

## ORIGINAL RESEARCH ARTICLE

# Predictors and consequences of early sexual debut among students in tertiary institutions in Lagos metropolis, Nigeria

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## Abstract

This study investigated the factors associated with early sexual debut, consensual sexual debut and multiple sexual partners in tertiary institutions in Lagos Metropolis, Nigeria. The study adopted a cross-sectional survey design with a proportional sampling method. Structured questionnaire was used to elicit information from respondents. Four hundred and thirty-three questionnaires were deemed eligible for data analysis. Chi-square, t-test and binary logistic regression were utilised to analyse the data. It was found that respondents who attended private secondary schools were more likely to have early sexual debut ( $X^2= 3.076$ ;  $p<0.05$ ). There was no significant difference in the age at sexual debut for respondents from nuclear and extended families (M.D = -0.377). Females were less likely to experience consensual sexual debut than their male counterparts (OR=0.469;  $p<0.01$ ). Also, early sexual debut influenced exposure to multiple sexual partners- those who delayed sex till age 22 were the least likely to be exposed (OR= 0.056;  $p<0.001$ ). Adequate sex education of young people-beginning at early years- before their sexual debut is important for improved sexual health. (*Afr J Reprod Health 2020; 24[3]: 78-87*).

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**Keywords:** Sexual debut, multiple sexual partners, consensual sex, undergraduates; family type; Nigeria

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## Résumé

Cette étude a examiné les facteurs associés aux débuts sexuels précoces, aux débuts sexuels consensuels et aux partenaires sexuels multiples dans des établissements tertiaires de Lagos Metropolis, au Nigéria. L'étude a adopté un plan d'enquête transversal avec une méthode d'échantillonnage proportionnel. Un questionnaire structuré a été utilisé pour obtenir des informations auprès des répondants. Quatre cent trente-trois questionnaires ont été jugés éligibles pour l'analyse des données. Le chi carré, le test t et la régression logistique binaire ont été utilisés pour analyser les données. Il a été constaté que les répondants qui fréquentaient des écoles secondaires privées étaient plus susceptibles d'avoir des débuts sexuels précoces ( $X^2 = 3,076$ ;  $p < 0,05$ ). Il n'y avait pas de différence significative d'âge au début des rapports sexuels pour les répondants issus de familles nucléaires et élargies (M.D = -0,377). Les femmes étaient moins susceptibles d'avoir des débuts sexuels consensuels que leurs homologues masculins (OR = 0,469;  $p < 0,01$ ). En outre, les débuts sexuels précoces ont influencé l'exposition à plusieurs partenaires sexuels - ceux qui ont retardé les rapports sexuels jusqu'à l'âge de 22 ans étaient les moins susceptibles d'être exposés (OR = 0,056;  $p < 0,001$ ). Une éducation sexuelle adéquate des jeunes - dès les premières années - avant leurs débuts sexuels est importante pour une meilleure santé sexuelle. (*Afr J Reprod Health 2020; 24[3]: 78-87*).

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**Mots-clés:** Débuts sexuels, partenaires sexuels multiples, rapports sexuels consensuels, étudiants de premier cycle; type de famille; Nigeria

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## Introduction

Human sexuality (and sexual debut as a subset of it) is one of the most interesting areas of concern, both in academic research and in general public discourse. This is evident in the universal interest in sex-related issues- from the small tribal band to the large cosmopolitan city<sup>1</sup>. Consequently, hardly a day goes by in the life of an average person when he or she is not exposed to sexual content,

whether in popular movies or music, in advertising, or on different social media<sup>2</sup>. As Lehmiller put it; *sex is all around us*<sup>3</sup>. This gives rise to one of the central concerns in the research literature: the issue of sexual debut and its various causes and consequences, both for the individual, and for the society at large.

Sexual debut refers to an individual's first sexual experience<sup>4</sup>. Researchers often speak of early sexual debut, delayed sexual debut, and

secondary sexual debut<sup>5</sup>. An individual is said to have early sexual debut when he or she has their first sexual experience before the age of 18, whereas an individual is said to have delayed sexual debut when he or she has their first sexual experience from age 20 and above<sup>6</sup>. Secondary sexual debut describes an individual who abstains from sex for a period of time following their first sexual debut<sup>2</sup>.

