

## **Demographic Determinants of Risky Sexual Behaviours Among In-School Adolescents in Wukari Local Government Area, Taraba State Nigeria**

**Blessing Edward Sa'aku<sup>1\*</sup> & E.S. Samuel<sup>2</sup>**

<sup>1,2</sup>Department of Human Kinetics and Health Education, University of Nigeria, Nsukka

\* Corresponding Author:

### ***Abstract***

*The purpose of the study was to investigate the demographic determinants of risky sexual behaviour among in-school adolescents in Wukari LGA, Taraba State, Nigeria. Three research questions were formulated. Cross sectional design was adopted. 345 subjects were randomly sampled using Taro Yamane formula with multi-stage sampling procedure from 3044 population of in-school adolescents in government owned Secondary Schools in Wukari LGA. The reliability coefficient of the questionnaire (DDRSBISAQ) was 0.73, determined through Cronbach Alpha statistic. Quantitative data from 345 copies of completed DDRSBISAQ were collected and analysed. The completed data were analyzed using Statistical Package for Social Sciences (SPSS) batch system version 21. Socio-demographic characteristics were analysed using Frequency and percentage, while research questions 1-3 were answered using Chi-square. Findings of the study indicated that the proportion of in-school adolescents who engaged in risky sexual behaviour such as early sexual initiation, possession of multiple sexual partners and having sex under intoxication is 2.78%. The findings further revealed that majority (84.48%) of in-school adolescents claimed they had never engaged in risky sexual behaviours. There was significant relationship between age (p-value 0.050) and in-school adolescents' sexual behaviours, while there was no significant relationship between gender (p-value 0.402) and sexual behaviours of the respondents. The study recommended among others that curriculum planners and developers should consider the findings of this study when planning curriculum for both JSS and SS students putting into consideration the variation in age and gender.*

**Keywords:** *Risky sexual behaviour, components of RSB, demographic determinants of RSB, in-school adolescents*

### ***Introduction***

Risky sexual behaviour among in-school adolescents is a major public health problem worldwide. United Nations Population Fund (UNFPA, 2004) pointed that sexual activity among young unmarried people worldwide is on the increase. The consequence of risky sexual behaviour is that it increases the likelihood of contracting sexually transmitted infections (STIs), precipitates teen unwanted pregnancy and low self-esteem. In addition, adolescents' brain structures are less developed and less well equipped to make rational judgments on complex sexual relationships, thereby predisposing them to heightened risk (Gardener, Steinberg & Peer, 2005). For these reasons, the United Nations Children Emergency Fund (UNICEF, 2011) highlighted youth's vulnerability to unplanned pregnancy, STIs, unsafe abortions and called for a better understanding of the factors that increase the risky sexual behaviour with the intention to come up with better interventions to mitigate these behaviours.

Literature revealed that young people are sexually active and are at high risk of contracting HIV/AIDS. Manju and Lule (2004) observed that involvement in risky sexual behaviours including the early transition to sexual activity and unprotected sex makes adolescents to be particularly vulnerable to STIs including HIV/AIDS, as well as unplanned and unwanted pregnancies, abortions, and the complications of early childbearing.

Sexual behaviours are things we do with others like kissing, erotic touch, intercourse, oral sex, anal sex and manual sexual stimulation (Robinson, 1999). Sexual behaviour is an individual's ability to experience or express sexual feeling, (Abah & Echodu, 2004). Sexual behaviour in this study refers to demonstration of sexual urge, seeking pleasure, sexual actions and reactions related to pleasure seeking. Sexual behaviour could be healthy or risky. Any romantic and pleasurable act or

coitus that increases the risk of contracting sexually transmitted infections or becoming pregnant is a risky sexual behaviour.

Risky sexual behaviour refers to any pleasurable coital activity that increases the risk of contracting STIs or becoming pregnant. Risky sexual behaviours are activities that involve sex which end with consequences that negatively affects in-school adolescents' health. Example of risky sexual behaviour includes having first sex before 16 years, inconsistent condom use and having multiple sexual partners. Many in-school adolescents indulge in risky sexual behaviours especially unprotected sex and having multiple sexual partners among others.

Forms or components of risky sexual behaviours are oral sex, anal sex, sex under intoxication, transactional or survival sex, unprotected sex, and multiple sexual partners. These behaviours are associated with serious and detrimental outcomes such as unwanted and unplanned pregnancy, STIs, including HIV/AIDS and sometimes infertility for life. In the context of this study, risky sexual behaviour refers to sexual actions which may involve coitus or intercourse that may result to adverse health outcomes among in-school adolescents.

Many adolescents, in-school adolescents inclusive engage in some forms of sexual behaviours other than vaginal intercourse. For example, between 2007 and 2010, 11 per cent of male adolescents and 13 per-cent of female adolescents reported that they had engaged in anal sex with someone of the opposite sex, (Copen, Chandra & Martinez, 2012).

