

Parental Characteristics and Adolescent Sexual Behaviour in Bida Local Government Area of Niger State, Nigeria

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ABSTRACT

This study was conducted in Bida Local Government Area of Niger State, Nigeria, to examine how parental attributes influence adolescent sexual activity. Data were gathered through structured interview with 400 adolescents aged 12–24 years using a three-stage random sampling procedure. Findings show that more than one third of the adolescents interviewed had sexual intercourse in the month preceding the survey. Less than one fifth of the sexually active adolescents were using a method of contraception to either prevent infections or avoid unwanted pregnancy. Further analysis confirmed the fact that adolescents with whom parents had discussed family life issues were less likely to be sexually active than those with whom parents had never discussed family life issues. The study also found a negative effect of family instability on adolescent sexuality. These findings call for the need for family-sensitive programs that will enhance family stability especially economically. The need for parental empowerment to be able to cope with the challenges of adolescent life in Nigeria is also stressed since adolescents who have family life education from parents are less likely to be sexually active. (*Afr J Reprod Health* 2002; 6[1]: 95–106)

RÉSUMÉ

Les Caractéristiques Parentales et les Comportements Sexuels de l'Adolescent dans la Région de l'Administration Locale de Bida dans l'Etat de Niger, au Nigéria. Cette étude qui a été menée dans la région de l'Administration Locale de Bida dans l'Etat de Niger, au Nigéria, a étudié la façon dont les attributs des parents influent sur l'activité sexuelle de l'adolescent. Les données ont été recueillies à travers une interview structurée auprès de 400 adolescents âgés de 12–24 ans, à l'aide d'un procédé d'un échantillon au hasard à trois étages. Les résultats ont montré que plus d'un tiers des adolescents interviewés ont eu des rapports sexuels le mois précédant l'enquête. Moins d'un cinquième des adolescents qui étaient sexuellement actifs utilisaient une méthode de contraception soit pour prévenir les infections soit pour éviter la grossesse non-désirée. Des analyses supplémentaires ont confirmé le fait que les adolescents avec qui les parents avaient discuté les questions sur la vie familiale, ont moins de chances d'être sexuellement actifs que ceux qui n'avaient pas discuté ces questions avec leurs parents. L'étude a constaté l'effet négatif de l'instabilité familiale sur la sexualité de l'adolescent. Ces résultats montrent la nécessité d'avoir des programmes qui sont sensibles à la famille, qui favoriseront la stabilité familiale, surtout économiquement. L'étude a souligné également la nécessité de permettre aux parents d'assumer leur responsabilité pour faire face aux défis de la vie adolescente au Nigéria, puisque les adolescents qui bénéficient de l'éducation de la vie familiale de la part de leurs parents ont moins de chances d'être sexuellement actifs. (*Rev Afr Santé Reprod* 2002; 6[1]: 95–106)

KEY WORDS: *Adolescent, sexual activity, contraceptive, unwanted pregnancy, Bida, Nigeria*

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Introduction

There is presently global interest on adolescent reproductive health especially in relation to sexuality. This is because of the attendant consequences of adolescents' sexual activity such as early/unwanted pregnancy often leading to unsafe abortion, STDs and HIV/AIDS. Studies on adolescent sexual behaviour have always investigated socio-economic factors associated with adolescent sexual activity. Kau¹ and Bugs et al² examined adolescent contraceptive knowledge and use and Jaccard and Dittus³ investigated the impact of parent-teen communication on adolescent sexual behaviour and contraceptive use. These and other studies have attempted to identify factors that influence adolescent sexual behaviour. It was found that the lack of parental interest and discipline, early school leaving, and physical maturity correlate with greater sexual experience. Nguyen et al⁴ examined the influence of attitudes and other variables on adolescents' intention to use condoms. It was found that the childbearing and marital experiences of their parents influence pre-marital sexual attitudes and behaviour of children by the religious affiliation and attendance of their mothers.

In Nigeria and Kenya, Barker and Rich investigated how peer interactions and social factors influence adolescents' attitudes toward sexuality and family planning. Earlier, Makinwa-Adebusoye⁵ had investigated the institutional context of adolescent sexual behaviour and fertility.

