

Accessibility of youth-friendly sexual and reproductive health services to secondary school adolescents in Southern Cross River, Nigeria

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Abstract: Sexual and reproductive health behaviors are the main causes of death, disability, and disease among adolescents in Nigeria. In this study, we determined the accessibility of youth-friendly sexual and reproductive health services to secondary school adolescents in southern Cross River State, Nigeria. Nineteen randomly selected public secondary schools across the seven local government areas in the zone were used. The respondents were four hundred senior secondary (SSI - SS3) students, aged 15-19 years, comprising 63.7% females and 36.3% males. A 50-item structured questionnaire was used for the study. There was a strong influence of age and sex of adolescents, income and occupation of parents, knowledge and awareness of adolescents, and tradition on the accessibility and use of youth-friendly sexual and reproductive health services (YFSRHS) by the adolescents. The attitude of health workers regarding accessibility had little effect. Overall, youth-friendly sexual and reproductive health services were not easily accessible to adolescents in the study area. Thus, there is a need to enforce adolescent reproductive health policies in the area. Training and the use of trained caregivers and peer educators to attend to adolescents, as well as the inclusion of adolescent reproductive health as a subject in the curriculum, are strongly recommended.

Keywords: Adolescent, Cross River state, Nigeria, Secondary schools, Sex education.

1. Introduction

Young people in Nigeria as in other developing nations, especially in sub-Saharan Africa, are constantly in danger from a wide range of health challenges. Sexual and reproductive health behaviours are the main causes of death, disability and disease among adolescents [1, 2]. Young people face risks that are related to unplanned pregnancy and complications related to pregnancy such as sexually transmitted diseases and HIV/AIDS. Physical and psychological trauma are the other undesirable outcomes of sexual abuse, gender-based violence and other forms of physical violence and accidents [1, 3, 4]. Adolescents are predisposed to these challenges because they often engage in sex without being prepared, have sex with many partners, indulge in alcohol and drug abuse which impairs their judgment, have limited understanding of prevention of sexually transmitted infection and lack skills to negotiate safer sex [4]. Furthermore, adolescents find it difficult to access reproductive health and HIV/AIDS services because the few services available ones seem not to be friendly and are mostly designed for adults.

Adolescent sexual activity has increased globally during the last few decades, exposing youths to greater reproductive health risks than adults. Although many Nigerian adolescents become sexually active at an early age, they encounter social, cultural and economic barriers to the information and health services they need to protect themselves against threats to their sexual and reproductive health [5]. Sexual activity starts as early as 15 years with only about 17-20% of the adolescents using contraception [5] and 2 percent of AIDS cases reported in Nigeria were estimated to be among

adolescents from the age of 15 [6]. Limited access to reproductive health services and information for young people has been reported in many nations in Sub-Saharan Africa - Nigeria inclusive. The country's 2008 demographic health survey reported limited access to maternal health services to women aged 15-19 due to not knowing where to get services and long distances to health facilities.

In Nigeria, many adolescents and young people are prone to risky sexual behaviour which has implications for HIV and other reproductive health infections. Thus, the absence of information on various reproductive health issues and services is more likely to contribute to the high rates of HIV and STIs. To adequately address these reproductive health problems for adolescents, it is pertinent to improve their reach to information on reproductive health and quality of services available to them. Nigeria has a social and cultural tradition of women giving birth early whereby teens or adolescent sexuality is not necessarily related to age, but much more to social and marital status [7, 8]. In the 2008 Nigeria Demographic and Health Survey, it was found from stationary and mobile clinics report that from January to October, there was low use of family planning methods, registering only 434 female adolescents in Calabar, Cross River State [9]. The figures are very low compared to the total number of adolescents in Calabar metropolis, which seem to indicate inadequate reach and use of reproductive health services (RHS) programmed by adolescents in the Southern Senatorial district of Cross River State in general.

Adolescent sexuality is characterized by low, incorrect or inconsistent use of family planning methods and the consequences are out of wedlock pregnancies, abortions, STIs, HIV and AIDS and school dropout, particularly among female adolescents. Discussing as well as accessing family planning services and SRH information by adolescents is considered a taboo culturally in most African societies, including Nigeria [5, 10]. This also results to less willingness and ability to access RHS, thereby increasing adolescents' reproductive health challenges and putting their lives at risk.

This study was therefore aimed to establish whether adolescents are accessing youth-friendly reproductive health services and information in the Southern Senatorial District of Cross River State, Nigeria. The goal is to help policy makers provide useful guidelines and programmed for adolescents/youths to understand their bodies' system through correct information and health services.

2. Methods

2.1. Study Area

The study was conducted in the Southern Senatorial District ($9^{\circ}5'10''$ - $10^{\circ}20''$ E; $5^{\circ} 16' - 4^{\circ}5'10''$ S) of Cross River state, Nigeria. It comprises of Akamkpa, Akpabuyo, Calabar Municipality, Calabar South, Bakassi, Biase, and Odukpani, Local Government Areas, commonly referred to as the Greater Calabar district. Three major languages are spoken across the district, namely Efik (in Bakassi, Odukpani, Akpabuyo, Calabar South and parts of Calabar Municipality), Ejagham (in parts of Calabar Municipality, Akamkpa) and Omon (in the whole of Biase LGA). Other minor dialects spoken in Odukpani and Biase are Ukwa, Umon and Ebom. The people's mainstay is agriculture (70%) and trading and white-collar jobs (30%). The study area has about sixty-seven primary and eighty-nine public secondary schools. In addition to public health centres, the Zone has NGOs and private sector participating in providing services. The Federal Ministry of Health through the various MCH and FP clinics provides reproductive health care services within the Zone. The major services include family planning (pills, and condoms), antenatal and post-natal care, education, and child delivery services.

2.2. Research Design

We used a descriptive cross-sectional design that aims at describing the demographic, socioeconomic, socio-cultural and health system factors that influence the access and utilisation of youth-friendly reproductive health services (YFRHS) among the adolescents in the Senatorial District. The study population comprised of male and female adolescents attending public senior secondary schools, grades 1-3 (SSI-SS3), aged 15 - 19 years. According to the National Agency for the Control of

AIDS (NACA) [11] zero-prevalence report, this is the age at which first sexual encounters occur in majority of residents.