Unprotected vaginal-penile intercourse has been known to be the predominant route for HIV and STIs transmission. However, it is becoming evident that youth are involved in oral and anal intercourse (Markham, Peskin, Addy, Baumer & Tortolero, 2009). Lindberg, Jones and Santelli (2008) opined that although the oral and anal sex behaviours of adolescents have been researched in the United States (US) for more than two decades, Kazaura and Masatu (2009) submitted that it was only recently that research evidence in some parts of Africa revealed the practice of oral and anal sex. Following from the above, a study to determine the proportion of in-school adolescents engaged in risky sexual behaviours (RSBs) was carried out in Wukari LGA of Taraba State.

Demographic determinants or variables are characteristics in a population distribution which are capable of changing or causing changes in a study. They could be gender, location, educational level, age and religion. Demography in this study refers to characteristics of in-school adolescents which can determine risky sexual behaviours of in-school adolescents.

National Adolescent Health Policy (2008) in Nigeria defines adolescents as individuals between the ages of 11 and 24 years. Okoro (2002) posited that adolescent is a person who is in the transition to acquire biological features peculiar to the adult group. Adolescent is a person who is within the period of transition from childhood to adulthood and the adolescent age range fall between the ages of 10 and 19 years (Nwoarali, 2004). In this study, adolescent refers to a person who is within the period of transition from childhood to adulthood with age range between 10 and 19 years. Adolescents' characteristics are capable of determining or influencing their risky sexual behaviours.

Determinants refer to factors that influence an adolescent into activities that have adverse consequences that are detrimental to health. In this work, determinants and factors will be used interchangeably. Determinants are considered as factors that can affect the behaviour and development of an individual. It is the forces and conditions that surround and influence living and non-living things (Sills, 2009). Determinants of risky sexual behaviour are influences, factors or indices that influence an adolescent into sexual activities that can have resultant harmful effect on health. These variables can influence risky sexual behaviour among in-school adolescents. They are gender, location, educational level, age and religious affiliations.

Age, gender and location are also strong demographic determining factors in risky sexual behaviour among in-school adolescents. For instance, Doyle, Mavedzenge, Plummer and Ross (2012) submitted that high proportions of adolescents between the ages of 15–19 years in Sub-Saharan Africa are increasingly sexually active and at higher risk of contracting STIs. They further pointed out that this is because risky sexual behaviour, including sexual intercourse before the age of 15 years, multiple sexual partners and sex without condoms, are now rife among adolescents and disproportionately higher in rural areas. Overall, these risky sexual behaviours are predominantly higher in boys compared to girls of the same age, partly because of the high level of testosterone in boys, which increases early disposition to sexual activities. For example, a Behavioural Health Survey Study (BHSS) among the in-school-going adolescents in eight selected African countries, it was

found that 38.1 per cent of boys, compared to 15.8 per cent of girls, reported sexual activities before the age of 15 years (Peltzer, 2010). This shows that boys are more involved in early sexual debut than girls.

It is expected that in-school adolescents are adequately trained, not supposed to indulge in premarital and early sexual debut. Regrettably, it has been observed that in-school adolescents in Wukari LGA indulge in risky sexual behaviour such as early sexual initiation, unprotected vaginal sex, possession of multiple sexual partners, among others which the resultant consequences are detrimental to their health. This risky sexual behaviour evident among in-school adolescents has far reaching implications for individual adolescent's health, families, communities and government. Therefore, the researcher sought to find out the demographic factors (age, gender, location, and level of education) that are associated with risky sexual behaviours among in-school adolescents in Wukari LGA.

The purpose of this study was to find out the demographic determinants of risky sexual behaviour among in-school adolescents in Wukari LGA of Taraba State. Specifically, the study sought to answer the following research questions

1. What is the proportion of in-school adolescents who practise risky sexual behaviour in Wukari LGA?
2. What is the relationship of age of in-school adolescents and their risky sexual behaviour in Wukari LGA?
3. What is the relationship between gender of in-school adolescents and their risky sexual behaviour among in Wukari LGA?

### ***Method***

The study employed cross-sectional research design. The population for the study consisted of all in-school adolescents in government owned secondary schools in Wukari LGA totalling 3044. The sample for the study was 345 students derived using Taro Yamane formula. The multi-stage sampling procedure was employed to draw the sample for the study. In the first stage, simple random sampling technique of balloting without replacement was used to select 5 secondary schools that were used for the study. In the second stage, stratified random sampling technique was used to select classes, three senior secondary classes (SSS 2) and two junior secondary classes (JSS 2). The students are in mixed/co-education schools. The fourth stage involves use of systematic random sampling technique to draw the required numbers of boys and girls that were representative from the selected classes using class register which produced a total of 162 females and 183 males, totalling 345 numbers of the sample size. For the adolescent males from each of the 10 randomly selected classes, seven classes contain 18 numbers of adolescent males each, while three classes have 19 numbers of males, giving a total of 183 in-school adolescents' males drawn from urban and rural secondary (senior and junior) schools as a representative sample. Adding 162 females to 183 males totalling 345 sample sizes, drawn for the study.

