



Young peoples' knowledge on availability, access and utilization of Sexual and Reproductive Health Services in Cameroon: The case of Fako Division.

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Abstract:

Introduction: Access to a range of sexual and reproductive health services that safely and effectively satisfy the needs of young people is considered a human right. Young people often do not know where and how to access Sexual and reproductive health services (SRH).

Objective: The objective of this study was to assess young peoples' knowledge on availability, access and utilization of sexual and reproductive health services.

Method: A school and facility based cross sectional study using semi- structured questionnaires and focus group discussion among student and young people living with HIV aged 10-24 years living in Fako Division. Data was analyzed using SPSS version 25 and the *Atlas Ti* version 9.0 software respectively.

Results: Inadequate knowledge on availability, access and utilization of sexual and reproductive health services at 369(57.4%), 100(80.6%) and 786(52.3%) was recorded respectively. This findings were consistent in the FGDs, and few who had knowledge of SRHSs, did not know where services were located. Students from BGS Buea and GHS Limbe had a 31% and 49% chance of presenting with inadequate knowledge on the utilization of SRH services than counterparts from PCSS Buea respectively [(AOR, 0.50; 95% CI: 0.36-0.69; p=<0.001) (AOR 0.33 95% CI: 0.23-0.47; p=<0.001)]. Students of the age group 15-19 years had a 14% chance of having adequate knowledge on utilization of SRH services than students of the age group 10-14years old (AOR 1.29; 95% CI; 1.00-1.64 p=0.044). Female students had a 12% chance of being more knowledgeable than male students with respect to utilization of SRH services (AOR 1.23; 95% CI: 0.79-1.54; p=0.073).

Conclusion: Insufficient knowledge of availability, access and utilization of sexual and reproductive health services by young people in Cameroon is still a call for concern. Therefore creating awareness on sexual and reproductive health services through community, media and school sensitization will increase their knowledge thereby improving uptake of these services.

Key words: Sexual and reproductive health, Availability, Accessibility, Utilization Young people, Knowledge

INTRODUCTION

Young people often do not know where and how to access Sexual and reproductive health services (SRHSs) [1]. Access to a range of sexual and reproductive health services that safely and effectively satisfy both young men's and women's needs is considered a human right. With most young people become sexually active before the age of 20[2]. Worries on Adolescent and youth sexual and reproductive health services (AYSRHS) is at the peak and a Public health concern. This is so following reports of increased sexual activity, and sexually transmitted infections (STIs) including Human immune Virus (HIV) infection coupled with increased early pregnancy rates among this group[3]. Majority of such occurs in low resource settings due to lack of access to quality sexual and reproductive health information and services[4]. Therefore Ensuring universal access to quality services, free of discrimination, coercion, or violence, has been a core aim of the sexual and reproductive health and right(SRHR) community since the 1994

International Conference on Population Development (ICPD) in Cairo, Egypt, and is seen as an essential aspect of reproductive rights[5].

The low levels of SRHR knowledge among adolescents and youth, along with the limited access to and usage of SRHR services and contraceptive methods, make it essential to provide comprehensive sexuality education (CSE) and ensure access to quality AYSRHSs [1]. According to research evidence in Ethiopia, many adolescents still lack access to health care and young people are at risk of reproductive health issues [6]. Adolescent and youth friendly sexual and reproductive health services (AYFSRHSs) is limited in a few government (public) health institutions in metropolitan centers, and many youth are less aware, experienced, and comfortable in obtaining health care in their locations. Also majority of youths lack basic information and knowledge about the available SRH services, and access to affordable and confidential services[7]. This lack of knowledge has led to young people being at an increased risk of STIs/HIV, unplanned pregnancy and pregnancy-related problems[6]. A study conducted in Ghana reported low knowledge among young people on the availability of SRHS[8].

Across sub-Saharan African countries, young people especially girls experience structural, health facility, community, interpersonal, and individual level barriers and facilitators to accessing and utilizing SRH services[9,10]. This include barriers to care such as laws and policies that require parental or partner consent, lack dedicated adolescent-friendly spaces or service providers that stigmatize and discriminate against adolescents [9,11,12]. Individual factors may include self-efficacy, lack of SRH knowledge, and awareness about the availability and type of services offered[9,13]. In Cameroon, Dezkem *et al* reported low knowledge among young people on the availability of SRHS[14]. Based on a 2018 forum to boost SRHS within schools and universities in Cameroon, it was found that there is a knowledge gap in the transmission of sex education [15,16]. Though there are ongoing programs to improve young people's knowledge of SRHS in Cameroon, there is limited evidence-based information evaluating the level of knowledge of SRHS among this group of persons. Therefore, this study seeks to assess young people's knowledge of availability, accessibility, and utilization of SRHSs within Fako division, towards the promotion of health and well-being of adolescents and young people.

