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Research Article

# Sexual and Reproductive Health Knowledge, Attitude and Behaviours of in-School Adolescents in Benin City, Nigeria

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#### **ABSTRACT**

Knowledge of sexual and reproductive health (SRH) and access to accurate information on it among adolescents remains a major challenge in Nigeria. This study assessed the SRH knowledge, attitudes and behaviours of in-school adolescents in Benin City, Nigeria. This cross-sectional study was carried out among 630 adolescents in Benin City. The respondents were selected using multi staged sampling technique. An adapted interviewer-administered questionnaire was used for data collection. Data analysis was carried out using IBM SPSS version 25.0 software. The mean age of the adolescents comprising 328 (52.1%) females and 302 (47.9%) males was  $14.9 \pm 1.3$  years. Although 561 (89.0%) adolescents were aware of SRH, only 107 (19.1%) had good knowledge of it. Most of them 587 (93.2%) demonstrated positive attitude towards SRH. Thirty-nine (6.2%) were sexually active with 30 (76.9%) having their sexual debut before the age of 15 years, 14 (35.9%) had more than one sexual partner while only 13 (39.4%) consistently used condom during sexual intercourse. Seventeen (43.6%) had experienced vaginal/penile discharge, 6 (15.4%) had been tested for STIs, 25 (64.1%) had received treatment for STIs with home treatment 16 (64.0%) being the predominant choice. This study revealed that the overall knowledge of SRH among in-school adolescents in Benin City was poor, but most of them displayed a positive towards SRH. Although only few of the adolescents were sexually active, the prevalence of risky sexual behaviour was high among them and they also exhibit poor SRH seeking behaviour.

Keywords: Adolescents, sexual and reproductive health, sexually transmitted infections, risky sexual behaviour

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## INTRODUCTION

Worldwide, adolescents aged between 10 and 19 years make up about 1.2 billion of young people. (WHO, 2018). Adolescence is a period of fast and exciting neurological, physical, and emotional transition from childhood to adulthood. This period can be quite challenging as these adolescents seek individuality and independence and are more easily influenced by their friends and the internet. (WHO, 2018; Landry *et al*, 2017). It is also a period of sexual maturation characterized by experimentation with drugs and sex thus exposing teenagers to a range of health risks. (Landry *et al*, 2017). Some of these health risks which are due to risky health behaviors like unprotected sex include unintended teenage pregnancy, unsafe abortions, sexually transmitted Infections, HIV/AIDS and lack of physical activity which could lead to obesity with its attendant morbidity.

Knowledge of, and access to accurate SRH information among adolescents remains a major challenge in Nigeria. (Ihesie and Chukwuogo, 2017). Among Nigerian adolescents, it has been identified that there is an association between poor knowledge and attitude about SRH issues and risky sexual behaviour as indicated by the high prevalence of STIs among adolescents. (Ihesie and Chukwuogo, 2017). Also, it has been

found that less than 30% of adolescents have comprehensive knowledge of HIV/AIDS. (Ihesie and Chukwuogo, 2017). The low knowledge of SRH could be because the key persons that should provide this correct information often times fail to do so. In a study done in Ebonyi state, Nigeria, among 1057 adolescents, less than half (47.9%) of adolescents in the survey reported ever discussing sex-related matters with anyone and only 4.5% had ever discussed sex-related matters with a parent. (Mbachu et al, 2020). Parents, teachers and healthcare workers fail to discuss SRH issues with adolescents because of socio-cultural norms around chastity and shifting of responsibility among these adults on who should provide SRH information. (Ihesie and Chukwuogo, 2017). This forces the adolescent to turn to their peers and other sources for the needed information, which may be inaccurate, leading to poor health choices and resultant risky sexual behavior with its attendant consequences for the adolescent. (Olasode, 2007). Also closely linked to knowledge of SRH is attitude. A positive attitude towards SRH is important as it can influence sexual behavior positively thereby leading to positive SRH outcomes including delayed sexual exposure, consistent condom use and reduction in the transmission of STIs. (Adeokun et al, 2009). Unmet needs for SRH information and

contraceptive services for adolescents can result in risky sexual behaviours and poor health outcomes. (Ihesie and Chukwuogo, 2017). These risky sexual behaviours include inconsistent condom use, early sexual debut and multiple sexual partners. Failure to consistently use condoms and other contraceptives has been implicated as a factor in teenage pregnancy. Teenage pregnancy among adolescent girls is a common occurrence across sub-Saharan Africa and accounts for about half of the births recorded in the region. (Ihesie and Chukwuogo, 2017). According to a WHO report, more than 1.1 million adolescents aged 10-19 years lost their lives, mainly due to preventable causes such as complications of pregnancy or giving birth, or because of HIV/AIDS. (WHO, 2018).