The instrument for data collection was the researcher-constructed questionnaire called Demographic Determinants of Risky Sexual Behaviour among In-School Adolescents Questionnaire referred to as DDRSBISAQ. The questionnaire contained fifteen items grouped in sections A and B covering socio-demographic characteristics and components of risky sexual behaviours, structured questions of polychotomous that were interpreted as follows: 4 as always, 3 as sometimes, 2 as rarely and 1 as never. Face validity of the instrument was established by five experts, all from Department of Human Kinetics, Health and Education, in University of Nigeria, Nsukka. Reliability of the instrument was also determined using Cronbach Alpha statistic which gave a value of 0.73. The instrument which was administered by the researcher and some assistants were collected on the spot and examined for completeness of responses and analyzed using Statistical Package for Social Sciences (SPSS) batch system version 21. Frequency and percentages were used to answer the research question one while research questions 2-4 were answered using chi-square.

**Results**

Table 1

**Percentage of the Respondents by their Socio-Demographic Characteristics**

S/N	Characteristics	f	%
1	<b>Gender</b>		
	Male	183	53.0
	Female	162	47.0
	Total	345	100.0
2	<b>Age</b>		
	11-13	64	18.6
	14-16	72	20.9
	17-19	209	60.0
	Total	345	100.0

Table 1 shows that out of 345 respondents, 183 (53.0%) were males, while 162 (47.0%) were females. On age, 64 (18.6%) aged between 11 - 13 years, 72 (20.9%) aged between 14 - 16 years while 209 (60.67%) aged between 17- 19 years.

Table 2

**Proportion of In-school Adolescents who engaged in Risky Sexual Behaviour (345)**

S/N	Items	Always		Sometimes		Rarely		Never	
		f	%	f	%	f	%	f	%
	<b>Risky Sexual Behaviour</b>								
	Early sexual initiation/ activity	9	2.6	25	7.2	18	5.2	293	84.9
	Oral sex	5	1.4	19	5.5	11	3.2	310	89.9
	Anal Sex	5	1.4	14	4.1	13	3.8	313	90.7
	<b>Cluster Percentage</b>		<b>1.8</b>		<b>5.6</b>		<b>4.0</b>		<b>88.5</b>
	<b>Possession of multiple sexual partners</b>								
	Having sex with more than two people at a time or separately	5	1.4	17	4.9	9	2.6	314	91.0
	Sex with a person who have other sexual partners	9	2.6	20	5.8	20	5.8	296	85.8
	<b>Cluster percentage</b>		<b>2</b>		<b>5.4</b>		<b>4.2</b>		<b>88.4</b>
	<b>Sex under intoxication</b>								
	Drink alcohol to stimulate Libido	7	2.0	14	4.1	14	4.1	310	89.9
	Having sex when drink	2	.6	2.5	7.2	7	2.0	311	90.1
	Sex under the influence of other drugs	2	.6	20	5.8	8	2.3	315	91.3
	<b>Cluster percentage</b>		<b>1.2</b>		<b>5.7</b>		<b>2.8</b>		<b>90.4</b>
	<b>Unprotected sex</b>								
	Use of condom during sex	34	9.9	24	7.0	11	3.2	276	80.0
	Consistent use of condom	29	8.4	27	7.8	17	4.9	272	78.8
	Use of preventive like oral pills, injectable or LUCD	11	3.2	20	5.8	12	3.5	302	87.5
	Unsafe sex without condom if partner insist	11	3.2	28	8.1	15	4.3	291	84.3
	Resist sex despite the urge	10	2.9	29	8.4	13	3.8	203	58.8
	Engage in selling sex	12	3.5	13	3.8	2	.6	318	92.2
	Casual sex with regular partner	12	3.5	21	6.1	11	3.2	301	87.2
	Engage in homosexuality	6	1.7	16	4.6	12	3.5	311	90.1
	<b>Cluster percentage</b>		<b>7.8</b>		<b>6.4</b>		<b>3.3</b>		<b>51.5</b>
	<b>Transactional or survival sex</b>								
	Having sex in exchange of gift/favour like,								
	Money	8	2.3	23	6.7	10	2.9	304	88.1
	Clothes	8	2.3	15	4.3	10	2.9	312	90.4

Accommodation	5	1.4	10	2.9	8	2.3	322	93.3
Food	5	1.4	12	3.5	11	3.2	317	91.9
Admission	7	2.0	6	1.7	8	2.3	324	93.9
Marks	8	2.3	11	3.2	9	2.6	317	91.9
<b>Cluster percentage</b>		<b>1.9</b>		<b>3.7</b>		<b>2.7</b>		<b>91.5</b>
<b>Oral sex</b>								
Romance or suck the penis or vagina	10	2.9	25	7.2	6	1.7	304	88.1
<b>Cluster percentage</b>		<b>2.9</b>		<b>7.2</b>		<b>1.7</b>		<b>88.1</b>
<b>Anal sex</b>								
Romance or putting the penis into the anus	7	2.0	12	3.5	5	1.4	321	93.0
<b>Cluster percentage</b>		<b>2.0</b>		<b>3.5</b>		<b>1.4</b>		<b>93.0</b>
<b>Overall Cluster % Total</b>		<b>2.78</b>		<b>5.35</b>		<b>2.87</b>		<b>84.48</b>

Data in Table 2 shows the proportion of in-school adolescents who engaged in risky sexual behaviour was 2.78%.