2.3. Sample Size and Sampling Procedure

The sample size studied was 388 pupils, as determined according to Yamane [12] from the total number of adolescents in SSI - SS3, aged 15-19 years within the Southern Senatorial District. Thus, the sample size of 388 plus 68 extra copies of the questionnaires to safeguard against non-response or low return rate were administered, bringing the sample size to 456. A total of nineteen (19) schools were selected randomly for this study (Table 1). Three schools were selected from any LGA that had eight or more public schools and two were selected from those with less than eight public schools. The schools selected from Calabar Municipality and Calabar South represented schools from urban areas while those selected from Bakassi gave the rural representation. At least one school in each of the remaining four LGAs was selected to represent an urban school and the others, rural schools. This means that schools in some LGAs were completely urban, those in some LGAs were completely rural and those in some LGAs have a split of the two settings. This gives a total of ten urban and nine schools rural schools.

Table 1.

List of schools randomly selected from the 7 local government areas in the southern senatorial district.

S/No.	Local government areas	Schools selected
1	Akamkpa	Govt. Sec. School Akamkpa; Comm. Sec. Sch. Old Netim, Comm. Sec. Sch. Oban = 3
2	Akpabuyo	Govt. Tech. Coll. Nakanda; Comm. Sec. Sch. Ikot Ewa = 2
3	Bakassi	Comh. Esighi; Govt. Sec. Sch. Ikang Central = 2
4	Biase	Comm. Sec. Sch. Akpet Central; Comm. Sec. Sch. Adim, Biase Sec. Sch. Ehom = 3
5	Calabar Municipality	Government secondary School. State, NYSC Model Secondary School, Ikot Ansa, Government Secondary School Akim = 3
6	Calabar south	Govt. Sec. Sch. Atu; Govt. Tech. Sch. Mayne Avenue, Govt. Sec. Sch. Idang = 3
7	Odukpani	Govt. Sec. Sch. Creek Town; Comm. Sec. Sch. Akap Okoyong; Govt. Sec. Sch. Ikoneto = 3

The study population comprised more females (285) than males (171), since females suffer more from the resultant effects of adolescent escapades. Purposive sampling was used to select key informants and health providers for interviews and discussion, based on their hands-on experience with young people, and their knowledge of reproductive health policies.

2.4. Data Collection

To collect information from the adolescents, a structured 50-item questionnaire was used. This consisted of two actions: A and B. Section A elicited background information on the respondents such as age, sex, income/occupation of parents and so on, while part of section B was built on a 4-point Likert scale to measure some variables around YFSRH services. These variables included awareness, tradition, attitude of workers and accessibility. The individual interviews were undertaken through direct (face to face) interactions with health care personnel and key informants who were either Principals of schools, or YFSRHS providers from NGOs. A total of 15 of them were purposively drawn as follows: Seven chief health workers, five YFSRHS providers from Girls Power Initiative, Planned Parenthood Federation Nigeria (PPFN) Society for Family Health (SFH); two secondary school Principals and the Head of Planning Research and Statistics in the Cross River State Secondary Education Board.

The purpose was to bring together information that can be used to explain the reproductive health challenges of young people, their understanding of youth-friendly RHS available, the level of utilisation, and the hindrances and obstacles to acquiring and using identified services. This information was obtained using an unstructured interview schedule. Similar questions were asked to key informants and health workers to obtain the needed data. Additional inquiries regarding precise information from

Secondary Education Board focused on particular feature of RHS in addition to the rules that give direction in providing YFSRHS for young persons.

2.5. Data Analysis

Four hundred copies of the questionnaire were retrieved for analysis. In the general description of data, frequency counts and simple percentages were used to summaries the responses made for all the questionnaire items. Our hypotheses were that the demographic factors (age and sex) parental income and occupation, knowledge and awareness of the adolescents, traditional religions and attitudes of health workers do not significantly influence accessibility and utilization of YFSRHS by secondary school adolescents.

3. Results

The study involved more female adolescents (63.7%; $n = 255$) than males (36.3; $n = 145$) (Table 2). More females were sampled because they are more vulnerable to the adverse effects and complications from dangerous and risky adventures. Females from urban schools formed 34.7% of the study population while the males formed 22.3%. From the rural schools, the females were 29% and males were 14%. All the respondents were aged between 15 and 19 years; 39.8% ($n = 159$) were aged 15 - 16 years; 44.2% ($n = 177$) were 17-18 years and 16.0% ($n = 64$) were 19 years or older. Respondents aged 15-16 years constituted 23% in urban schools and 16.8% in rural schools; for those aged 17-18 years, 24.5% were urban schools and 19.7% in rural schools; for those aged 19 years and above, 9.5% were in urban schools and 6.5% in rural schools. In terms of relationship status, 66.7% ($n = 267$) were single, 1.5% ($n = 6$) were married, 19.8% ($n = 79$) of females had boyfriends and 12.0% ($n = 48$) of males had girlfriends. Twelve percent of the females in urban schools and 7.8% of them in rural schools had boyfriends. For the boys that had girlfriends, 7.5% of them were from urban schools and 4.5% were from rural schools. With respect to mother's occupation, 7.8% ($n=31$) said their mothers were farmers, 45% ($n=180$) business women, 17.0% ($n=68$) teachers, 1.5% ($n=6$) were workers in the medical field, 28% ($n=112$) civil servants and 0.7% ($n=3$) were in the military. As for father's occupation 5.0% ($n=20$) said their fathers were farmers, 41% ($n=164$) businessmen, 13.5% ($n=54$) teachers, 2.3% ($n=9$) in the medical field and 0.7% ($n=3$) in the military. For the urban schools, 17.8% of mothers and 20.5% of fathers were civil servants; for the rural schools, the ratios were 10.2 and 65%, respectively. Business mothers and fathers in the urban schools formed 26.5 and 25.5%; in the rural schools, the ratios were 18.5 and 15.5%, respectively. Overall, 81 (20.3%) of the students were in SS 1, 183 (45.8%) in SS 2 and 136 (34.0%) in SS 3. From the urban areas, SSI students constituted 12%, SS2 were 26.8% and SS3 were 18.2%; in the rural schools, the ratios were 8.2, 19 and 15.8%, respectively.