In sub-Saharan Africa, analysis of the Demographic and Health Survey by Amo-Adjei and Tuoyire shows that the rate of pre-marital sex ranges from 12% to 82% for both sexes, and half of Africans had their first sex by the age of 16-17<sup>7</sup>. The median age at first sexual intercourse varies very slightly across region and between sexes<sup>7</sup>. Ethiopia, Gambia and Senegal recorded the highest median age (18) at first sex for males. For females, it was only in Gambia that females delayed sex till age 18. The lowest median age at first sex for females was 15 and recorded in Congo, Liberia, Mozambique and Sierra Leone. However, in Burundi, Ghana, Gambia, Comoros, Madagascar, Malawi, Rwanda, Swaziland, Togo, Uganda, Zambia and Zimbabwe, there is no difference in the age at sexual debut for both sexes. The median age at first sex in these countries ranges from 16 to 17. Females with lower education, and lived in female-headed households initiated sex earlier. Poorer wealth was a risk factor for both sexes.

In Nigeria, the National Population Commission reported that the median age at first sexual intercourse among women is 17.6 years. In addition, 24% of Nigerian women reported that they had sexual intercourse by age 15 and 54 percent by age 18<sup>8</sup>. Consequently, approximately 7 in 10 Nigerian women reported having had sexual intercourse by age 20<sup>8</sup>.

Although, some researchers have observed that Nigeria has made enormous gains in delaying the age at sexual debut among its youth, primarily through the intensive nation-wide delivery of comprehensive sex education programmes<sup>9</sup>; available data, however, suggest that the country still has a lot of work to do to improve the sexual and reproductive health of its teeming youth population. A study reported that 28% of Nigerian adolescents are sexually active<sup>10</sup>.

Perhaps the biggest source of concern related to the age at sexual debut among Nigerian youth is their observed lack of the skills (particularly for the females), both to negotiate safe sex and to delay the onset of safe sex. This makes it a matter of primary concern to understand issues affecting the sexual and reproductive health of Nigeria's teeming youth population<sup>10</sup>.

Regarding possible factors associated with early sexual debut, and the consequences of same. It has been established that the use of pornographic materials, parents' tacit approval<sup>11</sup>, developmental factors such as early menarche which are associated with early production of testosterone and oestrogen<sup>12,13</sup>, peer influence<sup>14</sup>, single-parenthood<sup>15</sup>, and parental separation and death<sup>16</sup> have been found to be associated with early sexual debut. However, it is not clear in the literature whether attending private or public secondary school will influence early sexual debut. It is also not clear whether young people who were raised in nuclear families will differ in age at sexual debut from their counterparts who were raised in extended families. This study seeks to address the following questions: does nature of secondary school (whether public or private) attended influence early sexual debut among students of tertiary institutions? Do students raised in nuclear families delay age at sexual debut compared to those raised in extended families? Does gender influence experience of consensual sexual debut among undergraduates? Does early sexual debut expose undergraduates to having multiple sexual partners?

## Methods

### *Study design and setting*

This study adopted a cross-sectional research design, and there was face-to-face contact between the researcher and the respondents. The unit of analysis was an individual respondent (student). The study was conducted in three structurally different tertiary institutions: one university (University of Lagos), one polytechnic (Yaba College of Technology), and one technical college of education (Federal College of Education, Akoka). Tertiary institutions in Nigeria are stratified with universities being the most

prestigious, followed by polytechnics, then colleges of education. There are two reasons for selecting these institutions. One, the three institutions are similar in that they are the only federal government-owned university, polytechnic and college of education in Lagos State. Two, the institutions are part of the first generation tertiary institutions in Nigeria. Yaba College of Technology was the first polytechnic in the country (established since 1934). University of Lagos (1962) and Federal College of Education, Akoka (1967) were among the institutions established within the first decade of Nigeria's independence. The study population was composed of undergraduates who were running full-time programme in the institutions, and had had sex at least once as of the time of the study. Students who had never had sex were excluded from the study.

### **Sampling**

Sampling frames containing the total number of full-time students were retrieved from each of the institutions. Using a margin of error of 5%, confidence level of 95%, and a total population size of 39101, which was obtained from the three study locations, the Raosoft online sample size calculator ([http://www.raosoft.com/sample\\_size.htm](http://www.raosoft.com/sample_size.htm)) suggested a minimum sample size of 381. A total of 433 questionnaires were completed out of the 450 that were administered. As none of the institutions provided a gender distribution of the students, the purposive sampling technique was used to select 225 males and 225 females. The proportional sampling technique was used to determine the number of respondents that were drawn from each institution. The first institution, which was the University, constituted 65.5%, the second (the polytechnic) constituted 28.6%, while the third (college of education) constituted 5.9%. Sample sizes of 294, 129, and 27 respectively were allotted to the institutions putting the total at 450. This was based on the sampling frame collected from each of the three institutions.