Table 3  
**Relationship between Age and Risky Sexual Behaviour (n = 345)**

S/N	Sexual Behaviour	Always		Sometimes		Rarely		Never	
		f	%	f	%	f	%	f	%
	Risky Sexual Behaviour	-	-	0	0.0	11	17.2	53	82.8
	11 – 13	-	-	0	0.0	2	2.8	70	97.2
	14 – 16	-	-	1	0.5	14	6.7	194	92.8
	17 – 19	-	-		<b>0.1</b>		<b>68.9</b>		<b>89.2</b>
	<b>Cluster percentage</b>								
		$\chi^2$ value = 11.318, d.f = 4, p – value = .023 (Relationship)							
	Possession of Multiple Sexual Partners								
	11 – 13	3	4.7	7	10.9	1	17.2	43	67.2
	14 – 16	1	1.4	1	1.4	8	11.1	62	86.1
	17 – 9	4	1.9	4	7.9	19	9.1	182	87.1
	<b>Cluster percentage</b>		<b>2.66</b>		<b>6.7</b>		<b>12.46</b>		<b>80.1</b>
		$\chi^2$ value = 19.918, d.f = 6, p – value = .003 (Relationship)							
	Having Sex Under Intoxication								
	11 – 13	0	0.0	7	10.9	11	17.2	46	71.9
	14 – 16	0	0.0	2	2.8	3	4.2	67	93.1
	17 – 19	1	0.5	5	2.4	13	6.2	190	90.9
	<b>Cluster percentage</b>		<b>0.16</b>		<b>5.3</b>		<b>9.2</b>		<b>85.3</b>
		$\chi^2$ value = 21.227, d.f = 6, p- value = .002 (Relationship)							
	Unprotected Sex								
	11 – 13	2	3.1	3	4.7	23	35.9	36	56.3
	14 – 16	0	0.0	4	5.6	15	20.8	53	73.6
	17 – 19	1	0.5	12	5.7	25	12.0	171	81.8
	<b>Cluster percentage</b>		<b>3.6</b>		<b>5.3</b>		<b>22.9</b>		<b>70.56</b>
		$\chi^2$ value = 24.878, d. f = 6, p – value = .000 (Relationship)							
	Transactional/Survival Sex								
	11 – 12	0	0.0	3	4.7	8	12.5	53	82.8
	14 – 16	0	0.0	1	1.4	2	2.8	69	95.8
	17 – 19	3	1.4	6	2.9	18	8.6	182	87.1
	<b>Cluster percentage</b>		<b>0.46</b>		<b>3.0</b>		<b>7.96</b>		<b>88.56</b>
		$\chi^2$ value = 8.049, d.f = 6, p- value = .235 (Relationship)							
	Oral Sex								
	11 – 13	4	6.3	8	12.5	2	3.1	50	78.1
	14 – 16	4	5.6	4	5.6	0	0.0	64	88.9
	17 – 19	2	1.0	13	6.2	4	1.9	190	90.9
	<b>Cluster percentage</b>		<b>4.3</b>				<b>8.1</b>		<b>1.66 85.96</b>
		$\chi^2$ value = 12.888, d.f = 6, p- value = .045 ( Relationship)							

Anal Sex									
11 – 13	4	6.3	4	6.3	1	1.6	55	85.9	
14 – 16	1	1.4	1	1.4	2	2.8	68	94.4	
17 – 19	2	1.0	7	3.3	2	1.0	198	94.7	
<b>Cluster percentage</b>		<b>2.9</b>		<b>3.66</b>		<b>1.8</b>		<b>91.66</b>	
<b>Overall Cluster % Total</b>									<b>(P- value 0.050)</b>

$$\chi^2 \text{value} = 10.935, \text{d. f} = 6, \text{p-value} = .044 \text{ (significant)}$$

Table 3 shows that there is relationship between age and risky sexual behaviour: sexual behaviour ( $\chi^2 = 11.318$ , p- value = .023), possession of multiple sexual partners ( $\chi^2 = 19.918$ , p – value = .003), having sex under intoxication ( $\chi^2 = 21.227$ , p – value = .002), unprotected sex ( $\chi^2 = 24.878$ , p – value = .000), oral sex ( $\chi^2 = 12.888$ , p – value = .045), and anal sex ( $\chi^2 = 10.935$ , p – value = .090), since the p – values are less than .05 level of significance at six degrees of freedom. The Table also reveals no relationship between age and transactional/survival sex ( $\chi^2 = 8.049$ , p – value = .235), since the p – value is greater than .05 level of significance at six degrees of freedom.