Age at sexual debut is an important indicator of Adolescent Sexual and Reproductive Health (ASRH) outcomes. Adolescents who experience sexual debut at an early age have a higher risk of becoming pregnant or contracting an STI than those who delay sexual initiation. Age of sexual debut for most adolescents in Nigeria is between ages 16-19 years. (Ihesie and Chukwuogo, 2017). In addition, majority of sexually active Nigerian adolescents generally delay the use of any form of contraceptive by an average of about a year after sexual debut with early sexual debut being associated with low condom use. (Ihesie and Chukwuogo, 2017). There is also an increase in multiple sexual partners among young people including an increase in crossgenerational and transactional sex among sexually active female adolescents in Nigeria. These risky sexual behaviours increase the risk of negative SRH outcomes. (Ihesie and Chukwuogo, 2017).

Knowledge of SRH among adolescents is a prerequisite for good sexual health and a major determinant in improving SRH seeking behaviour. When the necessary information and skills are provided through adequate and accessible ASRH services, this can lead to positive behavioural changes among adolescents which in turn can reduce negative SRH outcomes by helping them postpone sexual debut, promote safe sexual behavior and promote SRH seeking behavior. (Adeokun *et al*, 2009; Cortez *et al*, 2016). Therefore, this study was carried out to assess the SRH knowledge, attitudes and behaviours among in-school adolescents in Benin City, Nigeria with a view to making appropriate recommendations that will drive the formulation and implementation of SRH policies, to relevant authorities.

#### MATERIALS AND METHODS

**Study design and setting:** This institution based cross-sectional study was conducted in Benin City, the capital of Edo State, Nigeria from January to May 2021. As at the time of the study, the population of adolescents in Benin City was 227,226 making up about 21% of the entire population. (NPopC, 2010). Benin City has 44 public and 64 private secondary schools.

**Study population and sampling:** The study population for this study comprised of adolescents attending mixed senior secondary schools in Benin City. The minimum sample size required for the study, which was calculated using the formula for single proportions ( $n=z^2pq/d^2$ ). (Cochrane, 1963). For the purpose of this study, p was taken as 67.5% which represents

the proportion of adolescents had good knowledge of contraceptive use in a previous study done in Lagos, Nigeria. (Chimah et al, 2016). Utilizing a design effect of 1.5 and adjusting for nonresponse at a rate of 10%, the sample size calculated was 556. A multi stage sampling method consisting of three stages was used to select the respondents. In stage one a simple random sampling technique by balloting was used to select two public and two private mixed secondary schools in each of the three Local Government Areas (LGAs) that make up Benin City. Thus, a total of twelve schools were used for this study. In stage two, one class each was select selected using simple random sampling technique from each of the selected senior secondary schools. In a school where a class had more than one arm, a simple random sampling was also used to select an arm per class for the study. In stage three, a systematic sampling technique was used to select the students in each class to participate in the study. A sampling interval N/n (where N = allocated sample size of senior secondary school students in each selected school, n = sample size allocated to each class) was computed for each class. The class register of each class was used as the sampling frame from which the first student was selected using simple random sampling within the calculated sampling interval and subsequently students were selected using the sampling interval until the required sample size was achieved. To ensure that each selected school was represented based on their respective sizes, proportional allocation was done to determine the total number of senior secondary students (SS1-SS3) that participated in the study in each selected school.