### **Research instrument and measures**

The study adopted a structured questionnaire which contained 49 questions. The dependent

variables were early sexual debut, consensual sexual debut and multiple sexual partners. Early sexual debut was measured as intercourse before age 18. We asked "at what age did you first have sex?" The variable was measured at the ratio level. Regarding consensual sexual debut, we asked "Was your consent sought at your first sex experience?" with two options "Yes, my consent was sought" and "No, my consent was not sought". We measured multiple sexual partners at ratio level. We asked "How many sexual partners have you had this year?", that is, within a space of 9 months (January to September). The major independent variables were; nature of secondary school attended (private vs government-owned school), family type raised in (nuclear vs extended) and gender. Other independent variables which were discussed at the multivariate level included time of sexual debut (before vs after admission into tertiary institution), first sexual partner (whether boyfriend/girlfriend, just a friend, classmate or stranger), parents' marriage type (monogamy vs polygamy), description of sexual drive (whether high, medium or low), orphanhood (whether parents are alive or late) and frequency of sexual intercourse.

### **Data analysis**

Statistical Package for Social Sciences (SPSS) version 22 was used for data analysis. Simple percentages were used to examine the socio-demographic characteristics of respondents, as well as other variables of interest to the study. Chi-square, t-test, and binary logistic regression were used to answer the research questions.

The main findings were presented at the bivariate level for the purpose of clarity. We used the Chi-square test to show the association between (1) gender and experience of consensual sexual debut; (2) nature of secondary school attended and involvement in early sexual debut (before 18 vs 18 and above); (3) early sexual debut and having multiple sexual partners. Independent sample t-test was used to test if the age at sexual debut varies for students raised in nuclear and extended family.

At the multivariate level of analysis, we ran a binary logistic regression model for each of the three dependent variables in order to see which

other possible factors are significant predictors. In the logistic regression, dependent variables such as age at first sex and number of sexual partners, which were measured at scale level, were categorised into two possible outcomes. Age at sexual debut was categorised into sex before age 18 and sex at age 18 or above. The former category was marked 'early'. Number of sexual partners was categorised into those who have had only one or none and those who have had two or more. The latter category was marked 'multiple'. Both bivariate and multivariate tests were computed at 95% level of significance.

## Results

### *Background characteristics of respondents*

Approximately half (50.3%) of the respondents were males. More than one-third (36.9%) of the respondents were between the ages of 16 and 20; respondents within the age group of 21-25 accounted for 34.4%. The mean age was 22.7 with a standard deviation of 3.98. Close to two-thirds (66.3%) of the respondents were non-orphans which means that both of their parents were alive as at the time of this study; about a quarter (24.9%) of the respondents had lost one of their parents. More than half (56.8%) of the respondents attended private secondary schools. More than half (57.4%) of the respondents were in a relationship as at the time of this study.

### *Sex-related characteristics*

We found that more than half (52.8%) of the respondents planned to have their first sex when they did. Less than half (43.7%) had sex before age 18. A little below three-quarter (74.3%) of the respondents said that their consent was sought before sexual debut. Less than half (42.8%) respondents said that condom was not used during their first sex. More than 60% of respondents from each of the three institutions had had sex before their tertiary education. About 71% of those who had had sex before tertiary education were males. Approximately half of the respondents said that they had their sexual debut with their boyfriend/girlfriend, while 29.4% respondents reported that they were initiated into sex by 'just a

friend'; 12.8% respondents were initiated into sex by 'others' which included aunt, teacher, family friend, relative, step-father, stranger, maid, etc.

### *Major findings*

**RQ 1:** Does nature of secondary school (whether public or private) attended influence early sexual debut among students of tertiary institutions?

Table 1 shows that 37.6% of the respondents who attended public secondary schools initiated sexual intercourse before age 18, compared with 48.1% of those who attended private schools. The Chi-square statistic of 4.553 and the p-value of 0.033 suggest that the nature of secondary school was significantly associated with involvement in early sexual debut. Another related finding is that, more than half (61.7%) of undergraduates who attended private secondary school were counselled by their parents(s) on matters of sexual intercourse before they had their first sex compared with 48.6% of those who attended public school ( $P < 0.05$ , table not shown). However, more proportion of undergraduates who attended private schools initiated sex before age 18 than those who attended public schools. This shows the relevance of understanding the content of the sexual education being passed by parents to their wards.