Table 4  
**Relationship between Gender and Risky Sexual Behaviour (N = 345)**

S/N	Gender and Sexual Behaviour	Always		Sometimes		Rarely		Never	
		f	%	f	%	f	%	f	%
	Risky Sexual Behaviour	-	-	0	0.0	20	10.9	163	89.1
	Male	-	-	1	0.6	7	4.3	154	95.1
	Female	-	-		<b>0.3</b>		<b>7.6</b>		<b>92.1</b>
	<b>Cluster percentage</b>								
		$\chi^2 \text{value} = 6.260, \text{d.f} = 2, \text{p- value} = .044 \text{ (Relationship)}$							
	Possession of Multiple Sexual Partners								
	Male	6	3.3	7	3.8	24	13.1	146	79.8
	Female	2	1.2	5	3.1	14	8.6	141	87.0
	<b>Cluster percentage</b>		<b>2.25</b>		<b>3.45</b>		<b>10.85</b>		<b>83.4</b>
		$\chi^2 \text{value} = 3.788, \text{d. f} = 3, \text{p – value} = .285 \text{ (No relationship)}$							
	Having Sex Under Intoxication								
	Male	0	0.0	11	6.0	15	8.2	157	85.8
	Female	1	0.6	3	1.9	12	7.4	146	90.1
	<b>Cluster percentage</b>		<b>0.3</b>		<b>3.95</b>		<b>7.8</b>		<b>87.95</b>
		$\chi^2 \text{value} = 5.045, \text{d. f} = 3, \text{p – value} = .169 \text{ (No relationship)}$							
	Unprotected Sex								
	Male	2	1.1	12	6.6	32	17.5	137	74.9
	Female	1	0.6	7	4.3	31	19.1	123	75.9
	<b>Cluster percentage</b>		<b>0.85</b>		<b>5.45</b>		<b>18.3</b>		<b>75.4</b>
		$\chi^2 \text{value} = 1.145, \text{d. f} = 3, \text{p – value} = .766 \text{ (No relationship)}$							
	Transactional/Survival Sex								
	Male	3	1.6	5	2.7	19	10.4	156	85.2
	Female	0	0.0	5	3.1	9	5.6	148	91.4
	<b>Cluster percentage</b>		<b>0.8</b>		<b>2.9</b>		<b>8.0</b>		<b>88.3</b>
		$\chi^2 \text{value} = 5.524, \text{d. f} = 3, \text{p – value} = .137 \text{ (No relationship)}$							
	Oral Sex								
	Male	5	2.7	11	6.0	4	2.2	163	89.1
	Female	5	3.1	14	8.6	2	1.2	141	87.0
	<b>Cluster percentage</b>		<b>2.9</b>		<b>7.3</b>		<b>1.7</b>		<b>88.05</b>
		$\chi^2 \text{value} = 1.345, \text{d. f} = 3, \text{p – value} = .718 \text{ (Not significant)}$							

Anal Sex								
Male	5	2.7	7	3.8	2	1.1	169	92.3
Female	2	1.2	5	3.1	3	1.9	152	93.8
<b>Cluster percentage</b>		<b>1.95</b>		<b>3.45</b>		<b>1.5</b>		<b>93.05</b>
<b>Overall Cluster % Total</b>		<b>(P-value 0.402)</b>						

$\chi^2$  value = 1.446, d. f = 3, p – value = .695 (No relationship)

Table 4 shows no relationship between gender and risky sexual behaviours as follows: possession of multiple sex partner ( $\chi^2$  3.788, p – value = .285), having sex under intoxication ( $\chi^2$  = 5.045, p – value = .169), unprotected sex ( $\chi^2$  = 1.145, p – value = .766), transactional/survival sex ( $\chi^2$  = 5.524, p – value = .137), oral sex ( $\chi^2$  = 1.345, p – value = .718), and anal sex ( $\chi^2$  = 1.446, p – value = .695), since the p – values are greater than .05 level of significance at three degrees of freedom. The Table, however, shows that there is relationship between gender and risky sexual behaviour ( $\chi^2$  = 6.260, p – value = .044), since the p – value is less than .05 level of significance at three degrees of freedom.

### Discussion

Table 1 shows that out of 345 respondents, 183 (53.0%) were males, while 162 (47.0%) were females. On age, 64 (18.6%) were aged between 11 - 13 years, 72 (20.9%) were aged between 14 - 16 years while 209 (60.67%) were aged between 17- 19 years.

The findings in Table 2 indicated that proportion of in-school adolescents who always engaged in risky sexual behaviours was low (2.78%). This is in agreement with the findings of Garofalo, Wolf kessel, Balfrey and DuRant (2010) which revealed that adolescents engaged in a variety of health compromising behaviours including early initiation of sexual intercourse before age 13 among 12<sup>th</sup> grade students in public high schools in Massachusetts. This is lower than those of Fatusi, and Blum (2008) finding which disclosed that at 15 years a fifth of adolescents (18% males; 22% females) were sexually experienced. The finding of never had sex is in consonance with the findings of Chinsembu, Kasanda and Shaimemanya (2011) which disclosed that 50.2 per cent of the adolescents never had sexual intercourse before.