Data collection and analysis: Data was collected using a structured, pretested, interviewer-administered questionnaire adapted and modified from Center for Disease Control Youth Risk Behavior Surveillance System (YRBSS). (CDC, 2019). The questionnaire was used to seek information on the sociodemographic characteristics, and SRH knowledge, attitudes and behaviors of the respondents. Five Paramedics assisted with data collection. Data obtained was analyzed using IBM SPSS version 25.0 (IBM Corp, Armonk, NY, USA). Knowledge of SRH was assessed using a total of 11 questions. Correct responses were given a score of 1, while incorrect responses were given a score of 0. For questions with multiple responses, a score of 1 was given if the correct responses chosen were over 50% and a score of 0 if the responses chosen were less than 50%. A summative score was obtained and converted into percentages. Overall knowledge of SRH was classified as good where respondents score  $\geq 70.0\%$  and poor where scores of < 70.0% were obtained. Quantitative assessment of adolescent's attitude towards SRH was based on their responses to 11 questions graded using a 3-point Likert scale (agree, indifferent and disagree). Responses which implied that adolescents were inclined towards safe sexual practices were considered as appropriate responses. Correspondingly, responses indicative of negative disposition towards SRH were considered as inappropriate. Responses to each question were coded as follows: least appropriate response was given a score of -2, 'indifferent' was given a score of 0 and the most appropriate response was given a score of +2. Thus, the maximum achievable score for each question was 2. Scores for each question was summed up and converted

into percentages. Adolescents who scored ≥ 70.0% were regarded as having positive attitude towards SRH while those who scored < 70.0% were categorized as having negative attitude. In this study, sexual activity was taken as a prior exposure to a penetrative sexual intercourse. (Isara and Osayi, 2021). Risky sexual behaviors were taken as sex at an early age, having multiple sexual partners and inconsistent condom use. (Kassa et al, 2016). Early sexual debut was defined as sexual activity before the age of 15 years. (Magnusson et al, 2019). Condom use was categorised into consistent and inconsistent condom use. Consistent condom use was defined as use of a new condom for every sexual activity while inconsistent condom use was defined as irregular use of condom during sexual activities. (CDC, 2013). Multiple sexual partners was defined as having more than one sexual partner over a period of time. These can be either serialized partners; one after the other, or simultaneous or concurrent; different sexual partners that overlap in time. (Mutinta, 2014). Stage of adolescence was categorized into early (10 - 14 years) and late (15 - 19 years) adolescence. (UNICEF, 2011). An initial univariate analysis was carried out to describe the data. In a bivariate analysis, the associations between the socio-demographic variables (age, class, gender) and the outcome variables (SRH knowledge, attitudes and behaviours of the adolescents) was tested using the chi squared test. The level of statistical significance was set at p < 0.05.

Ethical consideration: Ethical approval for the study was obtained from Edo State Ministry of Health (Protocol number HA-737/89). Permission was obtained from the school authorities and verbal assent was obtained from each respondent after the purpose of the study had been explained by the researcher. Participation in the study was voluntary and participants had the right to decline participation or to withdraw from the study at any time if they so desired with no penalties or loss of benefits.

## **RESULTS**

A total of 630 in-school adolescents with a mean age (standard deviation) of 14.9 (1.3) years and comprising of 238 (37.8%) early and 392 (62.2%) late adolescents participated in the study. Table 1 shows the socio-demographic characteristics of the adolescents. Three hundred and twenty-eight (52.1%) were females with almost all them being Christians (99.4%). Two hundred and forty nine (39.5%) were in SS 1, 217 (34.5%) were in SS 2 while 164 (26.0%) were in SS 3. Three hundred and forty-six (54.9%) and 284 (45.1%) were from public and private schools respectively. Majority of the respondents 470 (74.6%) reside with both parents, in a nuclear family (88.6%), with a higher proportion of the parents having tertiary level of education 384 (62.6%) and 335 (55.0%) for fathers and mothers respectively.

The awareness of SRH was affirmed by 561 (89.0%) of the respondents while 69 (11.0%) were not aware of SRH. Among those who were aware of SRH, a higher proportion were able to give the correct meaning of SRH (76.8%), STIs (64.7%), HIV/AIDS (90.7%), mention family planning as a components of SRH (61.0%) and condom as a type of contraceptive method (73.3%).

