6
Do you have closed friends who ever had sex?		
Yes	45	45.9
No	53	54.1

According to table 5, 21(21.40%) of the respondent have been kissed or romanced before, out of which 5(5.10%) of these respondent have had sex. Also, there was a

significant difference between respondents that have been kissed and romanced and those that have had sex ($P=0.00$).

Table V: Relationship among the variables

Variables	Have you ever had sex?		X ²	df	P-Value
	Yes	No			
Have you kissed or romanced a girl before?					
Yes	5(5.10%)	16(16.3%)	19.319	1	0.000
No	0(0%)	77(78.60%)			

Qualitative findings

As the quantitative response most of the respondents have knowledge of puberty and were also able to mention some changes that takes place in boys during puberty.

“The signs of puberty in boys when voice become deeper their voice cracks and they also have hair on their private parts” and “During puberty stage boys shoulder become wide”.

Furthermore, questions were asked who do boys usually meet for advice during puberty; some of the respondents say they meet their parents, others claim to meet their teachers and friends.

“I usually meet my parents and sometimes my teachers for advice” and “I meet my teachers and friends for advice on issues relating to puberty”.

Sexual behaviour and relationship experience

The FGD shows some of the respondents admitting to liking girls.

“Yes I like a girl not for the bad part but for the good reason” and “Yes I like a girl”.

When asked if they have close friends who have girlfriends, some claim not to have while some admitted that they had friends who have girlfriends.

“No I don’t have close friends who have a girlfriend” and “Yes I have closed friends who have three girlfriends”.

Some even went further to have friends who chat with their girlfriends on various social media platforms.

“Yes I have close friends that have five girlfriends in Facebook, whatsapp, BBM, and 2go” and “Yes I have close friend that have two girl friends in 2go”.

Source of information on Puberty & STIs

Many of the respondents affirmed to get their source of information on puberty and STIs from parents, teachers and friends, thus corroborating the findings of the quantitative study.

“I was taught about puberty and STIs by my mother at home”, “I was taught about puberty and STIs by my

teacher in school” and “I Learnt about puberty and STIs from my friends in school”

What are the Webpage you visit in the Internet

Some of the respondents said they visit social media websites to chat with friends, while others visit websites to download games.

“The webpage they visit in the internet is trick.com where I download games, bbm, 2go and whatsapp”.

However, some affirmed that their classmates do visit pornographic websites to download movies which they bring to school to watch during break time.

“Some of my classmates do download pornographic movies, which they bring to school for us to watch”.

In addition, most of the respondents said avoiding visit to pornographic websites is one way to prevent themselves from the dangers of the internet.

“I can protect myself from dangers of internet by not going to the wrong site that will corrupt me or watching pornographic movies e.g naked pictures or naked movies instead will go to the site where I will learn good things where they show Christian religious movies for children and education that will help me in the future”.

DISCUSSION OF FINDINGS

The study shows most of the respondents 93(94.90%) have heard of puberty and were able to define puberty 62(66.70%). Furthermore, majority of the respondents have heard of the word HIV 95(96.90%), but none could properly define the correct meaning of the acronym HIV. In addition, 79(80.60%) have heard of STI but few 3(3.10%) have heard of the word contraceptive; while only 28(28.60%) of the respondents have a girlfriend, out of which only 5(5.10%) have had sex.

The study shows most of the respondents were aware of puberty as a developmental stage in adolescent boys. This was also corroborated by the findings from the FGDs were the discussants demonstrated knowledge of puberty. This finding is however not surprising as sexual maturation as been shown to begin in this age group (12-19 years old).^[16] Coincidentally, most of the respondents’ ages are within this age group. This finding is similar to previous studies in Calabar and in four African countries of Burkina-Faso, Ghana, Uganda and Malawi were very young adolescents (12-14 years old)

demonstrated knowledge of puberty.^{[17],[18],[19],[20]} In the same vein, majority of the respondents showed high awareness of HIV and STI. This finding is similar to a study carried out in Kano and other parts of Nigeria.^{[8],[21],[22]}

The period of early adolescence is challenging for the provision of reproductive health information which will enable boys to deal in a positive and responsible way with their sexuality.^[4] This often leaves adolescents with the option of sourcing for information about their sexuality from parents, school and peers. Both the quantitative and qualitative findings shows most of the respondents acquire information on puberty, HIV and STI from their parents, school and friends. However, previous studies shows adolescents' source reproductive health information from peers, mass media, school education with parents and health care providers not reported as a common source of information.^{[21],[22],[23]} Furthermore, only few of the respondents have heard of contraceptive, this is different from the findings from the National HIV/AIDS and Reproductive Health Survey;^[24] were majority of males age (15-49) were aware of contraceptive.

Sexual behaviour and relationship experience of the respondents shows almost one fourth have kissed or romanced a girl before, have closed friends who have had sex and have become sexually active themselves. The situation is further compounded by the revelation from the FGDs discussants that some of their friends do download pornographic movies which they bring to school for them to watch. This finding is similar to a study in Delta State Southern Nigeria where some of the adolescents are sexually active.^[15] In addition, the results shows all the respondents who have had sex have kissed or romanced a girl before and the association was significant at $p < 0.05$.

The implication of these findings is that most of these male adolescents without adequate knowledge of the risks associated with casual sex might start involving themselves in risky sexual activities as they see it as part of the complex process of maturation, making them at risk of contracting HIV/AIDS and other Sexually Transmitted Infections in the future.

CONCLUSION

The findings show that some of the respondents are already sexually active, involved in fondling and other sexual practices. Therefore, more health promotion and education programs targeting this group of adolescents in both public and private primary and secondary schools should be carried out regularly; in order to equip them with the required knowledge for a safer and better future reproductive health free of diseases.

ETHICAL CONSIDERATION

Ethical approval for the study was obtained from the department of public and community health, Novena

University ethical committee. In addition, an official approval for the study was given by the principal of Ime-Obi and Dein secondary school, Agbor Delta State respectively.

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CONFLICTS OF INTEREST

The authors declare that there are no conflicts of interest.

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