The finding that in-school adolescents engaged in possession of multiple sexual partners agrees with the finding of Marston, Beguy, Kabiru and Cleland (2011) which disclosed that multiple sexual partners were common among the respondents, and (CDC 2012) through YRBSS stated that 15.3 per cent of the adolescents had sexual intercourse with four or more people during their life.

In agreement with the finding that in-school adolescents engaged in having sex under intoxication, Fatusi and Blum (2008) and Omeje, Ekwueme and Petronilla Omeje (2013) in their study, revealed that in-school adolescents engaged in having sex under intoxication through alcohol use (HR = 1.90, 95% CI = 1.38 2.62 to burst their sexual behaviours and excessive intake of alcohol constitutes sexual behaviours in the society.

The finding that in-school adolescents never engaged in transactional/survival sex contradicts that of Zhou and Diana (2011) whose report revealed that female adolescents made choices to engage in transactional/survival sex to gain access to a continuum of material and consumer needs. Besides, the exchange of materials could also be for support of many reasons, not really for sexual acts. The act of transfer of money or gift could be the expression of love and commitment as they are about meeting the financial needs of the female adolescents or the acquisition of sex for males. Similar findings by Oladokun, Enakpene, Fabamwo, Obisesan, Ogenbede (2005) and Cherie and Berhane (2012) which disclosed that some respondents had also practiced oral sex and 51.1 per cent of students engaged in anal sex are in line with the finding in this study that in-school adolescents sometimes engaged in oral and anal sex.

The result in Table 3 disclosed that in-school adolescents engaged in risky sexual behaviour based on age. The findings which revealed that adolescents aged 11-19 years engaged in risky sexual behaviour is not in agreement with the findings of Chinsembu, Kasanda and Shaimemanya (2011)

who found that 50.2% of adolescents aged 12 – 16 years never had sex before. This notwithstanding, the finding is in line with that of Marston, Beguy, Kabiru and Cleland (2011) which reported that respondents who were aged 12 – 16 years had experienced early sexual debut, and that of Oluwatoyin and Modupe (2014) revealed that adolescents between ages 10 – 14 years were engaged in risky sexual behaviour more than those between 15 – 19 years. Alex-Hart, Okagua and Opara (2015) revealed that age group has no positive relationship with having sexual intercourse ( $\chi^2=4.522$ ,  $P=.104$ ).

The study further found that in-school adolescents aged 11 – 19 years engaged in possession of multiple sexual partners, had sex under intoxication, and practiced unprotected sex. The findings are consistent with the findings of Fatusi and Blum (2008), CDC (2012), Awotidebe, Philips, and Lens (2014) and Oluwatoyin and Modupe (2014), which reported that 15.3 per cent of the respondents had had intercourse with four or more people during their life, 42.2 per cent reported having penetrating sex with more than one partner, using alcohol in-school adolescents was ( $HR=1.90$ ,  $95\% CI = 1.38-2.62$ ) and that in-school adolescents practiced unsafe sexual activity.

Other findings in contrast to that of the researcher are Awotidebe, Philips and Lens (2014) who recorded that 44 per cent of adolescents reported consistent and regular use of condoms for every sexual intercourse especially adolescents with high knowledge of HIV infection, and Ngwu (2015) reported that slightly less than one fifth of the adolescent students always took oral contraceptives, had sex using withdrawal method, had sex with protection and with condom.

The finding in Table 3 also shows that in-school adolescents aged 11-19 years had not engaged in transactional/survival sex was surprising because gifts and favours are sign of love and care. Females are supposed to be cared for by males. Also, females are known for materialism to live above standard. The finding is in disagreement with the findings of Manlove, Logan, Moore and Ikramullah (2008) who reported that adolescents especially females make choices to engage in transactional sex to gain access to continuum of material and consumer needs.

The result further revealed that in-school adolescents aged 11-19 years engaged in oral sex. The respondents probably thought that oral sex set them at liberty, safe from unintended and unwanted pregnancy with its painful consequences that might result from vaginal sex. They were also preserving their virginity and reducing risk of STIs. This finding agrees with the findings of Oladokun, Enakpene, Fabamwo, Obisesan and Ogegebede (2005) who stated that some school adolescents had also practiced oral sex. Some other similar studies are in consonance with this finding. For instance, Cherie and Berhane (2012) revealed that the overall proportion of respondents who reported ever having oral sex was 5.4 per cent (190) and of these 51.6 per cent (98) had oral sex in the past 12 months.

The finding that in-school adolescents aged 11-19 years never engaged in anal sex was expected. It was expected because the level of social exposure in the study area is low, so one could have believed that in-school adolescents from such area would not know about such method as anal sex, talk more of engaging in it. The finding contradicts the findings of Marston, et al. (2011) who reported that considerable proportion of the respondents had engaged in anal sex.