Table 1: Socio-demographic characteristics of in-school adolescents in Benin City

	Variables	Frequency	Percent
		(n = 630)	
Age group	10 – 14	238	37.8
(years)	15 – 19	392	62.2
Mean age $\pm$ SD =	$14.9 \pm 1.3$		
Sex	Male	302	47.9
	Female	328	52.1
Religion	Christianity	626	99.4
	Islam	4	0.6
	SS1	249	39.5
Class in School	SS2	217	34.5
	SS3	164	26.0
School Type	Public	346	54.9
	Private	284	45.1
Reside with	Both parents	470	74.6
	Mother only	75	11.9
	Guardian	61	9.7
	Father only	24	3.8
Family Type	Nuclear	558	88.6
	Extended	72	11.4
Father's level of	None	16	2.6
education	Primary	50	8.1
	Secondary	164	26.7
	Tertiary	384	62.6
Mother's level of	None	37	6.1
education	Primary	62	10.2
	Secondary	175	28.7
	Tertiary	335	55.0

However, majority fared poorly in other questions used in assessing their knowledge of SRH. Overall, 454 (80.9%) adolescents had poor knowledge of SRH while only 107 (19.1%) had good knowledge (table 2). The factors associated with the knowledge of SRH among the respondents are shown in table 3. A slightly higher proportion of late adolescents, females and those attending private schools had more knowledge of SRH. Also, the knowledge of SRH increased with the class of the adolescents and both parents level of education. However, only the association between the class of the respondents and their knowledge of SRH was statistically significant (p < 0.001).

Concerning attitude towards SRH, majority of the adolescents showed positive disposition to all the questions used in assessing their attitude. Overall, most of them (93.2%) demonstrated a positive attitude towards SRH (table 4).

The sexual behaviours of the respondents are shown in table 5. Thirty-nine (6.2%) have had sexual intercourse. Among those who have ever had sexual intercourse, majority 30 (76.9%) had their first sexual exposure before the age of 15 years, 25 (64.1%) reported only one sexual partner while only 13 (39.4%) consistently used condom during sexual intercourse. Also, 24 (61.5%) have ever been pregnant or impregnated someone (nine female and 15 male respondents) out of which, 22 (91.7%) engaged in termination of pregnancy while 5 (20.8%) delivered their babies. Among those who had engaged in termination of pregnancy, majority 16 (72.7%) had

engaged it once, with the predominant place of termination of pregnancy being patent medicine store 12 (54.5%) while 13 (59.1%) mentioned unplanned pregnancy as one of the reason for termination of pregnancy.

Table 2: Knowledge of SRH among in-school adolescents

Variables	Frequency (n= 561)	Percent
Meaning of Sexual and Reproductive Health*		
State of complete physical, mental and	431	76.8
social well-being in all matters relating to		
the reproductive system		
Capacity to reproduce	106	18.9
Freedom to decide if, when and how often	28	5.0
to reproduce		
Components of Sexual and Reproductive Health*		
Family planning	342	61.0
Prenatal, antenatal and postnatal services	169	30.1
Prevention and treatment of unsafe	71	12.7
abortion		
Treatment of reproductive tract infections	62	11.1
Prevention and treatment of infertility	61	10.9
Meaning of Sexually Transmitted		
Infections*	2.62	
Infections passed from one person to another through sexual contact	363	64.7
Infections transmitted through sexual	189	33.7
contact, caused by bacteria, viruses or		
parasites		
Infections gotten from the toilet	93	16.6
Symptoms of Sexually Transmitted Infections*		
Vaginal discharge	248	44.2
Pain when urinating	215	38.3
Discharge from the penis	211	37.6
Pain during sex	126	22.5
Lower abdominal pain	113	20.1
Sexually Transmitted Infections*		
Gonorrhoea	365	65.1
Syphilis	310	55.3
Genital herpes	95	16.9
Bacterial vaginosis	81	14.4
Genital warts	58	10.3
Trichomoniasis	32	5.7
Correct meaning of HIV/AIDS	509	90.7
Mode of transmission of HIV*	20.5	
Blood	395	70.4
Semen	154	27.5
Breast milk	129	23.0
Genital secretion	98	17.5
No available cure for HIV/AIDS	429	76.5
Contraception prevents pregnancy	491	87.5
Types of contraceptive methods*  Condoms	/ <sub>11</sub>	72.2
Oral contraceptive pills	411 254	73.3
Intrauterine contraceptive device	86	45.3 15.3
Injectable	50	8.9
Implant	36	6.4
Overall knowledge of SRH	50	0.4
Good	107	19.1
Poor	454	80.9
		00.7