**RQ 2:** Does gender influence experience of consensual sexual debut among undergraduates?

Table 2 shows that 78.9% of male respondents experienced consensual sexual debut, 71.6% of the female respondents experienced same. The statistics show that the association is not significant on overall. However, when we controlled for institution, sex was not significantly associated with non-consensual sexual debut in the university and college of education. But in the polytechnic, sex was significantly associated with consensual sexual debut: 73.8% for males as opposed to 55.4% for females [ $X^2 = 4.633$ ;  $p < 0.05$  (table not shown)]. This may explain why more males reported to have enjoyed their first sex than females: 78.6 vs 62.5;  $p < 0.05$ . Still on gender, more females delayed sexual intercourse till their admission into tertiary institution than males (70.6 vs 61.0;  $p < 0.05$ ).

**Table 1:** Cross-tabulation of secondary school attended and early sexual debut

Secondary school attended	Age at sexual debut		Total (%)
	Less than 18 (%)	18 or above (%)	
Government-owned (public school)	67 (37.6)	111 (62.4)	178 (100.0)
Privately owned school	115 (48.1)	124 (51.9)	239 (100.0)
<b>Total</b>	<b>182 (43.6)</b>	<b>235 (56.4)</b>	<b>417 (100.0)</b>

**X<sup>2</sup>: 4.553; df: 1; p-value: 0.033**

**Table 2:** Cross-tabulation of gender and consensual sexual debut

Gender	Experience of consensual sexual debut		Total (%)
	Yes (%)	No (%)	
Male	172 (78.9)	46 (21.1)	218 (100.0)
Female	154 (71.6)	61 (28.4)	215 (100.0)
<b>Total</b>	<b>326 (75.3)</b>	<b>107 (24.7)</b>	<b>433 (100.0)</b>

**X<sup>2</sup>: 3.076; df: 1; p-value: 0.079**

**Table 3:** Cross-tabulation of early sexual debut and multiple sexual partners

Early sexual debut	Number of sexual partners		Total (%)
	None/One (%)	Two or more persons (%)	
No	86 (46.5)	99 (53.5)	185 (100.0)
Yes	42 (31.1)	93 (68.9)	135 (100.0)
<b>Total</b>	<b>128 (40.0)</b>	<b>192 (60.0)</b>	<b>320 (100.0)</b>

**X<sup>2</sup>: 7.688; df: 1; P-value: 0.006**

**Table 4:** Test for difference in the age at first sex for different family types

Group Statistics				
Family type	N	Mean	Std. Deviation	Std. Error
Nuclear Family	295	17.66	3.258	.190
Extended Family	130	18.04	3.219	.282

**T: -1.110; df: 249.419; mean difference: -0.377; p-value: 0.270**

This could be because more females (63.8%) were counselled by their parent(s) than males (48.9%) before their first sex encounter.

**RQ 3:** Does early sexual debut expose undergraduates to having multiple sexual partners?

We also found that early sexual debut was associated with having multiple sexual partners. More than two-thirds of the respondents who had early sexual debut had multiple sexual partners,

compared with 53.5% of those who did not have early sexual debut. Approximately 51% of those who had early sexual debut did not have prior plan to have sex the day they did. Consequently, the sex was not consensual for 30.8% of them compared with 19.4% of those who delayed sex till age 18 (p<0.05). Another implication is that, more than half (58.4%) of those who had early sexual debut did so with someone with whom they had no prior emotional attachment unlike 42.9% for those who delayed sex till age 18.

**RQ 4:** Do students raised in nuclear families delay age at sexual debut compared to those raised in extended families?

Table 4 shows that the mean age at first sex for those raised in nuclear families is 17.66, and 18.04 for those raised in extended families. The T statistic is -1.110; degree of freedom is 249. Although the difference is insignificant, further analyses show that being raised in extended family has implication for some sexual behaviours which are worthy of mention. Students raised in extended family experienced non-consensual sexual debut than those raised in nuclear family (32.8% vs 21%; p=0.009). In addition, more than half (54.3%) of those raised in extended family did not use condom at first sex compared with 40% of those raised in nuclear family (p=0.007). More than half (58.8%) of those raised in extended family had their first sex with someone with whom they had no prior emotional attachment, whereas 54.7% of those raised in nuclear family had first sex with boyfriend/girlfriend (p=0.05). More than three-quarters (84.6%) of students raised in extended family moved with friends who had regular sexual intercourse compared with 72% of those raised in the nuclear family. About 7 out of 10 students raised in extended family had multiple sexual partners compared with 56.2% of those raised in the nuclear family (p=0.025).