The finding in Table 4 that in-school adolescents engaged in risky sexual behaviour based on gender agrees with that of Peltzer (2011) which shows that the overall prevalence of sexual intercourse among adolescents in the past 12 months was 11.0 per cent (14.6% males and 7.6% females). The finding is also in consonance with the findings of Fatusi, et al. (2008); Chinsebu, et al. (2011), which disclosed that about a fifth of respondents (18 % males; 22% females) were sexually experienced and among females were also associated with increased adolescents early sexual initiation and also sexual activity was significantly high among male gender. This implies that sexual behaviour is higher among male compared to female students.

It was also found that few male and female respondents engaged in possession of multiple sexual partners and having sex under intoxication compared to their male counterparts, while majority claimed never engaged in having sex under intoxication. This finding is not in consonance with the findings of Oladokun, et al. (2005) and Fatusi, et al. (2008) which reported that most of those adolescents that are sexually exposed had more than one partner with higher proportion being male students, and that some respondents reported alcohol use ( $HR = 1.90$ ,  $95\% CI = 1.38 -2.62$ ) before sex.



The findings further more show that male students always insignificantly engaged in transactional/survival sex compared to female in-school adolescents, and females sometimes engaged in transactional/survival sex more than males. This finding contradicts the findings of Ejike (2015) which revealed that 135 of the sexually active students (61.1%) agreed they received money for the sexual relationship they had. Of these, males 87(64.4%) significantly outnumbered females 48(35.5%). Similarly, Poulin (2007) disclosed that both males and females reported that gift giving and providing support are part and parcel of the dating scene.

It was equally indicated that female in-school adolescents engaged in oral sex more compared to male adolescents though insignificant, while majority of both gender claimed never engaged in oral sex. This finding disagrees with Chisembu, et al. (2011) whose report disclosed that sexual activity was significantly high among adolescent male respondents compared to female students.

The result further revealed that male in-school respondents insignificantly engaged in anal sex more than female students. According to Houston, Fan, Husman, and Peralta, (2007)'s findings which revealed that between 3% and 41% of girls and between 7% and 20% of boys reported having engaged in anal sex. This is in consonance with the findings of the present study.

### **Conclusion**

In-school adolescents engaged in some forms of risky sexual behaviours such as early sexual initiation, possession of multiple sexual partners among others. Age was found to be related to in-school adolescents' risky sexual behaviour, while gender was not.

### **Recommendations**

Following the findings and conclusion of the study, the below recommendations were made:

1. The Federal Ministries of Health and Education in collaboration with Taraba State Ministries of Health and Education should utilized the findings of this research work when drafting the national adolescents' health policy to capitalize on sexual risk behaviour of adolescents as target.
2. Curriculum planners should consider the findings of this study when planning and developing curriculum for both junior and senior secondary schools putting into consideration the variance in age, gender, reproductive health/sexuality education should be incorporated into secondary school curriculum/syllabus where it has not been done, and
3. Parents in collaboration with teachers should ensure to develop cordial and close relationship with adolescents through cohesive monitoring, supervision and also guiding them against bad peer groups as models.
4. Parents should endeavour to find out sources, caution and discourage at pre-school age of 5 years because at this stage, it is believed that children are curious and so ask a lot of funny questions especially from their mothers' adolescents through rejection of materials and (or) gifts into the house.
5. In order to curtail or reduce early sexual initiation among adolescents, parents should begin early to teach or orientate their children on reproductive health matters.
6. There is need for religious bodies, institutions or organizations to set rules to regulate adolescents' risky sexual behaviours through moral order, sanctions and punishments by deities for deviance for their adolescents in order to control risky sexual behaviours.

### **References**

- Abma, J. C., Martinez, G. M., & Copen, C. E. (2010). Teenagers in the United States: Sexual activity, contraceptive use, and childbearing, National Survey of Family Growth 2006-2008. National Centre for Health Statistics. *Vital and Health Statistics*, 23(30).  
Retrieved from [http://www.cdc.gov/nchs/data/series/sr\\_23/sr23\\_030.pdf](http://www.cdc.gov/nchs/data/series/sr_23/sr23_030.pdf)
- Alex, B. A., Okagua, J. & Opara, P. I. (2015). Sexual behaviour of secondary school students in Port Harcourt. *British Journal of Medicine and Medical Research* 6(3), 325-334.  
DOI:10.9734/BJMMR/2015/14539.