**Table 3:** Factors associated with in-school adolescents' knowledge of SRH

		Knowled	ge of SRH		
Va	riables	Good	Poor	χ²	p Value
		n (%)	n (%)		
Age	10 - 14	37 (17.3)	177 (82.7)	0.713	0.439
(years)	15 – 19	70 (20.2)	277 (79.8)	•	
Sex	Male	48 (18.4)	213 (81.6)	0.147	0.747
	Female	59 (19.7)	241 (80.3)	•	
School	Public	51 (16.9)	250 (83.1)	1.908	0.196
Type	Private	56 (21.5)	204 (78.5)	•	
Class in	SS1	32 (13.7)	201 (86.3)		
School	SS2	29 (16.2)	150 (83.8)	18.70	< 0.001*
	SS3	46 (30.9)	103 (69.1)		
	Both parents	81 (19.3)	339 (80.7)		
Caregi	Father only	6 (27.3)	16 (72.7)	1.621	0.654
ver	Mother only	12 (18.5)	53 (81.5)		
	Guardian	8 (14.8)	46 (85.2)	•	
Family	Nuclear	96 (19.2)	404 (80.8)	0.048	0.866
Type	Extended	11 (18.0)	50 (82.0)	•	
Father's	None	2 (12.5)	14 (87.5)		
level of	Primary	5 (11.4)	39 (88.6)	6.711	0.081
education	Secondary	20 (14.3)	120 (85.7)	•	
	Tertiary	78 (22.4)	270 (77.6)	•	
Mother's	None	4 (11.4)	31 (88.6)		
level of	Primary	9 (15.5)	49 (84.5)	7.152	0.067
education	Secondary	22 (14.9)	126 (85.1)	•	
	Tertiary	71 (23.5)	231 (76.5)	•	
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<sup>\*</sup>Statistically significant

**Table 4:** Attitude of in-school adolescents towards SRH

Variable (n = 630)	Agree Freq.	Don't Know	Disagree Freq.
	(%)	Freq.	(%)
Adolescents should express love by	52 (8.3)	(%) 82	496
having sex	02 (0.0)	(13.0)	(78.7)
Adolescents should abstain from sex	527	49	54 (8.6)
until they are married	(83.7)	(7.8)	
Adolescents should coerce others	52 (8.3)	107	471
into having sex		(17.0)	(74.8)
Adolescents should have sex in	43 (6.8)	71	516
exchange for money or other		(11.3)	(81.9)
incentives			
It is wrong for adolescents to use	216	214	200
condoms or other forms of	(34.3)	(34.0)	(31.7)
contraceptives			
Sexual and reproductive health	132	85	413
information should not be taught in	(21.0)	(13.5)	(65.6)
schools			
Adolescents should seek sexual and	417	133	80 (12.7)
reproductive health services from	(66.2)	(21.1)	
healthcare facilities			
Adolescents should engage in	51 (8.1)	148	431
termination of unplanned pregnancy		(23.5)	(68.4)
STIs can be treated without going to	63	166	401
a healthcare facility	(10.0)	(26.3)	(63.7)
Adolescents should consult their	130	183	317
friends for sexual and reproductive	(20.6)	(29.0)	(50.3)
health information			
Overall attitude	Freq. (%)		
Positive	587 (93.2)		
Negative	43 (6.8)		

<sup>\*</sup>Multiple responses

Among the adolescents who were sexually active, 17 (43.6%) had experienced vaginal/penile discharge, 6 (15.4%) had been tested for STIs while 25 (64.1%) had received treatment for STIs. Majority 16 (64.0%) of the respondents who had received treatment for STIs were treated at home (table 6).