One common research finding on adolescent sexual practices is poor knowledge and use of modern contraception. For example, Lema found a poor knowledge of contraceptive and its use in Kenya. Chliabra⁶ in India and Anarfi⁷ in Ghana found similar patterns. Poor knowledge and inconsistent use of contraceptives among sexually active adolescents have made necessary the need for effective family life education for young men and women in and out of school. It is believed that sex education will expose them to responsible sexuality, the need to delay first intercourse and adopt satisfactory means of preventing unintended pregnancy and other consequences. For family life education to be more successful and effective there is need for parental involvement. However, several studies in some countries have shown that parents discuss reproductive matters with young men and

women. Dessantis and Thomas⁸ found that some parents had discussed sex with their children in Haiti.

In Nigeria, Adeyemo & Brieger⁹ found that out of six family life education topics the 253 families interviewed discussed only an average of three; some parents did not feel competent while others felt that raising such issues might encourage undesirable behaviour by the youth. Studies also show that some parents may not be knowledgeable as to what to teach and how to teach it. Some parents initiate discussions about sex with sons only when evidence of sexual activity leads them to do so.¹⁰ Zelnik and Kantner¹¹ investigated family and behavioural factors influencing adolescent sexual activity in USA and found that black teenagers below 18 years in families of low socio-economic status are more likely to have sexual experience. The proportion was only 37% when the father was educated. Roberts et al found a high level of adolescent sexual permissiveness when parental rules were perceived to be less strict.

In Nigeria, studies on adolescent sexual behaviour have focused on the socio-demographic and other background characteristics of urban adolescents,^{5,12,13} and the nature and level of family life education adolescent children receive.⁹ None of the Nigerian studies has critically examined the nature of the relationship between parental attitudes and adolescent sexual behaviour despite its widespread acceptance of the relationship.¹⁰

This paper reports the findings of a study that investigated the relationship between parental characteristics and adolescent sexual behaviour in Bida area of Niger State in Nigeria.

Research Methodology

Research Area

The study area is Bida Local Government Area of Niger State, Nigeria. Bida is the traditional headquarters of Nupe Kingdom. The Nupes live in the low basin formed by the two valleys of Rivers Niger and Kaduna. They are basically farmers and predominantly Moslems. The ancient town of Bida is one of the twelve towns founded by the Binis around the fourteenth century. The town is said to have been a base for hunters, therefore, it was safe from marauders. The name Bida was derived from

two attributes of the town. To the Binis Bida means "come let's go for safety and comfort", while to the Gwaris Bida means "beauty of meat is there".

Since the late 1950s Bida town has enjoyed a number of social amenities. There are now in the town several educational and social institutions such as a federal polytechnic, a federal medical centre, the National Cereal Research Institute, Niger State School of Nursing and Midwifery, and numerous Koranic primary and post-primary institutions. The existence of these institutions has led to an influx of diverse ethnic groups from other states of the federation most especially from the western part of the country.

The population of Bida, according to the breakdown of the 1991 census, is 170,725 with a sex ratio of 105 males to 100 females. The 1995 projected population of Bida, based on a 2.8% growth rate, is 190,644. In Bida, as in most urban centres in Nigeria, there is a preponderance of youth in the population. Unemployment is widespread, income per head is low, and among the youths there are high numbers of secondary school dropouts. These socio-economic features may exert some influence on the sexual behaviour of adolescents in the town.

Study Design

The target population was adolescents aged 12–24 years in the study area. The study was carried out using a three-stage random sampling procedure in selecting 400 adolescents that fell within the age group. These were interviewed by the principal investigator and four other trained interviewers. The town was divided into fourteen zones based on the delineation of areas into political wards. We then used simple random sampling procedure (i.e., by writing each ward on a separate piece of paper, folding the papers and randomly selecting from the folded papers) to select four wards from a list of fourteen. Systematic random sampling procedure was then used in selecting houses on each street/unit. The first unit of house was selected by choosing at random any number between one and nine; subsequent houses were then selected systematically. In every selected house an adolescent was

interviewed with the consent of the head of the household.

Data Collection

Information was collected through structured interviews with respondents. Four higher national diploma (HND) statistics students of the Federal Polytechnic, Bida, were recruited and trained (for 3 days) in standard method of probing and investigation before the commencement of the fieldwork. These interviewers are indigenes of the area and understand the culture, language and sensibilities of the people. The research objectives as well as questions on the interview schedule were explained to the interviewers.