- Awotibe, A., Philips, J., & Lens, W. (2014). Factors contributing to the risk of HIV infection in rural school-going adolescents. *International Journal of Environmental Research in Public Health*, *11*, 11805-11821; 10.3390/ijerph11111805.
- Centres for Disease Control and Prevention. (2012). Youth risk behaviour surveillance-United States, 2011. *Morbidity and Mortality Weekly Report*, *61*(4). Retrieved from <http://www.cdc.gov/mmwr/pdf/ss/ss6104.pdf>.
- Cherie, A. & Berhane Y. (2012). Perceived sufficiency and usefulness of IEC materials and methods. *African Journal of Reproductive Health*, *9*(1).
- Chinsebu, K.C., Kasanda, C.D., & Shaimemanya, C.N. (2011). Prevalence, distribution and behavioural determinants of coital activity among High School students. *Journal of Public Health and Epidemiology*, *3*(7), 308-316.
- Doyle, M., Mavedzenge, S., Plummer, M., Ross, D. (2012). The sexual behaviour of adolescents in sub-Saharan Africa: Patterns and trends from the national surveys. *Trop. Med. Int. Health*, *17*, 796-807.
- Ejike, O. (2015). Sexual Behaviour and Sex Practices among Secondary School Students in Enugu. *Journal of Child Adolescent Behaviour*. *3*, 243. doi:org/10.4172/2375-4494. 1000243
- Fatusi, A. O. (2005). Adolescent sexual and reproductive health needs in Nigeria: shaping a pragmatic and effective response. *Journal of Community Medicine & Primary Health Care*. *17*, 1-6.
- Gardener, M., & Steinberg, L. (2005). Peer influence on risk taking, risk preference, and risk decision making in adolescence and adulthood: An experimental study. *Develop. Psychol*, *41*, 625-635.
- Garofalo, R., Wolf, R. C., Kessel, S., Palfrey, S. J., & DuRant, R. H. (1998). The association between health risk behaviour and sexual orientation among a school-based sample of adolescents. *Pediatrics*. *101* (5), 895-902.
- Houston, A. M., Fang, J., Husman D., & Peralta, L. (2007). More than just vaginal *Gynecol*, *20*: intercourse: anal intercourse and condom use patterns in the context of "main" and
- Kazaura, M. R., & Masatu, M. C. (2009). Sexual practices among unmarried adolescents in Tanzania. *BMC Public Health*, *9*, 373.
- Lindberg, I.D., Jones, R., & Santelli, J. S. (2008). Non-coital sexual activities among adolescents. *Journal of Adolescents Health*, *43*(3), 231-238.
- Manju R, Lule E. (2004). Exploring the socioeconomic dimension of adolescent reproductive health: A multicountry analysis. *International Family Planning Perspectives*. *30*(3), 110-117.
- Manlove, J.S. (2006). The role of parents religiosity in teens' transition to sex and contraception. *Journal of Adolescent Health*, *39*(4), 578-587.
- Manlove, J., Logan, C., Moore, K., & Ikramullah E. (2008). Pathways from family religiosity to adolescent sexual activity and contraceptive use. *Perspectives on Sexual and Reproductive Health*, *40*, 105-117.
- Markham, C. M., Peskin, M. F., Addy, R. C., Baumer, E. R., & Tortolero, S. R. (2009). Patterns of vaginal, oral, and anal sexual intercourse in an urban seventh-grade population. *Journal of School Health*, *79*, 193-200.
- Marston, M., Beguy, D., Kabiru, C., & Cleland, J. (2011). Predictors of sexual debut among young adolescents in Nairobi's informal settlements. *International Perspectives on Sexual and Reproductive Health*. Do1. 10.1363/3902213. *39*(1), 22-31.
- Nwoarali, C. (2004). *Adolescents behavioural journal of health education*.
- Okoro, I., & Osareven, U. (2005). Reproductive health. *Journal of reproductive health*. *9*(3).
- Oladokun, A., Enakpene, C. A., Fabamwo, A. O., Oisesan, K. A., & Ogengbede, O.A. (2005). Sexual behaviour of in-school adolescents in Ibadan South-West, Nigeria, *African Reproductive Health*, *12*(2), 89-97.
- Omeje, J.C., Ekwueme, M.N., & Omeje, P.N. (2013). Environmental Determinants of Risky Sexual Behaviours among Secondary School Students in Obollo-Afor Education Zone University of Nigeria, Nsukka: *Research on Humanities and Social Sciences*; *3*(15)
- Peltzer, K. (2010). Early sexual debut and associated factors among in-school adolescents in eight African countries. *Acta Paediat*. *99*, 1242-1247.

- Peltzer, K. (2011). Prevalence and social correlates of sexual intercourse among school-going adolescents. *The Scientific World Journal*, 11(1) 1812-1820.
- Robinson (1999). *Institute of Medicine Department of Health and Human Services*.
- Schwartz, S.J., Forthum, L .J., Larry, F., Ravert, R. D., Zamboanga, B. L., Uma –Taylor, A.J., Filthon, B.J., Kim S.Y., & Hudsom, M. (2010). Identify consolidation and health risk behaviours in college students, *American journal of health*, 34(2), 214-224.
- Ugwu, D. C. (2015). Reproductive and sexual health behaviour of secondary school students. UNN, Nsukka. *International Journal of Human Kinetics and Health Education IJHKHE*, 1(1).48-53.
- United Nations Children’s Fund (UNICEF) (2011). Opportunity in Crisis: Preventing HIV from Early Adolescence to Young Adulthood; New York, NY, USA, 2011 *International Journal of Environmental Research, Public Health*, 11, 11819
- United Nations Population Fund (UNFPA). (2004). *Adolescents and young people. State of World Population*. Retrieved from <http://www.unfpa.org/swp/2004/emglish/ch9/index.htm>.
- Zhou, D. (2011). *Determinants of risky sexual behaviour among young adults of South Africa*. Witwatersrand University Press.