3.1. Analysis of Responses to Traditional Factors

As shown in Tables 3-4, 63.8% ($n=255$) of the respondents agreed that their tradition forbids discussion of sex-related matters with anybody while 36.2% of them disagreed; 27.3% of those that agreed were from urban schools while 35.5% were from rural schools. Those that disagreed were 28.7% urban and 7.5% rural. About 44% ($n=176$) of respondents agreed that it is a traditional taboo to discuss sex-related matter with either fathers or mothers but 56% ($n=224$) disagreed. About 18% of those that agreed were from the urban schools while 25.75% were from the rural schools. Among those that disagreed, 57.5% were from urban schools and 17.3% were from rural schools. As to whether tradition allows them to discuss their sexuality with same sex parents only, 47.6% ($n=190$) of them agreed and 52.4% ($n=201$) disagreed. Similarly, 59% ($n=236$) of them agreed that in their tradition, sex matters are sacred while 41% ($n=164$) disagreed; 20.75% of those that agreed were from urban schools and 26.75% were from rural schools; 36.25% of respondents from urban and 16.25% from rural schools disagreed. As to whether tradition has no rules or regulations about human sexuality, only 16.8% ($n=67$) agreed while 83.2 percent ($n=333$) disagreed. About 75% ($n=298$) agreed that in their tradition, only adults seek sex-related counsel while 16.8% ($n=102$) disagreed. Among those that agreed, 11.75% were from urban

schools while 5% were from rural schools; 35.3% of respondents from urban schools and 38% from rural schools disagreed (Table 4). Thus, on the average, 51% agreed that tradition has an influence on their quest for sexual knowledge while 49 percent disagreed. Out of those who agreed, 24.3% were from urban schools while 26.7% were from rural schools Table 4. Those in disagreement were 33% from urban schools and 15% from rural schools.

Table 2.
Socio-demographic background of respondents.

Variables		Urban	Rural	Frequency	Percentage
Gender:	Male	89 (22.3)	56 (14)	145	36.3
	Female	139 (34.7)	116 (29)	255	63.7
	Total	228 (57)	172 (43)	400	100
Age:	15- 16 years	92 (23)	67 (16.8)	159	39.8
	17- 18 years	98 (24.5)	79 (19.7)	177	44.2
	≥19 years	38 (9.5)	26 (6.5)	64	16.0
	Total	228 (57)	172 (43)	400	100
Relationship status	Single	147 (36.71)	120 (30)	267	66.7
	Married	3 (0.75)	3 (0.75)	6	1.5
	Have boyfriend	48 (12)	31 (7.8)	79	19.8
	Have girlfriend	30 (7.5)	18 (4.5)	48	12.0
	Total	228 (57)	172 (43)	400	100
Mother's occupation	Farming	9 (2.25)	22 (5.5)	31	7.8
	Business	106 (26.5)	74 (18.5)	180	45.0
	Teaching	33 (8.25)	35 (8.75)	68	17.0
	Medical	6 (1.5)	0	6	1.5
	Civil servant	71 (17.8)	51 (10.2)	112	28.0
	Military	3 (0.75)	0	3	0.7
	Total	228	172	400	100
Father's occupation	Farming	8 (2)	12 (3)	20	5.0
	Business	102 (25.5)	62 (15.5)	164	41.0
	Teaching	26 (6.5)	28 (7)	54	13.5
	Medical	7 (1.75)	2 (0.5)	9	2.3
	Civil servant	82 (20.5)	68 (17)	150	37.5
	Military	3 (0.75)	0 (0)	3	0.7
	Total	228	172	400	100
Students' class	SS1	48 (12)	33 (8.25)	81	20.3
	SS2	107 (26.8)	76 (19)	183	45.8
	SS2	73 (18.21)	63 (15.8)	136	34.0
	Total	228	172	400	100.0
Family religion	Christianity	228 (57)	169 (42.3)	397	99.3
	Traditional	0	3 (0.7)	3	.7
	Total	228	172	400	100.0

Table 3.
Frequency of responses to the role of tradition in discussing human sexuality.

Item content Item parameter	No. observed (%)	SA	A	D	SD
Tradition forbids discussion of sex-related matters	n(%)	73(18.3)	182(45.5)	96(24.0)	49(12.2)
It is taboo for females to discuss sex with mother/father	n(%)	50(12.5)	126(31.5)	115(28.8)	109(27.2)
Tradition allows discussion with same parent only	n(%)	61(15.3)	129(32.3)	95(23.8)	115(28.8)
Sex matters are sacred in our tradition	n(%)	80(20.0)	156(39.0)	72(18.0)	92(23.0)
Our tradition has no rules about sexuality	n(%)	15(3.8)	53(13.0)	119(29.8)	214(53.5)
Only adults seek counsel on sex-related matters	n(%)	75(18.8)	223(55.8)	51(12.8)	51(12.8)

Source: SA (strongly agree), A (agree), D (disagree), SD (strongly disagree).

3.2. Accessibility to Youth Friendly Reproductive Health (YFSRH) Services

About 31% (n=123) of respondents agreed that they had free access to YFSRH services while 69.2% (n=277) disagreed (Table 5). From the urban schools, 19.5% of students agreed, 37.5% disagreed. From the rural schools, 13.75% agreed while 31.75% disagreed. About 72% (n=288) had limited access while 27.9% (n=112) had unlimited access. Also, 47.8% (n=191) had access through pharmacists or chemists of which 33.5% were from urban schools and 14.25% were from rural schools; however, 52.2% (n=209) disagreed. Only 11.5% (n=46) agreed that traditional herbal doctors were their only sure access to YFSRH services with 88.5% (n=354) disagreeing. Also, about 45.1% (n=180) had access to YFSRHS organized by their churches while 54.9% (n=220) disagreed.

Table 4.

Frequency of responses to the role tradition in discussing sexuality: urban versus rural schools.

Item content	No. observed (%)	Urban schools			Rural schools				
		SA	A	D	SD	SA	A	D	SD
Tradition forbids discussion of sex related matters	n(%)	30(7.5)	83(20.8)	78(19.5)	37(9.25)	43(10.8)	99(24.75)	18(4.5)	12(3)
It is taboo for females to discuss sex matters with father/mother	n(%)	20(5)	53(13.2)	75(18.8)	80(38.8)	30(7.5)	73(18.3)	40(10)	29(7.25)
Our tradition allows discussion of sexuality with same sex parents only	n(%)	25(6.3)	58(14.5)	67(16.8)	78(19.5)	36(9)	71(17.8)	28(7)	37(9.3)
Sex matters are sacred in our tradition	n(%)	51(12.8)	59(14.8)	50(12.5)	68(17)	29(7.3)	97(24.3)	22(5.5)	24(6)
Our tradition has no rules about human Sexuality	n(%)	10(2.5)	37(9.25)	58(14.5)	12.3(3)	5(1.25)	15(3.75)	61(15.3)	91(22.8)
Only adults seek sex-related counsel in our tradition	n(%)	39(9.75)	118(29.5)	33(8.25)	38(9.5)	36(9)	105(26.3)	18(4.5)	38(9.5)

Source: SA (strongly agree), A (agree), D (disagree), SD (strongly disagree)

About 53% (n=210) of respondents agreed that they had no access to any YFSRHS at all while 47.5 percent (n=190) disagreed. This was almost an even split, as 23.75% of those that agreed were in urban schools and 28.75% were in rural schools. Also, 77.3% (n=309) agreed that YFSRHS centers were not within their reach while 22.7% (n=91) disagreed. Further, YFSRHS was not within the reach of 40.5% of respondents from urban schools and 36.75% of students from rural schools. Among those that YFSRHS centers were located close to, 51.3% (n=205) agreed they do not go there while 48.7% do (Table 6). On average, about 49% of respondents agreed that they had access to YFSRHS while 51.3% disagreed.