**Multivariate analyses**

Table 5 shows that undergraduates who attended private secondary schools were 1.7 times more likely to have had their sexual debut before age 18 than those who attended government schools. Time of sexual debut was a significant predictor as

**Table 5:** Summary of regression models for predictors of early sexual debut

Predictors	B	SE	AOR	95% CI	
				Lower	Upper
<b>Institution</b>					
University (reference category)	--	--	1.0		
Polytechnic	.701	.362	2.015	.991	4.098
College of Education	112	.690	1.118	.289	4.329
<b>Sex</b>					
Male (reference category)	--	--	1.0		
Female	.264	.342	1.302	.667	2.545
<b>Nature of secondary school</b>					
Government school (reference category)	--	--	1.0		
Private school	.523	.351	1.687	.848	3.356
<b>Time of sexual debut</b>					
Before admission (reference category)	--	--	1.0		
After admission	-1.904	.428	.335*	.145	.774
<b>First sexual partner</b>					
Boyfriend/girlfriend (reference category)	--	--	1.0		
Just a friend	.984	.450	2.675*	1.107	6.646
Schoolmate/Classmate	1.733	.476	5.659***	2.225	14.396
Others	2.747	.507	15.600***	5.775	42.138
Constant	-3.394	.491	.034***		
Model X <sup>2</sup> (p)			55.880 (.000)		
Hosmer and Lemeshow's Test (p)			5.428 (.711)		

\*- p ≤ 0.05; \*\*- p ≤ 0.01; \*\*\* - p ≤ 0.001

**Table 6:** Summary of regression models for predictors of consensual sexual debut

Predictors	B	SE	AOR	95% CI	
				Lower	Upper
<b>Age at sexual debut</b>					
15 years or below (reference category)	--	--	1.0		
16-18 years old	.887	.320	2.427**	1.296	4.546
19-21 years old	.927	.358	2.526**	1.253	5.094
22 years old and above	.967	.469	2.630*	1.050	6.589
<b>Gender</b>					
Male (reference category)	--	--	1.0		
Female	-.756	.265	.469**	.279	.789
<b>Parents' marriage</b>					
Monogamy (reference category)	--	--	1.0		
Polygamy	.150	.263	.860	.513	1.442
<b>First sexual partner</b>					
Boyfriend/girlfriend (reference category)	--	--	1.0		
Just a friend	-1.039	.312	.354**	.192	.653
Schoolmate/Classmate	-1.122	.370	.326**	.158	.672
Others	-1.698	.457	.183***	.075	.448
Constant	1.571	.362	4.812***		
Model X <sup>2</sup> (p)			49.596 (.000)		
Hosmer and Lemeshow's Test (p)			1.393 (.994)		

\*- p ≤ 0.05; \*\*- p ≤ 0.01; \*\*\* - p ≤ 0.001

undergraduates who had sex before gaining admission into tertiary institution more likely to have had their sexual debut before age 18 than those who had sex after gaining admission ( $\beta = -1.904$ ;  $p < 0.05$ ). The type of first sexual partner was also a significant predictor of early sexual

debut. Respondents who had their first sex with just a friend were 2.7 times more likely to involve in early sexual debut than those whose first sex was with their boyfriend/girlfriend ( $\beta = .984$ ;  $p < 0.05$ ). Respondents who had their first sex with classmate/schoolmate were 5.7 times more likely

**Table 7:** Summary of regression models for predictors of multiple sexual partners

Predictors	B	SE	AOR	95% CI	
				Lower	Upper
Age at sexual debut					
15 years or below (reference category)	--	--	1.0		
16-18 years old	-1.014	.490	.363*	.139	.948
19-21 years old	-1.488	.504	.226**	.084	.607
22 years old and above	-2.878	.663	.056***	.015	.206
Description of sexual drive					
Very strong (reference category)	--	--	1.0		
Somewhat strong	-1.630	.342	.196***	.100	.383
Not strong	-1.199	.424	.302**	.131	.693
Orphanhood					
Not an orphan (reference category)	--	--	1.0		
Single orphan	.220	.331	1.246	.652	2.382
Double orphan	.420	.577	1.522	.491	4.719
Frequency of sexual intercourse					
Once in a week (reference category)	--	--	1.0		
2-3 times in a week	1.418	.376	4.128***	1.976	8.626
4 times or more	1.012	.517	2.751*	.999	7.573
Constant	2.207	.528	9.093***		
Model X <sup>2</sup> (p)		73.127	(.000)		
Hosmer and Lemeshow's Test (p)		4.117	(.846)		

\*-  $p \leq 0.05$ ; \*\*-  $p \leq 0.01$ ; \*\*\*-  $p \leq 0.001$

to have had early sexual debut than the reference category ( $\beta = -1.733$ ;  $p < 0.001$ ). Respondents whose first sexual intercourse was with 'others' such as strangers, relatives, teachers and so on were 15.6 times more likely to experience early sexual debut than those who had their first sex with boyfriend/girlfriend ( $\beta = 2.747$ ;  $p < 0.001$ ).