Interviewers were assigned by the researcher to cover only one of the four wards selected. Each of them interviewed 90 adolescents from the ward covered, thus totalling 360 respondents while the researcher interviewed the remaining 40 respondents, 10 from each randomly selected ward. Only six respondents were interviewed daily. Editing of the data led to the dropping of ten questions, which contained inconsistent responses.

The structured interview technique adopted in this study enabled us to collect reliable data, it also provided interviewers with the opportunity of ensuring that respondents properly understood the questions. Data were analyzed at three levels: univariate, bivariate and multivariate. The logistic regression model is used for the multi-variate analysis.

Research Findings

Profile of Respondents

About two thirds of the respondents were males while one third were females. The median age for male respondents was 21 years, compared with 20 years for females. The respondents were predominantly Moslems. Only a small proportion of the respondents had no formal education though more males than females were in post-secondary schools. Majority was married as at the time of the survey. The distribution of respondents by occupation shows that about two thirds were students; 25% were apprentices or were in vocational training.

Table 1 Percentage Distribution of Socio-Economic and Demographic Characteristics (Bida, Nigeria, 2001)

Characteristics	Male (n = 264)	Female (n =126)	Total (n = 390)
<i>Age of respondents</i>			
12–14	4.0(11)	6.3(8)	4.9(19)
15–17	10.9(29)	12.7(16)	11.6(45)
18–20	30.3(80)	38.1(48)	32.8(128)
21–23	32.6(86)	34.9(44)	33.3(130)
24+	22.0(58)	8.0(10)	17.4(68)
<i>Median age Education</i>			
None	4.2(11)	4.3(6)	4.1(17)
Primary	3.0(8)	5.5(7)	3.9(15)
Secondary	37.9(100)	38.9(49)	38.2(149)
Post-secondary	53.4(141)	49.2(62)	52.0(203)
Islamic/Arabic	1.5(4)	1.6(2)	1.5(6)
<i>Religious affiliation</i>			
Islam	81.4(215)	52.4(66)	72.0(281)
Christianity	16.7(44)	46.8(59)	26.4(103)
Traditional	0.8(2)	0.8(1)	0.8(3)
None	1.1(3)	–	0.8(3)
<i>Marital status</i>			
Married	97.7(258)	92.9(117)	96.2(96.2)
Single	2.3(6)	7.1(9)	3.8(15)
<i>Occupation</i>			
Farming	4.9(13)	0.8(1)	3.6(14)
Civil service	0.4(1)	0.8(1)	0.5(2)
Apprentice/training	26.5(70)	20.6(26)	24.6(96)
Bar boy/girl	1.5(4)	1.6(2)	1.5(6)
Trading/business	2.7(7)	0.8(1)	2.1(8)
Unemployed	0.4(1)	0.8(1)	0.5(2)
Artisan	1.1(3)	0.8(1)	1.0(4)
Student	62.1(164)	73.0(92)	65.7(256)
No response	0.4(1)	0.8(1)	0.5(2)

Parental Characteristics

From Table 2, about two third of respondents' parents were Moslems, less than one third were Christians while a negligible proportion of the respondents reported their parents as practicing either traditional or other forms of religion. Level of education of mothers was higher than that of fathers. Half of the fathers had no formal education compared with less than one third of mothers with no formal education. More of the respondents' mothers work in the public service, a reflection of their higher level of education. The most popular occupation for fathers was farming, as one

third of them were farmers, while less than one fifth of mothers were farmers. Over two thirds of the parents were living together.

In analysing parental income, responses were categorised into three income groups. This was done using the harmonised tertiary institutions salary structure (HATISS), which is the current salary structure being used in Nigeria. From the structure, salary levels range from level 1 to level 15. Incomes falling between levels 1 and 5 are low-income, levels 6 and 10 are medium-income, and those above HATISS 10 are high-income groups. As shown in the table, more than half of the re-

spondents' parents were within the medium-income group while less than one third was in the high income group. More than two thirds of parents had never discussed family life issues with their adolescent children while less than one fifth of both parents had done so.