3.3. Attitude of health staff

About 65% (n=259) agreed that the way health staff respond to sexual information issues really scares them while 35.2% (n=141) did not agree; about 60% (n=240) of them considered that health staff are never ready to attend to the youth on sexual matters (Table 7). About 43% of the students that agreed were from urban schools while 17.25% were from rural schools (Table 7). About 30.8% (n=123) of them agreed that the reaction of health staff to their reproductive information needs make them think YFSRHS should not exist. On whether YFSRHS staff are being paid for nothing, 19.2% (n=77) agreed while 80.8% (n=323) disagreed. About 34.7% (n=139) agreed that they never knew their usefulness until they met a health staff at the centre but 65.3% (n=261) of them disagreed with the statement. Similarly, 60% of respondents agreed that the time spent with a health staff at a YFSRHS was usually time well spent.

Table 5.
Frequency of responses concerning access to YFSRH services.

Item content	No. observed (%)	SA	A	D	SD
I have free access to any youth-friendly reproductive health Services	n(%)	35(8.8)	88(22)	155(38.8)	122(30.5)
My access to youth-friendly reproductive health services is limited	n(%)	49(12.3)	239(59.8)	61(15.3)	51(12.8)
My access to youth- friendly reproductive health services is through a pharmacist or chemist	n(%)	70(17.5)	121(30.3)	127(31.8)	82(20.5)
Traditional herbal doctors are my only access to YFSRHS	n(%)	16(4.0)	30(7.5)	97(24.3)	257(64.3)
have access to YFSRHS organized by my Church	n(%)	69(17.3)	111(27.8)	93(23.3)	127(31.8)
I do not have access to any YFSRHS at all	n(%)	73(18.3)	137(34.3)	87(21.8)	103(25.8)
YFSRHS centers are not really within my reach	n(%)	111(27.8)	198(49.5)	51(12.8)	40(10.0)
Though the YFSRHS center is located close to me, I do not go there	n(%)	45(11.3)	160(40)	110(27.5)	85(21.3)

Source: SA (strongly agree), A (agree), D (disagree), SD (strongly disagree)

Table 6.
Summary of responses concerning access to YFSRHS by location of schools.

Item content	No. observed (%)	Urban schools			Rural schools				SD
		SA	A	D	SD	SA	A	D	
I have free access to any youth-friendly reproductive health service	n(%)	26(6.5)	52(13)	104(26)	46(11.5)	19(4.75)	36(9)	51(12.75)	76(19)
My access to youth-friendly reproductive health services is limited	n(%)	19(4.75)	144(36)	35(8.75)	30(7.5)	30(7.5)	95(23.75)	26(6.5)	21(5.25)
My access to youth-friendly reproductive health services is through a pharmacist or chemist	n(%)	45(11.25)	89(22.25)	55(13.75)	39(9.75)	25(6.25)	32(8.0)	72(18)	43(10.75)
Traditional herbal doctors are my only access to YFSRHS	n(%)	4(1.0)	12(3.0)	47(11.75)	165(41.25)	12(3.0)	18(12.0)	57(14.25)	92(23)
I have access to YFSRHS organized by my church	n(%)	39(9.75)	63(15.75)	38(9.5)	88(22.0)	30(7.5)	82(20.5)	55(12.75)	39(9.75)
I have no access to any YFSRHS at all	n(%)	40(10.0)	55(13.75)	65(16.25)	68(17.0)	33(8.25)	101(25.25)	22(5.5)	35(8.75)
YFSRHS centers are not really within my reach	n(%)	65(16.25)	97(24.25)	40(10.0)	26(6.5)	46(11.5)	67(16.75)	11(2.75)	14(3.5)
Though the YFSRHS center is located close to me, I do not go there	n(%)	33(8.25)	93(23.25)	65(16.25)	37(9.25)	12(3.0)	67(16.5)	55(13.75)	48(12.0)

Source: SA (strongly agree), A (agree), D (disagree), SD (strongly disagree).

On whether YFSRHS staff should be posted to secondary educational institutions, 96.2% (n=385) agreed. Out of this, 56.25% were from urban schools and 40% were from rural schools (Table 8). Only 0.75% from urban schools and 3.0% from rural schools disagreed. Also, 90.3% (n=361) of the students agreed that an interaction with YFSRHS staff should be made compulsory to all youths once every three months. Of this, 51.5% from urban schools and 38.75 percent were from rural schools.

3.4. Awareness of YFSRHS

As indicated in Tables 8 and 9, 30.8% (n=123) of respondents were aware that YFSRHS were being provided in health facilities while 69.2% (n=277) were not aware. Out of those with awareness, 22% were from urban schools and 8.75% were from rural schools; of those not aware, 35% were from urban schools 34.25% from rural schools. Similarly, 31% (n=124) were aware of the provision of family planning services for youths while 69 % (38.0% from urban schools and 31% from rural schools) were not; On the other hand, 19% those that were aware of family planning services were from urban schools compared with 12.0% from rural schools. About 77.3% (n=229) of respondents knew that services provided by health facilities were for STD while 26.2% (n=105) did not. On the awareness of availability of HIV/AIDS prevention services, 81.8% (n=327) of the adolescents agreed while 18.2% (n=77) disagreed.

Table 7.

Frequency of responses concerning the attitude of YFSRHS staff.