Table 6 indicates that age at sexual debut was a predictor of experience of consensual sexual debut. Respondents who had first sex within ages 16-18 were 2.4 times more likely to consent to sexual debut than those whose first sex occurred at age 15 or less ( $\beta = .887$ ;  $p < 0.01$ ). Respondents who had their first sex between ages 19-21 were 2.5 times more likely to experience consensual sexual debut than the reference category ( $\beta = .927$ ;  $p < 0.01$ ). Respondents who delayed first sex till age 22 or above were 2.6 times more likely to experience consensual sexual debut than those who had first sex at 15 or below ( $\beta = .967$ ;  $p < 0.05$ ). Gender was also a significant predictor of consensual sexual debut as females were less likely to experience consensual sexual debut than their male counterparts ( $\beta = -.756$ ;  $p < 0.01$ ). First sexual partner was also a significant predictor of consensual sexual debut. Respondents whose first sexual partner was just a friend were less likely to

experience consensual sexual debut than those whose first partner was boyfriend/girlfriend ( $\beta = -1.039$ ;  $p < 0.01$ ). Respondents whose first sexual partner was schoolmate/classmate were also less likely than the reference category to experience consensual sexual debut ( $\beta = -1.122$ ;  $p < 0.01$ ). Respondents whose first sexual partner was 'others' such as strangers and relatives were similarly less likely to experience consensual sexual debut ( $\beta = -1.698$ ;  $p < 0.001$ ).

Table 7 reveals that respondents who were sexually debuted at age 16-18 were less likely to have multiple sexual partners than those who had their first sex at age 15 or below ( $\beta = -1.014$ ;  $p < 0.05$ ). Respondents who had their first sex between the ages of 19-21 were also less likely to have multiple sexual partners than their counterparts who were sexually debuted at age 15 or below ( $\beta = -1.488$ ;  $p < 0.001$ ). Similarly, respondents who were sexually debuted at age 22 or above were less likely to have multiple sexual partners than the reference category. Description of sexual drive was a significant predictor. Respondents who described their sexual drive as somewhat strong were less likely to have multiple sexual partners than those who described theirs as very strong ( $\beta = -1.630$ ;  $p < 0.001$ ). Respondents

who described their sexual drive as not strong were less likely to have multiple sexual partners than the reference category ( $\beta = -1.199$ ;  $p < 0.01$ ). Frequency of sexual intercourse was a significant predictor as respondents who had sex 2-3 times in a week were 4.1 times more likely to have multiple sexual partners than their counterparts who had sex once in a week ( $\beta = 1.418$ ;  $p < 0.001$ ). Respondents who had sex 4 or more times in a week were 2.8 times more likely to have multiple sexual partners than the reference category.

## Discussion

It was found that females were less likely to experience consensual sexual debut than males. Age at first sex and first sexual partner were co-predictors. These findings are in line with that of earlier studies<sup>17-19</sup> which posited that girls tend to start having sex earlier than boys of the same age. Of course, early sex may be non-consensual if the female partner is too young to negotiate, and since they initiate sex before boys, they are more likely to be vulnerable to non-consensual sexual debut. Females also initiate sex early in order to please their partners<sup>14</sup>. This usually happens because the male partners in the relationship 'exert sustained pressure' demanding sex and in some cases even threaten to break the relationship. The case may be worse with increase in age difference of partners involved. Dating older male partners was found by some studies<sup>20,21</sup> to increase chances of exposure to sexual violence. We found that having first sex with boyfriend/girlfriend increases the odds of consensual sexual debut. This makes sense since first sex with someone (such as boyfriend/girlfriend) with whom one has prior emotional attachment may be planned and agreed by both partners. In addition, there is possibility of continuity in the relationship and future intercourse if both partners consent before one of them is sexually debuted, unlike sex with 'just a friend' or stranger which may be spontaneous, unplanned and non-consensual.

The mean age at sexual debut for those raised in nuclear families was 17.66, and 18.04 for those raised in extended families; the difference was not significant. This finding contradicts that of earlier studies<sup>15,16,22,23</sup> which suggested that being

raised in an extended family may come with disorganisation, and consequently early sex. Future studies in Nigeria should investigate association between family size/type and early sexual debut across different states in the country.