Sexual Behaviour

Table 3 presents findings on sexual behaviour among adolescents in Bida. More than two thirds of males and more than half of female adolescents answered questions on age at first intercourse. They confirmed having engaged in sex. The mean age at first intercourse was 17 years for males and 15.3 years for females, an indication that female adolescents in Bida experienced sexual relation early. This is lower than the 18 years for males and 17.4 years for females that was reported by Makinwa-Adebusoye⁵, higher than the 15 years for males and lower than the 15.5 years for females reported by Agyei and Epema. The findings also fault the position of Morris¹³ that in all societies boys begin sexual activity earlier than girls. These differences may be due to sampling variability.

Current sexual activity was investigated by asking respondents if they had had sex in the last one month preceding the interview. It shows that in the last one month before the survey more than one third of males and nearly one third of females have had sex at least once. This is an index of sexual activity by Bida adolescents. More than half of sexually active males and nearly half of sexually active females had their first sexual relations with either a boyfriend or a girlfriend. Only a very small proportion of males and females had their first sexual relations with either a sugar daddy or sugar mummy. Sugar daddy/mummy in Nigeria refers to sexual relations in which an elderly rich man dates a young girl or when an elderly rich woman dates a young man.

Although most of the adolescents were sexually active only one third of males and less than one third of females approved the practice of premarital sex. Examining the reasons why they engage in premarital sex, more than half of males and females believed that adolescents engage in premarital sex in order to express love to their partners. Similarly, less than one third of males and less than one fifth of females engaged in sexual relations to satisfy their sexual urge. This is in tan-

dem with the biological theory, which postulates that increase in sexual activity during adolescence is a consequence of pubertal influence on libido.

As shown in Table 3, knowledge of contraception among adolescents is high. More than two thirds of males and females reported having knowledge of at least one method of contraception, but knowledge was higher among females than males. It also shows that about 14% of the adolescents were using a method of contraception. These results are consistent with previous findings. The experience of Bida adolescents with sexually transmitted infections confirms the conclusion of Makinwa-Adebusoye⁵ that adolescents are engaged in risky sexual practices.

Less than one fifth of males and females reported that they have been infected with an STD. Out of the sixty respondents who have been infected with an STD only six did not report treatment of the disease. However, more than half of those who reported said they were treated by a herbalist/spiritualist; one-fifth received treatment from hospitals (government or private).

Nearly all respondents have heard about AIDS but a lower proportion reported knowing that AIDS is incurable and a much lower proportion (13.8%) believed that AIDS can be cured in hospitals. Such dangerous misconception that AIDS is curable was reported in a few countries even among adult population.¹⁵

Bivariate Analysis

We also examined the relationship between adolescents' sexual and parental characteristics such as education, income, cohabitation, occupation, parent-child communication and age. As a measure of adolescent sexual activity, we asked the respondents whether they had sex in the last month preceding the survey.

Table 4 shows that adolescents, regardless of their parents' religion, were sexually active. Christian males were more sexually active than Moslem males, while Moslem females were more sexually active than Christian females. This shows that adolescents are sexually active regardless of their parents' religion. This is contrary to a finding by Thornton and Camburn that religious affiliation influences premarital sexual attitudes and behaviour of adolescents, although we did not measure religiosity of the respondents.

Table 2 Percentage Distribution of Respondents' Parental Characteristics (Bida, Nigeria, 2001)