Item content	No. Observed (%)	SA	A	D	SD
The way health staff responds to sexual information issues really scares me	n(%)	81(20.3)	178(44.5)	77(19.3)	64(16.0)
Health staff are never Ready to attend to any youth on sexual matters	n(%)	39(9.8)	201(50.3)	83(20.8)	77(19.3)
Because of their reaction, YFSRHS should not exist	n(%)	32(8.0)	91(22.8)	109(27.3)	168(42.0)
The health staff in the YFSRH centres are paid for nothing	n(%)	22(5.5)	55(13.8)	153(38.3)	170(42.5)
I never knew YFSRHS were so useful until I met a health staff at the center	n(%)	43(10.8)	96(24)	88(22.0)	173(43.3)
The time spent with health staff at a YFSRHS is time well spent	n(%)	63(15.8)	177(44.3)	75(18.8)	85(21.3)
YFSRHS staff should be posted to secondary educational Institutions	n(%)	199(49.8)	186(46.5)	0(0)	15(3.8)
Interaction with YFSRHS staff should be made compulsory to all youths at least once every three months	n(%)	164(41.0)	197(49.3)	6(1.5)	33(8.3)

Source: SA (strongly agree), A (agree), D (disagree), SD (strongly disagree)

Table 8.

Frequency of responses concerning the attitude of health workers: urban versus rural schools.

Item content	No. observed (%)	Urban schools				Rural schools			
		SA	A	D	SD	SA	A	D	SD
The way health responds to sexual information issues really scare me	n(%)	60(15)	106(26.5)	32(8.0)	30(7.5)	21(5.25)	72(18.0)	45(11.25)	34(8.5)
Healthy staff are never ready to attend to any youth on sexual matters	n(%)	30(7.5)	141(35.25)	30(7.5)	27(6.75)	9(2.25)	60(15.0)	53(13.25)	50(12.5)
Because of their reaction, YFSRHS should not exist	n(%)	22(5.5)	58(14.5)	42(10.55)	106(26.5)	12(3.0)	33(8.25)	67(16.75)	62(15.5)
The health staff in the YFSRH centers are paid for noting	n(%)	14(3.5)	34(8.5)	79(19.75)	101(25.25)	8(2.0)	21(5.25)	74(18.5)	69(17.5)
I never knew YFSRHS were so useful until I met a health staff at the center	n(%)	38(9.5)	65(16.25)	30(7.5)	95(23.75)	5(1.25)	31(7.75)	58(14.5)	78(19.5)
The time spent with health staff at a YFSRHS is time well spent	n(%)	25(6.25)	72(18)	61(15.25)	70(17.5)	38(9.5)	105(26.3)	14(3.5)	15(3.75)
YFSRHS should be posted to secondary educational institutions	n(%)	126(31.5)	99(24.75)	0(0)	3(7.5)	73(18.3)	87(21.8)	0(0)	2(0.5)
Interaction with YFSRHS staff should be made compulsory to all youths at least once every three months	n(%)	87(21.75)	119(29.75)	1(0.25)	21(5.25)	77(19.3)	78(19.5)	5(1.25)	12(3.0)

Source: SA (strongly agree), A (agree), D (disagree), SD (strongly disagree).

For pap smear test, 24.3% (n=97) agreed that they were aware while 75.7% (n=303) were not aware; 16.25 percent of those aware were from urban schools while 8 percent were from rural schools (Table 10). About 32% from urban schools and 35% from rural schools were not aware of the test. On the usefulness of condoms, 93.5% (n=374) were aware but 6.5% (n=26) were not; 54.5% of the respondents from urban schools and 39% from rural schools knew the usefulness of condom. However, 70% (n=280) said they were not aware of places that condoms were provided free of charge while 30% (n=120) were aware.

3.5. Knowledge of YFSRHS

About 61% (n=243) admitted that they knew about YFSRHS services while 39.2% (n=157) did not; 49 percent of those that knew were from urban schools and 8% were from rural schools (Table 11); 31.25 and 16.75% that did not know were from rural and urban schools, respectively. With respect to which of the YFSRHS they knew, condom provision was highest at 57.5% (n=230), of which 32% were from urban schools and 25.5% were from rural schools. This was followed by pregnancy (53.8%, n=215) of which 29.5% were from urban schools and 24.25% from rural schools. The least (7.5%; n=30) knowledge was adolescents SRS, of which 5.5% were from urban schools and only 2 percent from rural schools. The highest number of services known was four and by 22% (n=88) of respondents. Six (6) respondents from rural schools knew about none of the services. Specifically, only 37.8% (n=151) knew about YFSRHS while 62.3% (n=249) did not know.

Of those who knew, 26.25% were from urban schools and 11.5% were from rural schools; 30.75% of respondents from urban schools and 31.5% from rural schools did not know. On the source of information, 34.3% (n=137) got no information from the sources listed in our questionnaire, 3.8% (n=15) got it from friends, 31.3% (n=125) got it from parents, 30% (n=120) from schools and only 0.8% (n=3) got it from health facilities.

Table 9.

Frequency of responses concerning awareness of YFSRHS.

Item content	No. observed		Responses A	D	SD
	(%)	SA			
Awareness that ASRHS are provided in health facilities	n(%)	35(21.25)	88(22.0)	107(26.8)	170(42.5)
Awareness of provision of family planning services for adolescents	n(%)	36(9.0)	88(22.0)	118(29.5)	158(39.5)
MCH services are for adult men and women	n(%)	22(5.51)	207(51.8)	96(24.0)	75(18.8)
Awareness of services provided for sexually transmitted diseases by health families	n(%)	125(13.3)	170(42.5)	49(12.3)	56(14.0)
Awareness of HIV/AIDS prevention services for adolescents	n(%)	138(34.5)	189(47.3)	27(6.8)	46(11.5)
Awareness of existence of pap-smear test for adolescents	n(%)	15(3.0)	82(20.5)	99(24.8)	204(51.0)
Awareness of usefulness of condom	n(%)	178(44.5)	196(49.0)	3(0.8)	23(5.8)
Awareness that condom provision is free of charge	n(%)	97(24.3)	183(45.8)	39(9.8)	81(20.3)

Source: SA (strongly agree), A (agree), D (disagree), SD (strongly disagree).

Table 10.
Awareness of YFSRHS by students from rural versus urban schools.