The nature of secondary school attended may influence involvement in early sexual debut as respondents who attended private schools were more involved (48.1%) in early sexual debut than those who attended public secondary schools (37.6%). The possible reason could be the level of exposure and adventurousness of students who attended private secondary schools. In Nigeria, students who attend private secondary school may be from an economically advantaged background than those in public schools. This gives the former opportunities to have access to sophisticated phones and computers with which they access the internet and social media. They may also be more exposed to global trends in sexuality more than those in public schools. Access to the cinema and modern gadgets has both positive consequences (phone calls, ease of communication, exposure and enlightenment) and negative consequences (access to sexually explicit materials). Consequently, they may want to explore and practise what they see on the internet which may expose them to early sexual debut<sup>24,25,26</sup>.

Involvement in early sexual debut has influence on exposure to risky sexual behaviour such as having multiple sexual partners. Other studies<sup>12,15,27</sup> have supported these findings to show that not only does early sexual debut expose young people to having multiple sexual partners which can cause exposure to sexually transmitted infections (STIs)<sup>11</sup>. Early sexual debut has more negative implications for females as they are exposed to teenage and unwanted pregnancy<sup>28,29</sup>, which consequently have unwanted effects on the baby<sup>30,31</sup>.

## Ethical Issues

The researchers sought permission and obtained letter of approval from each of the institutions before the commencement of the research. In addition to the letter of informed consent that accompanied each questionnaire, the researchers ensured that each respondent was verbally



informed about the rationale for the study. The consent of all respondents was sought before they participated in the study. No respondent was offered any incentives to participate in the study

## Conclusion

The exposure of females to early non-consensual sexual debut has implications for psychological trauma, teenage and unwanted pregnancy and consequently abortion which could lead to untimely death. Early sexual debut has implications for risky sexual behaviours including multiple sexual partners. Parents/guardians and teachers are advised to introduce sexuality education to their wards at early age and continue discussing sex-related matters with them as they grow. Additional emphasis should be placed on children being raised in the extended family system. Early sexual debut is prevalent among students, as many of these young people had their sexual debut before commencing tertiary education, thereby suggesting that sexuality education should begin from early years. Many young people did not have a prior intention to initiate sex when they did, and a significant proportion of them did not consent to the intercourse. This may pose serious long time psychological, sexual and reproductive health issues. The rate of early sexual debut among undergraduates -especially those who attended private secondary schools- may be reduced if the teaching of sexuality education goes beyond classroom to include monitoring and counselling by parents and pro-social others.

## Contributions of Authors

TA and SA contributed to all the sections in the initial draft of the manuscript. TA analysed the data and interpreted the results. TA and SA participated in addressing the reviewers' comments and suggestions. JO oversaw and supervised the development of sampling methods and data collection.

## References

- Ryan C and Jetha C. Sex at dawn: The pre-historic origins of modern sexuality. Harper Collins, New York. 2011.
- Dabhoiwala F. The origins of sex: A history of the first sexual revolution. Oxford University Press, Oxford. 2012.
- Lehmiller JL. The psychology of human sexuality. Wiley Blackwell, Sussex. 2011.
- Lanier HJ, Stoute K, Hollender L, Sutherland G and Stewart J. It Was a Learning Experience: Lessons Learned from Young African American Men and Women's Sexual Debut. Journal of the Association of Nurses in Aids Care. 2017. 1 (1): 1-7.
- Donenberg GR, Bryant FB, Emerson E., Wilson HW and Pasch KE. Tracing the roots of early sexual debut among adolescents in psychiatric care. Journal of American Academy of Child Adolescence and Psychiatry. 2013; 42(5): 594-608
- World Health Organization. Sexual health, human rights, and the law. World Health Organization, Geneva. 2015.
- Amo-Adjei J and Tuoyire DA. Timing of sexual debut among unmarried youths aged 15-24 years in sub-Saharan Africa. Journal of biosocial science. 2018; 50(2):161-77
- National Population Commission (NPC) [Nigeria] and ICF International. Nigeria Demographic and Health Survey 2013. Abuja, Nigeria, and Rockville, Maryland, USA: NPC and ICF International. 2014.
- Huaynoca S, Chandra-Mouli V, Yaqub N and Denno DM. Scaling up comprehensive sexuality education in Nigeria: from national policy to nationwide application. Sex Education. 2014; 14 (2): 191-209.
- Envuladu E, Van de Kwaak A, Zwanikken P and Zoakah A. Exploring the factors influencing adolescent sexual behavior in plateau state Nigeria. American Journal of Medicine and Medical Sciences. 2017; 7 (1): 1-6.
- Wang B and Davidson P. Sex, lies, and videos in rural china: A qualitative study of women's sexual debut and risky sexual behaviour. The Journal of Sex Research. 2006; 43 (3): 227-235.
- Lara AS and Abdo HN. Age at initial sexual intercourse and health of adolescent girls. Journal of Pediatric and Adolescent Gynecology. 2015; 15 (2): 1-25. doi: 10.1016/j.jpjg.2015.11.012.
- Caruso S. Do hormones influence women's sex? Sexual activity over the menstrual cycle. Journal of Sex Medicine, 2014; 11(1): 211-21.
- Akintola O, Ngubane L and Makhaba L. 'I did it for him, not for me': An exploratory study of factors influencing sexual debut among female university students in Durban, South Africa. Journal of Health Psychology. 2011; 17(1): 143-153.
- Ohalete N. Adolescent sexual debut: A case for studying African American father-adolescent reproductive health communication. Journal of Black Studies, 2007; 37 (5): 737-752.
- Pilgrim NA, Ahmed S and Gray RH. Family structure effects on early sexual debut among adolescent girls in Rakai, Uganda. Vulnerable Children and Youth Studies. 2014; 9(3): 193-205.
- Goldberg RE, Tienda M and Adserà A. Age at migration,