Parental characteristics	Male adolescents	Female adolescents	Total
<i>Religious affiliation</i>			
Islam	75.8(200)	52.4(66)	68.2(266)
Christianity	17.4(46)	45.2(57)	26.4(103)
Traditional	1.1(3)	2.4(3)	1.5(6)
(None)	5.7(15)	–	3.9(15)
<i>Mother's education</i>			
None	29.5(78)	19.0(24)	26.2(102)
Primary	10.2(27)	5.6(7)	8.7(34)
Secondary	31.1(82)	38.9(49)	33.6(131)
Post-secondary	28.4(75)	34.9(44)	30.5(119)
Koranic	0.8(2)	1.6(2)	1.0(4)
<i>Father's education</i>			
None	56.1(148)	42.0(53)	51.5(201)
Primary	12.1(32)	15.1(19)	13.1(51)
Secondary	17.1(45)	15.1(19)	16.4(64)
Post-secondary	11.7(3)	26.2(33)	16.4(64)
Koranic	3.0(8)	1.6(20)	2.6(10)
<i>Mother's occupation</i>			
Unpaid family worker	10.6(28)	4.0(5)	8.5(33)
Trading	10.6(28)	7.1(9)	9.5(37)
Civil service	45.8(121)	60.3(76)	50.5(197)
Professional	8.7(23)	11.1(14)	9.5(37)
Farming	24.3(64)	17.5(220)	22.0(86)
<i>Father's occupation</i>			
Unpaid family worker	14.0(37)	8.7(11)	12.3(48)
Trading	23.1(61)	24.6(31)	23.6(92)
Civil service	14.4(38)	27.8(35)	18.7(73)
Professional	13.3(35)	9.5(12)	21.1(47)
Farming	35.2(93)	29.4(37)	33.3(130)
<i>Living arrangement</i>			
Living together	72.7(192)	73.8(93)	73.1(285)
Not living together	27.3(72)	26.2(3)	26.9(105)
<i>Parent's income</i>			
Low-income	28.8(76)	31.0(39)	29.5(115)
Medium income	57.6(152)	46.0(58)	53.8(210)
High income	13.6(36)	23.0(29)	16.7(65)
<i>Parent-child communication</i>			
<i>Family life issues</i>			
Father only	5.3(14)	0.8(1)	3.8(15)
Mother only	4.9(13)	27.0(34)	12.1(47)
Both parents	14.8(39)	7.1(9)	12.3(48)
Parents never did	73.9(195)	60.3(76)	69.5(271)
No response	1.1(3)	4.8(6)	2.3(9)

Table 3 Percentage Distribution of Respondents by Premarital Sexual Activities (Bida, Nigeria, 2001)

Variables	Male adolescents	Females adolescents	Total
% ever had sex	33.0	27.5	31.3
Age at first sex (years)	17.0	15.3	16.2
% approved premarital sex	53.8	58.7	55.4
<i>Reasons why adolescents engage in premarital sex</i>			
For love	27.2	19.8	24.9
Urge satisfaction	6.1	6.4	6.1
Financial gains	10.6	6.4	9.2
For fun	25.6	36.4	31.0
Others	20.5	31.0	25.8
Current sexual activity: had sex the month preceding the survey	43.2	31.8	39.5
<i>Sex partner</i>			
Boy/gidfriend	61.0	46.8	56.4
Fiancé only	5.7	11.1	7.4
Sugar daddy/mummy	3.0	4.8	3.6
Any man/woman	1.1	1.6	1.3
No response	29.2	35.7	31.3
<i>Contraception</i>			
% heard of contraception	72.0	83.3	75.6
% currently using a method	8.9	21.9	13.6
% ever contacted STDS	16.3	13.5	15.4
% treated the STDS	88.4	94.1	90.0
<i>Place of STD treatment</i>			
Chemist shop	21.0	18.7	20.4
Hospitals	18.4	31.3	22.2
Herbalist	55.3	43.8	51.8
% heard of HIV/AIDS	97.3	95.2	96.7

For male adolescents, sexual activity increased with educational attainment of fathers except for those whose fathers had no formal education. Similar findings have been reported among female adolescents. For males and females, a high proportion of those whose fathers had no education were sexually active.

Variations in adolescents' sexual activity with respect to fathers' education differ slightly when compared with mothers' education. For example, the highest level of sexual activity was found among males whose mothers had attained only secondary education while the highest level of sexual activity was found among females whose mothers had attained only primary education.

An examination of variations in adolescents' sexual activity with respect to mothers' occupation

shows that more males than females were sexually active. For instance, 46% of males and 20% of females whose mothers were engaged in unpaid family work or house chores were sexually active. In three of the occupational categories, more males than females reported sexual activity. Unlike in the study by Thornton and Camburn, where no discernable effect of mothers' employment was found on adolescents' sexual attitudes and behaviour, we found that the proportion of males who were sexually active decreased as the occupational categories became more socially prestigious. This is similar to the findings of Robert et al.

The table also shows that more males reported sexual activity than females except for those whose fathers were engaged in farming. For males, the proportion that was sexually active decreased as fa-

thers' occupation became more socially prestigious. This relationship seems difficult to explain.

One of the effects of family instability on the adolescent is unnecessary sexual exposure. Kobiwu¹⁶ observed that the best an unstable family can produce is an incomplete or unsocialised child. Thus, variation in adolescent sexual activity is analysed with respect to parental living arrangement. Our analysis shows that adolescents whose parents were not living together (divorced or separated) were more likely than those whose parents were

cohabiting to be sexually active. This is consistent with the findings of similar studies elsewhere. For example, Mott et al¹⁸ reported that in the United States youth living in single parent households are at increased risk of early initiation of sexual intercourse. Similarly, Twa-Twa found that adolescents whose parents are alive and cohabiting had lower rate of ever having had sexual intercourse than those whose natural parents were separated, or have one or both parents dead.