Item content	No. Observed (%)	Urban schools				Rural schools			
		SA	A	D	SD	SA	A	D	SD
Awareness that ASRHS are provided in health facilities	n(%)	28(7.0)	60(15.0)	82(20.5)	58(14.5)	7(1.75)	28(7.0)	25(6.25)	112(28.0)
Awareness of provision of family planning services for adolescent	n(%)	25(6.25)	51(12.75)	63(15.75)	89(22.25)	11(2.75)	37(9.25)	55(13.75)	69(17.25)
MCH services are for adult men and women	n(%)	11(2.75)	124(31.0)	41(10.25)	52(13.0)	11(2.75)	83(20.75)	55(13.75)	23(5.75)
Awareness of services provided for sexually transmitted diseases by health facilities	n(%)	70(17.5)	108(27.0)	20(5)	30(7.5)	55(13.75)	62(15.5)	29(7.25)	26(6.5)
Awareness of HIV/aids prevention service for adolescents	n(%)	97(24.25)	99(24.75)	7(1.75)	25(6.25)	41(10.25)	90(22.5)	20(5)	21(5.25)
Awareness of existence of pap-smear test for adolescence	n(%)	15(3.75)	50(12.5)	47(11.75)	116(29.0)	0(0)	32(8.0)	52(13.0)	88(22.0)
Awareness of usefulness of condom	n(%)	112(28.0)	106(26.5)	0(0)	10(2.5)	66(16.5)	90(22.5)	3(0.75)	13(3.25)
Awareness that condom provision is free of charge	n(%)	45(11.25)	97(24.25)	20(5)	66(16.5)	52(13.0)	86(21.5)	19(4.75)	15(3.75)

Source: SA (strongly agree), A (agree), D (disagree), SD (strongly disagree).

Table 11.
Frequency analysis of responses to items on knowledge of YFSRHS.

Item content	Response options	Urban	Rural	N	Percentage
Knowledge about sexual reproductive health services	Yes	196(49)	47(11.75)	243	60.8
	No	32(8)	125 (31.25)	157	39.2
	Total	288(57)	172(43)	400	100.0
Which RHS do you know of (some know more than one)	ASRH	22(5.5)	8(2)	30	7.5
	Family Planning	58 (14.5)	28 (7)	86	21.5
	Pregnancy	118 (29.5)	97 (24.25)	215	53.8
	MMCH	88 (22)	62 (15.5)	150	37.5
	STDs	73 (15.25)	65 (16.25)	138	34.5
	HIV/AIDs	96 (24)	90 (22.5)	186	46.5
	Condom Provision	128 (23)	102(25.5)	230	57.5
	Pap smear	52 (913)	16 (4)	68	57.5
Distribution by the number of services known	None	0	6 (1.5)	6	1.5
	One	49 (12.25)	32 (8)	81	20.3
	Two	60.(15)	20 (5)	80	20.0
	Three	31 (7.75)	19 (4.75)	50	15.5
	Four	60 (15)	28 (7)	88	22.0
	Five	20 (5)	14 (3.5)	84	21.0
	Six	8 (2)	3 (0.75)	11	2.7
	Total	228 (57)	172 (43)	400	100.00
Knowledge of youth friendly services	Yes	105 (26.25)	46 (11.5)	151	37.8
	No	123 (30.75)	126 (31.5)	249	62.3
	Total	228 (57)	172 (34)	400	100.0
Source of information YFSRSH services	None of the sources	66 (16.5)	71 (17.75)	137	34.3
	Friends				
	Parents	8 (2)	7 (1.75)	15	3.8
	School	72 (18)	53 (13.25)	125	31.3
	Health facility	79 (19.75)	41 (10.25)	120	30.0
	Total	3 (0.75)	0 (0)	3	0.8
	228 (57)	172 (43)	400	100.00	

3.6. Utilization of YFSRHS

Only 17.5% (n=70) of respondents (14.5% urban and 3% rural) had visited or used YFSRHS while 82.6% (n=330) (42.5% urban and 40% rural) had never (Table 12). On the number of times they had visited or used YFSRHS, 82.2% (n=329) said never, 7.8% (n=31) said once, 7.3% said twice, 0.5% (n=2) said thrice and 2.3% (n=9) said more than three (3) times. The highest service used was family planning (31.8%; n=127) followed by STDs (27%; n=108), adolescent sexual and reproductive health (26.3%; n=105) and MCH (5.0%; n=20). About 22% of those that used family planning services were from urban schools; 19.25 percent went for STD services while only 4.75 percent of went for ARH services from the rural schools. None of the respondents, whether from urban or rural schools had used the service for pap smear.

In terms of number of health services used 32.3% (n=129) had two different services, 25.5% (n=102) used one service, 21.5% (n=86) used three services, 5.0% (n=20) used four services and 15.8% (n=63) used none; 20.25% of the urban respondents had used up to two different types of services and 15.75 percent have used three different services. From the rural schools, 14% had used only one service while 12% used two different services; only 1% had used up to four services. Twelve percent (n=48) said they had never gone to the mentioned places for YFSRHS, 21.3% (n=85) had gone to government health facilities, 24.8% (n=99) to private health facilities, 39% (n=156) to pharmacy/chemist, 2.3% (n=9) to their school programmed organized and 0.7% (3) to community-based service (Table 13).

About 44% (n=176) of respondents had problems accessing YFSRHS; on the type of problems usually encountered, 19.3% (n=77) said lack of equipment, 20.8% (n=83) said poor service quality, 16.5% (n=66) said location of service center, 5.0% (n=20) said inconvenient hour of service and 5.8% (n=23) said lack of privacy; 15% of respondents with lack of equipment as a problem were from urban schools, 14.5% percent of them had poor services as their problems. From the rural schools, 12.25% had location of health facilities as their problem. About 81% (n=325) of the respondents said they had confidants while 18.7% (n=75) had none. In terms of who their confidants were, 4.3% (n=17) said boy/girlfriend, 57.5% (n=230) said mother, 22.5% (n=90) said father, 11.3% (n=45) said sibling, 1.5% (n=6) said teacher and 3.0% (n=12) said religious leader.

4. Discussion

The adolescent age is a transition period of human development characterized by risk of sexual and reproductive problems arising from the quest for independence and relationships, especially with the opposite sex. This age makes it difficult for adolescents to have confidential talks with older persons (be they parents, health workers or teachers) about their health challenges as it concerns sexuality. In the Focus Group Discussion (FGD) with adolescent females aged 15-19 years at Akpabuyo and Biase, the participants said they do not openly talk about sexual matters with their parents, especially their fathers, not because they are not free but for fear of what the parents will think of them. At Akpabuyo, a participant said:

"Our father can kill us. They do not even accept when they see you with a boy not to talk of mentioning anything on a topic like that...."