**Table 5:** Sexual behaviour of in-school adolescents in Benin City

Variables		Frequency	%
Ever had sexual	Yes	39	6.2
intercourse $(n = 630)$	No	591	93.8
Age of sexual debut	< 15	30	76.9
(years) $(n = 39)$	≥ 15	9	23.1
Number of sexual	1	25	64.1
partners $(n = 39)$	> 1	14	35.9
Condom Use $(n = 33)$	Consistent	13	39.4
	Inconsistent	20	60.6
Ever been pregnant	Yes	24	61.5
or impregnated someone	No	15	38.5
Times pregnant or	Once	14	58.3
impregnated	Twice	2	8.3
someone $(n = 24)$	Thrice	4	16.7
	More than thrice	4	16.7
Outcome of	Termination	22	91.7
pregnancy*	Delivery	5	20.8
	Spontaneous	3	12.5
	miscarriage		
	More than thrice	2	9.1
Place of termination	Patent medicine	12	54.5
of pregnancy*	store		
	Hospital	4	18.2
	Home	4	18.2
	Traditional home	2	9.1
Reason for	Pregnancy was	13	59.1
termination of	not planned		
pregnancy*	Partner's refusal to	4	18.2
	take responsibility		
	Fear of rejection	2	9.1
	Fear of expulsion	1	4.5
	from school		
	Not getting a	1	4.5
	husband in future		
43.6 T. 1	None	1	4.5

<sup>\*</sup>Multiple responses

#### DISCUSSION

Adolescence is a critical and vulnerable period of biological, physical and psychological changes in which they face challenges like initiating sexual activity, entering the age of risk-taking, entering into unions and making decisions on family formation that affect future health and opportunities. (Ihesie and Chukwuogo, 2017). This study revealed a worrisome poor knowledge of SRH, an encouraging positive attitude towards SRH and a very challenging SRH behaviour among the in-school adolescents. These findings are capable

of jeopardizing both the sexual and general health of the adolescents.

Adolescents' poor knowledge of SRH can negatively influence their decisions and lead to risky sexual behaviours like early sexual debut and nonuse/inconsistent condom use which have dire health consequences including transmission of STIs and unsafe abortion. In order to improve adolescent's knowledge and foster the acquisition of factual information on SRH, the Nigerian government introduced the Family Life and HIV/AIDS Education (FLHE) in the school curricula at the basic and secondary school levels as well as in teacher training institutions. Despite this laudable policy, implementation has been challenging. The study done to evaluate the implementation of the FLHE programme in Nigeria revealed that only 54% of schools in Edo state were supplied with the FLHE materials leading to a low proportion of schools implementing the FLHE in Edo State. (Udegbe et al, 2015). This could explain the finding of poor knowledge of SRH among the in-school adolescents in this study.

Table 6: Prevalence of sexually transmitted infections among the inschool adolescents

Variables		Frequency (n = 39)	%
Ever experienced	Yes	17	43.6
discharge from vagina/penis	No	22	56.4
Ever been tested	Yes	6	15.4
for any STI	No	33	64.6
Ever received	Yes		
treatment for STI	No	25	64.1
		14	35.9
Place of STI	Home	16	64.0
treatment $(n = 25)$	Health facility	4	16.0
	Patent medicine store	3	12.0
	Traditional home	3	12.0

<sup>\*</sup>multiple responses

Despite the poor knowledge level of SRH, the majority of the adolescents had a positive attitude towards SRH. A positive attitude towards SRH is important as it can positively influence sexual behavior thereby leading to positive SRH outcomes including delayed sexual exposure, consistent condom use and reduction in the transmission of STIs. (Santosa *et al*, 2016). This finding is similar to a study done in Ogbomoso, Southwest Nigeria where the majority (88.3%) of students had positive attitudes regarding SRH. (Fehintola *et al*, 2018).

In this study, majority of the respondents are not sexually active. This finding is commendable as abstinence from vaginal, anal and oral intercourse is the only most effective way to prevent the transmission of STIs, HIV/AIDs and unwanted pregnancy. (CDC, 2021) However, majority of those who were sexually active had their first sexual exposure before the age of 15 years. This high prevalence of early sexual debut found in this study could be due to the fact that the majority of the respondents' first sexual experiences were unplanned/coerced. Early sexual debut can lead to increased

incidence of multiple sexual partners, the preponderance of unprotected sex, an increased risk of STIs, unwanted teenage pregnancies and unsafe abortions, with their corresponding health consequences.