Table 4 Percentage Distribution of Respondents' Current Sexual Activity by Parental Characteristics (Bida, Nigeria, 2001)

Parental characteristics	Sexual behaviour of the sampled adolescents	
	% Male who had sex in the month preceding the survey	% Female who had sex in the month preceding the survey
<i>Religion of parents</i>		
Islam	39.5	45.5
Christianity	47.8	14.0
Unspecific	3.3	–
<i>Father's education</i>		
None	44.6	35.8
Primary	34.4	31.6
Secondary	35.6	21.1
Post-secondary	48.4	33.3
<i>Mother's education</i>		
None	42.3	20.8
Primary	51.9	42.9
Secondary	52.4	32.7
Post-secondary	30.7	31.8
<i>Mother's occupation</i>		
Unpaid family worker	46.4	20.0
Trading	42.6	38.7
Civil servant	39.5	28.6
Professional	37.1	16.7
Farming	41.9	45.4
<i>Living arrangement</i>		
Living together	27.1	20.4
Not living together	50.4	63.6
<i>Parent-child communication</i>		
Father only	42.9	–
Mother only	38.5	5.9
Both parent	28.2	22.2
Parents never did	46.7	44.7
<i>Income of parents</i>		
Low income	82.9	48.7
Medium income	30.3	22.4
High Income	28.0	27.6

Reported adolescents' sexual activity varied with respect to whether a parent-child communication on family life issues took place. It is shown above that adolescents with whom parents had discussed family

life issues were less likely to be sexually active. This is inconsistent with previous research findings that most parents do not talk with their teenage children about sex or birth control.^{9,17}

Multivariate Analysis

Table 5 Log Odds of the Effect of Parental Characteristics on Adolescent Current Sexual Activity (Bida, Nigeria, 2001)

Parental attributes	Coefficient		Odds ratio	
	Male	Female	Male	Female
<i>Religion</i>				
Islam	-0.0913	-1925	0.9128	10212
Christianity	RC	RC	RC	RC
<i>Mother's education</i>				
None	-3.1000	-4.0368	0.4510	06450
Primary	-2.0539	4.5007	0.9282	1.0773
Secondary	RC	RC	RC	RC
Post-secondary	-3.9898	-1.8915	0.1850	0.9293
Others	_*	_*	_*	_*
<i>Mother's occupation</i>				
Unpaid family worker	RC	RC	RC	RC
Self-employed/Trading	-0.3780	1.3534	0.6880	3.8706
Civil service	-0.6690	0.1688	0.51222	1.1839
Professional	-0.8750	1.0417	0.4169	2.8341
Farming	-0.9011	0.0300	0.9127	1.0305
<i>Father's occupation</i>				
Unpaid family worker	0.1682	-2.3181	1.1832	0.0985
Self-employed/Trading	0.07780	-1.6168	1.0809	0.1985
Civil service	-0.2220	-1.7369	0.9781	0.1761
Professional	-0.0913	-2.5253	0.9128	0.8000
Farming	RC	RC	RC	RC
<i>Marital status</i>				
Living together	RC	RC	RC	RC
Not living together	0.9653	0.8740	2.6255	2.3964
<i>Income</i>				
Low income	1.0378	0.8562	2.817	2.3297
Medium income	0.1947	-0.1049	1.219	0.9008
High income	RC	RC	RC	RC
<i>Parent-adolescent communication</i>				
Father only	-0.4209	_*	0.6735	_*
Mother only	-0.4351	-1.6001	0.6211	0.2019
Both parents never did	RC	RC	RC	RC
<i>Fathers education</i>				
None	-0.1415	0.9520	0.9520	1.1419
Primary	-0.8701	-1.8296	0.4189	0.1605
Secondary	-0.4203	-2.5244	0.6568	0.0808
Post-secondary	RC	RC	RC	RC

However, earlier findings that a young woman is more likely than a young man to learn about reproductive health issues from her mother or an older family member as reported in Newcomer and Udry¹⁹ and Andre et al²⁰ is not confirmed, as our results indicate more males than females have discussed family life issues with their mother, father or both.