4.1. At Biase Another Participant Said

"We are more afraid of our fathers than our mothers but even then, it is very difficult to talk about sexual matters. We do not even ask them any question. They also will not talk about it. We talk to our siblings on this. We can talk to our parents on other things".

An interview with a project officer of Planned Parenthood Federation of Nigeria (PPFN) confirmed this as she said that young persons are usually not confident in discussing their sexual issues with adults, especially their parents because of the unfriendly attitude of adults on ASRH. Another staff of Girls' Power Initiative (GPI) said that young persons are scared that the adults will judge them wrongly and discriminate against them. They therefore prefer their peers who may have same experiences and will understand more. All the Primary Health Care (PHC) workers interviewed were also of the same opinion that adolescents are shy when talking with adults.

Table 12.
Frequency of responses concerning the utilization of YFSRHS.

Item content	Response options	Urban	Rural	N	Percentage
Ever visited or used YFSRHS	Yes	58(14.5)	12(3)	70	17.5
	No	170(42.5)	160(40)	330	82.6
	Total	228(57)	172(43)	400	100.0
Number of times visited YFSRHS	Never	170(42.5)	159(39.75)	329	82.7
	Once	21(5.25)	10(2.5)	31	7.8
	Twice	27(6.75)	2(0.5)	29	7.3
	Thrice	2(0.5)	0(0)	2	.5
	More than 3 times	9(2.25)	0(0)	9	2.3
	Total	228(57)	172(43)	400	100.0
Type of services used (not necessarily in a YF centre)	Adolescent sexual and reproductive health	72(18)	35(8.75)	105	26.3
	Family planning	86(21.5)	41(10.25)	127	31.8
	Pregnancy	51(12.75)	31(7.75)	82	20.5
	Mother and child health	9(2.25)	11(2.75)	20	5.0
	Sexually transmitted disease	77(19.25)	31(7.75)	108	27.0
	HIV/AIDS services	57(14.25)	40(10)	97	24.3
	Pap smear	0(0)	0(0)	0	0
	Condom provision	68(17)	53(13.25)	121	30.3
	Others (no response)	25(6.25)	41(10.25)	66	16.5
	None	22(5.5)	41(10.25)	63	15.8
Number of health services used	One	46(11.5)	56(14)	102	25.5
	Two different services	81(20.25)	48(12)	129	32.3
	Three different services	63(15.75)	23(5.75)	86	21.5
	Four different services	16(4)	4(1)	20	5.0
	Total	228(57)	172(43)	400	100.0

Table 13.
Frequency of responses concerning the utilization of YFSRHS.

Item content	Response options	Urban	Rural	N	Percentage	
Where did you go for these services?	None of the mentioned places	14(3.5)	34(8.5)	48	12.0	
	Govt. health facility	36(9)	49(12.25)	85	21.3	
	Private health facility	65(16.25)	34(8.5)	99	24.8	
	Pharmacy/chemist	108(27)		156	39.0	
	School programme	5(1.25)	48(12)	9	2.3	
	Community-based service	0(0)	4(1)	3	0.7	
	Total	228(57)	172(43)	400	100.0	
	Do you have problems accessing YFSRH services?	Yes	121(30.25)	55(13.75)	176	44.0
		No	104(26)	120(30)	224	56.0
		Total	228(57)	172(43)	400	100.0
Types of problems	No problem at all	59(14.75)	72(18)	131	32.8	
	No equipment	60(15)	17(4.25)	77	19.3	
	Poor service quality	58(14.5)	25(6.25)	83	20.8	
	Location of facility	17(4.25)	49(12.25)	66	16.5	
	Inconvenient hour of service	18(4.5)	2(0.5)	20	5.0	
	Lack of privacy	16(4)	7(1.75)	23	5.8	
	Total	228(57)	172(43)	400	100.0	
	Do you have any confidant?	Yes	221(55.25)	104(3.75)	325	81.3
No		7(1.75)	102(25.5)	75	18.7	
Total		228(57)	172(43)	400	100.0	
Who is your confidant?	Boy/girl friend	2(0.5)	15(3.75)	17	4.3	
	Mother	128(32)	102(25.5)	230	57.5	
	Father	63(15.75)	27(6.75)	90	22.5	
	Sibling	20(5)	25(6.25)	45	11.3	
	Teacher	0(0)	6(1.5)	6	1.5	
	Religious leader	15(3.75)	3(0.75)	12	3.0	
	Total	228(57)	172(43)	400	100.0	

The broad range of health problems associated with adolescent sexuality have more impact on the females than the males. The various complications that go with adolescent pregnancies and deliveries, unsafe abortions affect only the females. This means that more females are expected to access YFSRHS than males, but in the face of some health workers not being approachable and the services not adolescent-friendly, there can be no utilization of such services. As shown in Tables 7-8, there was a split opinion of respondents concerning their encounters with health staff which is strongly instrumental to whether or not they will utilize the services offered and what they will tell their peers as their experiences. Utilization of services depends majorly on accessibility of such services, and if the setting for such services is not free of barriers, it can interfere with care and privacy, the adolescents will not be willing to come back when they need to and they will not be able to recommend it to their friends. According to Federal Ministry of Health Abuja [13] the ratio of adolescents utilizing a facility is ascribed to the type and style of service delivery. Maro [14] suggested that services to the adolescents must be friendly, meaning that they must be acceptable to them and appropriate for them.

In other words, it should be delivered in the right style. This is most often found in a private facility than in a government facility. From our Focus Group Discussion on these age/gender variables with the females in Calabar, the adolescents were often shy, especially if the facility does not operate integrated services where the mission of adolescents to such centres could be shielded. A female participant in Calabar said:

"We don't know where they are doing anything for us like that, if we know, we cannot go there because if people see us enter there, they will laugh at us". When they were asked where they go to for ASRH services, they laughed and responded, "anywhere".

4.2. Discussion With the Males Gave the Same Impression, They Said

...It is only condom, but we rarely use it because even if we go to the chemist, it is difficult to ask for it. If we do, they look at us somehow, especially when there are other customers. Sometimes we will say that somebody sent us, still they look at us.

This was also confirmed by one of the key informants, a project officer with the Planned Parenthood Federation of Nigeria in an interview which she suggested integrated health services as a way of enhancing utilization of reproductive health services for adolescents. This therefore means that while the government health facilities have barriers to utilization by the adolescents, they simply turn to private ones which could be a patent medicine facility, quack practitioners and so on.