Majority of the sexually active adolescents had been pregnant at least once in their lifetime. This is not surprising as more than half of the adolescents in this study inconsistently used condoms. Unsafe sex as evidenced by inconsistent and incorrect condom use has been found to be a significant predictor of unplanned and unwanted pregnancy. (Okereke, 2010). Early pregnancies among adolescents have major health consequences for adolescent mothers and their babies. Pregnancy and childbirth complications are the leading cause of death among girls aged 15-19 years globally. Adolescent mothers face higher risks of eclampsia, puerperal endometritis and systemic infections than women aged 20-24 years. Babies born to mothers under 20 years of age face higher risks of low birth weight, preterm delivery, and severe neonatal conditions. (Ajayi et al, 2019). There are also social consequences for unmarried pregnant adolescents which may include stigmatization, rejection or violence by partners, parents and peers and drop out of school which may truncate the adolescent girl's future education and employment opportunities. (WHO, 2020). Most times the fear of the above consequences gives rise to unsafe abortions.

It was found in this study that majority of the respondents who had history of unintended pregnancy had engaged in termination of pregnancy at least once and was carried out in a patent medicine store. Because abortion is illegal in Nigeria, most of them are performed clandestinely and in most cases by unqualified personnel, and this often results in severe complications such as septicemia, internal organ damage, tetanus, sterility, severe vaginal bleeding, incomplete abortion, septic abortion, infertility and death. (Okereke, 2010).

Also related to the burden of unsafe abortions is the issue of STIs among adolescents. Among the adolescents who were sexually active, 43.6% had experienced vaginal/penile discharge with majority of them taking treatment at home. A study in Owerri, South east Nigeria, reported that 27.2% of the sexually active adolescents had experienced STI but unlike this study, most of them obtained treatment from patent medicine store. (Okereke, 2010). The poor SRH seeking behavior observed in this study may be as a result of poor of knowledge of SRH and this may lead to a delay in seeking treatment. The knowledge of STIs and their complications is important for adequate prevention and prompt treatment. The worrisome poor SRH seeking behavior can result in untreated or poorly treated STIs with its attendant long-term complications. STIs like Gonorrhea and Chlamydia trachomatis infection can cause epididymitis inflammatory urethral stricture in males thereby leading to infertility in the future. The females are not spared as pelvic inflammatory disease, dyspareunia, infertility, chronic pelvic pain, increased risk of ectopic pregnancies, abortions, stillbirths, and perinatal and neonatal morbidities are possible complications that could result from STIs. In both sexes, herpes, gonorrhoea and syphilis can increase the risk of HIV acquisition, but young females are particularly at risk of contracting human papilloma virus (HPV) infection which causes cervical cancer once they engage in the act of penetrative sexual intercourse.

In conclusion, this study revealed that the overall knowledge of SRH among in-school adolescents in Benin City was poor. Late adolescents, those in higher class (SS 3) and those whose parents had tertiary level of education were significantly more knowledgeable about SRH. Most of the adolescents displayed a positive attitude towards SRH. Although only a few of the adolescents were sexually active, the prevalence of risky sexual behavior was high among them and they also exhibited poor SRH-seeking behaviour. This portends great danger to their future reproductive health.

We recommend that the Nigeria government should scale up the distribution of FLHE materials to all secondary schools in the thirty-six states of the country. The Edo State government on her part should, through the Post Primary Education board, increase support for SRH education of the adolescents by ensuring implementation and improvement of the FLHE programme in all secondary schools through better monitoring and coordination. The Guidance and Counselling units of secondary schools should be empowered to educate in-school adolescents on the following: the need to seek credible SRH information from and utilize healthcare facilities for guidance, counseling, prevention, diagnosis and treatment of STIs; the need to delay sexual intercourse until when emotionally and physically matured and; the need for correct and consistent use of condoms to prevent transmission of STIs for those who are sexually active. The school authorities should through the Parent Teachers Association, encourage parents to initiate and sustain continuous communication on SRH issues with emphasis on abstinence and safe sex, with their adolescents. Also, they should establish FLHE clubs in secondary school to help promote and reinforce SRH education among the adolescents.

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