Table 4 further shows that adolescents who reported low parental income were more sexually active than those who reported high or medium parental income. Zelnick and Kantner¹¹ reported that black teens younger than age 18 and in families of low socioeconomic status are more likely to have sexual experience than higher socioeconomic status blacks. This is true because parents who are low income earners may not have the ability to provide their young adolescents with all the basic needs of life, thus exposing such children to sexual exploitation by older members of the society most especially when the young children seeks financial or other assistance from them.

Table 5 shows that male respondents, adolescents whose parents attained secondary education, had more likelihood of engaging in sexual activity in the last one month before the survey than those whose mothers attained other levels of education ($p = 0.03$). For females, those whose fathers had no education had more likelihood of sexual relations than those whose fathers had education. However, this was not true for males, hence, our hypothesis that the higher the parental level of education the less likely adolescents are to be sexually active is not confirmed by the result. Adolescents whose parents were Moslems or Christians, irrespective of sex, had less likelihood of sexual relations than adolescents whose parents were adherents of other religion ($p = 0.02$). A consideration of parents' occupation showed that for male adolescents those whose mothers were engaged as unpaid family workers had more likelihood to engage in sexual relations ($p = 0.02$). This pattern was not consistent with respect to occupation of fathers, because the results reveal that males whose fathers were engaged either as unpaid family workers or were self-employed had higher likelihood of sexual relations than other adolescents whose fathers were in other occupational categories.

Analysis of parental living arrangement confirmed that adolescents from parents who were not living together were more likely to be sexually ac-

tive. As shown in Table 5, adolescents whose parents were not living together had greater likelihood of engaging in sexual relations than adolescents whose parents were living together ($p = 0.00$). Examination of parental communication variable showed that discussion of family life issues with adolescents by parents could make adolescents less likely to be sexually active ($p = 0.00$). Income analysis showed that differentiation in adolescent sexual activity can be explained by differences in parental income. Adolescents whose parents were in the high-income group had less likelihood of engaging in sexual activity, while for female adolescents those whose parents were in the medium income group had less likelihood of engaging in sexual activity ($p = 0.02$).

Discussion and Implications of the Study

Survey data have consistently shown that current sexual behaviour of adolescents places them at the great risk of early pregnancy and sexually transmitted infections including HIV/AIDS. It is therefore necessary that factors associated with adolescent sexuality are identified and examined to aid in the design of effective programmes for adolescent reproductive health needs. This study was conceived as one of such studies. It examined how parental factors influence adolescent sexuality in Bida in northern Nigeria.

The study shows that adolescents in Bida belong to the group of sexually mobile segments of the society, thus confirming earlier studies. The current levels of adolescent sexuality may not be unconnected with the fast erosion of traditional, religious and cultural norms that frown at premarital sex. Rene had earlier observed that virginity at marriage is no longer socially desirable in southwestern Nigeria. One of the major concerns about adolescent sexual activities is the inconsistent use of modern contraceptives among those who are sexually active. The most common reason that both men and women give for not using contraceptives is that they do not expect to have intercourse. The second most important reason is that they do not know about contraceptives, as reported by Kiragu and Morris.¹⁴ Other reasons for inconsistent use of contraceptives among adolescents include lack of power to negotiate use with the sexual partner.

In this study, it was found that knowledge of contraceptive is higher than its use. For example, while 76% knew about it only 14% were currently using it. It was found that almost half of the respondents reported friends as a major source of information on family life issues. This is an indication that most adolescents rely on inaccurate information on reproductive health issues, which continue to expose them to consequences of unprotected sex as enumerated in Leshabari and Kaaya. This is because the friends being relied upon may have incomplete knowledge of contraceptives. There is no doubt that parents have an important role to play in the upbringing of their children, the effectiveness of parents in discharging this onerous duty could to a greater extent help adolescents delay first intercourse and protect themselves if sexually active. However, if the parents are hindered by factors such as education, income and marital instability, the young child might become a victim of neglect and abuse. For instance, it was found in this study that adolescents whose parents are not living together have more likelihood of engaging in sexual activity. This may be attributed to the abuse of one of the parents, because the absence of either parent led to a lack of proper monitoring and education of the child. Older members of the community might exploit such situations or persuade and coerce needy adolescents, most especially the females, into having unprotected sexual contact. Similar conclusions have been reached by Oppong in Ghana that adolescent girls are especially at risk of sexual coercion as well as economic pressures and seduction by males old enough to be their fathers.