4.3. Influence of Income and Occupation of Parents on Accessibility and Utilization of YFSRHS

Our data showed that the occupation of parents significantly influences the access to and utilization of YFSRHS by adolescent students. The Implication of this is that a student is poor because his parents are poor. McFarland [15] observed that use of such services was related to the adolescent socio-economic status as measured by the type of job their parents did. Since adolescents are naturally expected to be in school at this time, except for those who have dropped out, they do not have their personal finance, thus they rely on their guardians or parents for their welfare, including health; if the services for adolescent sexual health are available but beyond the reach of their pockets or that of their parents, then they cannot utilize such services. The user fee charged at the health facilities may hinder the adolescents from utilizing YFSRHS [16]. Matters are generally more complicated for adolescents from poor and unstable homes because they are the ones more likely to have sexual experience at a very early age [17]. Subjects whose parents have high socio-economic status may be able to afford the cost of health care but those of low status struggle to afford the cost [18]. This makes utilization not possible except the cost is subsidized or reviewed downward.

4.4. Relationship Between Knowledge and Awareness of Secondary School Adolescents and Accessibility and Utilization of YFSRHS

Ordinarily, knowledge and awareness are supposed to empower the adolescents to utilize a service or a facility. As indicated in Table 9, respondents were only massively aware of the usefulness of condom, and services provided for STD in the health facilities. All other items on the instrument were not used by most respondents. There are other types of SRH services that the adolescents are supposed to be offered which they are not aware of. It is even doubtful what those that claimed knowledge and awareness of YFSRHS really know and the sources of that knowledge. A Focus Group participant in Biase Local Government Area when asked what she knew about family planning answered thus... *"I was told that it is the removal of a woman's womb"*. With such a notion among youths, which triggers fear of infertility in the future, they considered it more logical and easier to go for an induced abortion than to use contraceptive [19].

4.5. Tradition And Religious Influence

Sexual matters are very sensitive. It is socially and culturally unacceptable for unmarried adolescents to be sexually active in Nigeria. For the same reasons, some parents are still uncomfortable

and find it very difficult to talk frankly and honestly with their adolescent wards. This makes available SRH services inaccessible for fear of stigmatization, thereby hindering adolescents from seeking health care in sexual matters Fife and Wright [20]; Mbugua [21]; Eneji, et al. [22] and Eneji, et al. [23]. UNFPA [24] counseled that efforts be made to provide SRH services to young people if they have already begun sexual activity since they may have apparent demands that may result to deteriorating health outcomes if the needs were not attended to. Nare, et al. [25] identified the division among parents, religious leaders, and community on issues of adolescents' sexuality.

From the Focus Group Discussion among the females in Akpabuyo, two adolescents had the same experience. They withdrew from participation at GPI because of negative comments from the public and resistance by their parents. This is what they said:

"They told us that, that place (GPI) is a bad place. That the teachings there make girls to be bold, insolent and corrupt. They kept saying that the teachings at GPI were negative and against our tradition (as Africans)".

It is interesting to note that both of them were living in Calabar at that time of participation before their parents moved to Akpabuyo. They never met themselves while at GPI, neither did they live close to one another. They admitted that GPI experience was worth it. One of the secondary school principals in Calabar as a teacher, a father and a pastor said:

What they do in GPI is bad. It communizes what should not be made common. Even our African tradition holds it sacred. What they teach the girls there is alien to our culture, and that is why the English society have collapsed. Our own is collapsing too.

This clearly shows public opinion towards adolescent reproductive health concerns. Interview with a GPI staff confirmed all these. She said that misconception by the public affects the operation of the organization. It can therefore be seen clearly that, whereas government is not providing a comprehensive adolescent reproductive health service, the ones provided by non-governmental organizations (NGO) are not accepted by the public; this is a clear cultural barrier based on belief system. This is because it is considered sinful and un-cultural for an unmarried youth (adolescent) to engage in sexual relationship, so no information is given and no service is expected to be accessed or utilized.

4.6. Attitude of Health Workers

Warenus [26] reported that reproductive health services in public establishments were not adequately utilized because of the judgmental attitude of the service providers. This is corroborated in Nare, et al. [25] that adolescents and young people were harassed and sent away from a health facility and asked instead to focus on their studies. This attitude of the health workers may not encourage the adolescents to return after the first visit. Three of the Primary Health Care workers interviewed also alluded to this that they may not be necessarily harsh on the adolescents but they will counsel them and send them away. But to where? Participants at the various Discussion sessions had nothing to say about Health care providers' attitude because they had no reasons for the services. Others that had encounters with them were for general medical cases and not for reproductive health. Only one female in Akpabuyo and one in Calabar had such need and both said they patronize patent medicine shops. One of them gave her reason for using the patent medicine shop as *"it is not possible for her to go to the health facility because the health worker in charge there was her mother's friend"*.

At the interview, when the health workers were asked how they felt and what will be the approach if an adolescent walks into their clinic and demands for family planning services. A family planning provider in a primary health facility in Odukpani exclaimed *"what a discouraging scenario!"* Others said they will find out reasons for such demand and also find out family background. Only one public health staff said she will counsel adolescent and after that grant the request because according to her, preventing pregnancy with family planning is still better than unsafe abortion.

Another Primary Health Care worker said she will not even advocate for establishment of YFSRHS, let the services be annexed to schools. However, health officers from the NGOs (GPI, PPFN and SFH) all said that they will counsel the adolescent as family planning should not be the first option but where

the adolescent is already sexually active, non-prescriptive methods may be advised to avoid attendant risks of exposure to unprotected sexual intercourse.

5. Conclusion

This study aimed to determine the accessibility of YFSRH services to secondary school adolescents in the Southern Senatorial district of Cross River State, Nigeria, since the adolescent stage is the transition from childhood to adulthood, marked by profound physical, mental and emotional changes. This transition could be quiet and serene or turbulent and unpredictable. We found a serious challenge to the accessibility of adolescents to youth-friendly sexual and reproductive health services in the study area. The accessibility was influenced by age, sex, income and occupation of parents of adolescents and knowledge and awareness of YFSRH services by adolescents. Traditional and religious factors also limited the accessibility. Therefore, youth-friendly service centres should be established to help cater for the reproductive health needs of adolescents in the study area. These youth-friendly services should be integrated into existing health facilities to expand the services and shield the adolescents who may be shy of accessing an adolescent-specific service centre. Adolescent reproductive health should be a core subject in the secondary schools since all students there are adolescents and youths with common interest.

Transparency:

The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

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