- family instability, and timing of sexual onset. *Social Science Research*. 2016; 2(1): 1-54.
18. Cavazos-Rehg P, Krauss MJ, Spitznagel EL, Schootman M, BucholzKK, PeipertJF, Sanders-Thompson V, CottlerLB and Bierut LJ. Age of sexual debut among US adolescents. *Contraception*, 2009; 80: 158-162.
  19. Moore AN. Gender Role Beliefs at Sexual Debut: Qualitative Evidence from Two Brazilian Cities. *International Family Planning Perspectives*. 2006; 32(1): 45-51.
  20. Polis C, Lutalo T, Wawer M, Serwadda D, Kigozi G, NalugodaNK and Gray R. Coerced sexual debut and lifetime abortion attempts among women in Rakai, Uganda. *International Journal of Gynecology and Obstetrics*. 2009; 104: 106-109.
  21. Doskoch P. Characteristics linked to sexual debut vary across sub-Saharan Africa. *International Perspectives on Sexual and Reproductive Health*, 2013; 39 (3): 166-167.
  22. TenkorangEY and Adjei JK. Household living arrangements and transition to sexual debut among young people in Ghana. *Sex Education*. 2014; 15 (1): 1–18.
  23. Ningpuanyeh WC and Susuman AS. Correlates of early sexual debut and its associated STI/HIV risk factors among sexually active youths in Malawi. *Journal of Asian and African Studies*. 2016; 1-12.
  24. Mulugeta Y and Berhane Y. Factors associated with premarital sexual debut among unmarried high school female students in Bahir Dar town, Ethiopia: Cross-sectional study. *Reproductive Health*, 2014; 11 (40): 1-6.
  25. Fekadu M and Alemayehu W. Age at sexual initiation and factors associated with it among youths in North East Ethiopia. *Ethiopian Journal of Health Development*, 2009; 23(2):154–162.
  26. Wong ML, Chan RK, Koh D, Tan HH, Lim FS, Emmanuel S and Bishop G. Premarital sexual intercourse among adolescents in an Asian country: Multilevel ecological factors. *Paediatrics*, 2009; 124(1):44–52.
  27. Khangelani Z, Geoffrey S, Thabile K, Thembile M, Thomas R and Ntombizodwa M. Age at sexual debut: A determinant of multiple partnership among South African youth. *African Journal of Reproductive Health*, 2010; 14 (2): 47-54.
  28. Mwakagile D, Mmari E, Makwava C, Mbwana J, Bibberfeld G, Mhalu F and Sandstrom E. Sexual behaviour among youths at high risk for HIV-infection in Dares Salaam, Tanzania. *Sexually Transmitted Infections*, 2001; 77(4): 255-259.
  29. Ghandour LA, Mouhanna F, Yasmine R and Elkak F. Factors associated with alcohol and/or drug use at sexual debut among sexually active university students: Cross-sectional findings from Lebanon. *BMC Public Health*, 2014; 14: 671-681. DOI: 10.1186/1471-2458-14-671.
  30. Chen XK, Wen SW, Fleming N, Demissie K, Rhoads GG and Walker M. Teenage pregnancy and adverse birth outcomes: a large population based retrospective cohort study. *International Journal of Epidemiology*, 2007; 36(2): 368-373.
  31. Restrepo-Mendez MC, Barros AJ, Santos IS, Menezes AM, Matijasevich A, Barros FC and Victora CG. Childbearing during adolescence and off-spring mortality: findings from three population-based cohorts in southern Brazil. *BMC Public Health*, 2011; 11: 781.