It was found also that many parents do not discuss family life and sexual issues with their adolescent children. Results show that 69.5% of parents have never discussed sex and contraception with their children. This is inimical to current global effort at promoting reproductive health information to adolescents. The need, therefore, to design programmes that will empower parents with the skills to teach their children reproductive health matters should be promoted in Nigeria.

REFERENCES

1. Kau M. Sexual behaviour and knowledge of adolescent males in the Molopo Region of Botswana. *Curations* 1991; 14(1): 37-40.
2. Buga GA, DH Amoko and DJ Ncayiyen. Sexual behaviour, contraceptive practice and reproductive health among school adolescents in rural Transkei. *East Afr Med J* 1996; 73(2): 95-100.
3. Jaccard J and P Dittus. Parent-adolescents communication about premarital sex and pregnancy. *Families in Society* 1993; 74(6): 329-343.
4. Nguyen MN, JF Saucier and LA Pica. Influence of attitude on the intention to use condoms in Quebec sexually active male adolescents. *J Adolesc Health* 1994; 15(3): 269-274.
5. Makinwa-Adebusoye PK. Adolescent reproductive behaviour in Nigeria: a study of five cities. *NISER Monograph Series* No. 3, 1991.
6. Chhabras S. A step towards helping mothers with unwanted pregnancies. *Indian J Maternal and Child Health* 1992; 3(2): 41-42.
7. Anarfi JK: Vulnerability to sexually transmitted diseases: street children in Accra. *Health Transition Review* 1987; 7(Suppl.): 281-306.
8. Desantis L and JT Thomas. Parental attitude towards adolescents sexuality - transcultural perspectives. *Nurse Practitioner* 1987; 12(8): 43-48.
9. Adeyemo MO and WR Brieger. Dissemination of family life education to adolescents by their parents in sub-urban Ibadan, Nigeria. *Intl Quart Comm Health Edu* 1995; 15(3): 241-252.
10. Moore KA, JL Peterson and FF Furstenberg. Parental attitudes and the occurrence of early sexual activity. *J Marriage and the Family* 1996; 48(14): 777-782.
11. Zelnik M and J Kantner. Sexuality, contraception and pregnancy among young unwed females in the United States of America. In: F Westoff and Parker JR (Eds.). *Commission Researches Volume 1, US Commission on Population Growth and the American Future Demographic and Social Aspects of Population Growth*, Washington DC, 1972.
12. Oloko BA and AO Omoboye. Sexual networking among some Lagos State adolescent Yoruba students. *Health Transition Review* 1993; 3(Suppl.).
13. Araoye MO and OO Fakeye. Sexuality and contraception among Nigerian adolescents and youth. *Afr J Reprod Health* 1998; 2(2): 142-150.
14. Morris L. Young adults in Latin America and the Caribbean: their sexual experiences and contraceptive use. *Intl Fam Plann Persp* 1988; 14(4): 153-158.
15. Konde-lule JK and Rwakaikara E. Knowledge about AIDS in Rural Uganda. Abstract presented at the Montreal conference, 1998, 51.
16. Kobiowu SV. *Fundamental Issues in Social Foundations and Sociology of Education*. Ibadan: Cardinal Crest Limited, 1998.

17. Basset M and J Sherman. Female sexual behaviour and the risk of HIV infection: an ethnographic study in Harare, Zimbabwe. Women and AIDS program research report series. International Centre for Research on Women, Washington DC, 1994.
18. Mott FL, et al. The detriment of first sex by age 14 in a high-risk adolescent population. *Fam Plann Persp* 1996; 28(1):13–18.
19. Newcomer SF and JR Udry. Parent-child communication and adolescents' sexual behaviour. *Fam Plann Persp* 1985; 17(4): 169–74.
20. Andre TDC and Cheng Y. Sources of sexual education as a function of sex/coital activity and type of information. *Contemp Edu Psy* 1991; 16(3): 215–240.
21. Schofield M. The role of environment in the sexual activity of school students in Tororo and Palisa District of Uganda. *Health Transition Review* 1996; 7(Suppl.): 67–81.