MATERIALS AND METHOD

Study area was in three health districts in Fako Division namely: Buea, Limbe, Tiko health districts. Presently Fako Division is one of the divisions that have been seriously affected by the crisis thus making movement challenging into some of the districts. A school and facility based cross sectional study conducted from June 2022 to October 2023 among secondary school students and young people living with HIV aged 10 to 24 in Fako Division of the South West Region. A multistage sampling technique was used and purposive sampling employed to select the districts and schools selected for the study.

Sampling size was obtained using LORENZ formula ($Z^2P(1-P)/e^2$) with an effect of 3.5, proportion of 50% and a non-response rate of 10% giving a sample size of 1478 participants for the study. The sample size was proportionately distributed to the selected schools. Data was collected using semi-structured questionnaire and focus group discussion. The number of students in each school was arbitrarily allocated across the classes from form one to upper sixth. Also this was done without recourse to any standards but rather to capture enough respondents to provide the needed data set.

Data analysis was done using Statistical Package for Social Sciences (SPSS) version 25.0 and frequency tables were generated from the proportions and graphs plotted accordingly. At 95% confidence interval and significance level of <0.05 , bivariate and multivariate logistic regression models were utilized to explore the relationship between socio-demographic variables, and others factors (health facility, cultural, economic factors) with the knowledge of availability, access and utilization of SRH services.

For ethical consideration, the study protocol was approved by the University of Bamenda Ethical Committee code number (2022/0712H/UBa/IRB) as well as administrative clearance from the regional delegation of public health, for South-West Region Cameroon. Consent of respondents was obtained, and confidentiality was maintained by assigning codes to the questionnaires.

In determining of level of Knowledge, questions that were scored with correct answers were assigned a score of 1 and incorrect a score of zero. A question with a single correct response was scored 1 while questions with multiple correct responses were weighted and scored according to the number of right answers so that they all sum up to 1. Participants who scored below the mean

value were considered to have inadequate knowledge, while participants who scored the mean and above were considered to have adequate level of knowledge.

Results

A total of 1489 (100.0%) of the students were recruited across 3 health districts in Fako. The mean age of the participants was 15.6 years (standard deviation = 2.2) and ranged from 10 to 24 years. Majority 989 (66.4%) of the respondents were between 15 and 19 years. The female gender of 984 (66.1%) participants dominated the study. The estimated monthly income of the majority [871 (78.5%)] of the students was less than 20,000 FCFA. In addition, most 1019 (68.4%) of the participants were living with their parents at the time of the study. Slightly more than half 790 (53.1%) of the students reported owning a social media handle. The socio-demographic characteristics of the study participants is presented on Table 1.

Table 1: Socio-demographic characteristics of students in Secondary Schools in the Limbe, Tiko and Buea health district.

Variable	Buea No (%)	Tiko No (%)	Limbe No (%)	Total No(%)
Institution of studies				
BGS Buea	462(66.60)	0	0	462(31.0)
GHS Limbe	0	0	356(63.8)	356(23.9)
GHS Mbonjo	0	0	202(36.2)	202(13.6)
GHS Motombolombo	0	237(100.0)	0	237(15.9)
PCSS Buea	232(33.4)	0	0	232(15.6)
Total	694(100)	237(100)	558(100.0)	1489((100.0)
Age (years)				
10-14	125(18.0)	57(24.1)	261(46.80)	443(29.8)
15-19	553(76.8)	172(72.6)	284(50.9)	989(66.4)
20-24	36(5.2)	8(3.4)	13(2.3)	57(3.8)
Total	694(100.0)	237(100.0)	558(100.0)	1489(100.0)
Sex				
Female	385(65.7)	152(64.1)	386(69.2)	984(66.1)
Male	201(34.3)	85(35.9)	172(30.8)	505(33.9)
Total	586(100)	237(100.0)	558(100.0)	1489(100.0)
Monthly income (FCFA)				
<20000	323(70.7)	157(66.2)	391(81.8)	871(78.5)
20100-40000	57(8.2)	7(4.0)	49(10.3)	113(10.2)
40100-60000	34(4.9)	4(2.3)	23(4.8)	61(5.5)
>60100	43(6.2)	6(3.4)	15(3.1)	64(5.8)
Total	457(100.0)	174(100.0)	478(100.0)	1109(100.0)
Significant others				
Alone	16(6.9)	18(7.6)	18(3.2)	91(6.1)
Parents	163(70.3)	161(67.9)	433(77.6)	49(3.3)
Relative	45(19.4)	50(21.1)	100(17.9)	1019(68.4)
Others	8(3.4)	8(3.4)	7(1.3)	330(22.2)
Total	232(100.0)	237(100.0)	558(100.0)	1489(100.0)

Availability of SRHSs among students of Limbe,Tiko and Buea HD

More than half 846(56.8%) respondents had not heard on available SRHSs with a majority 373(66.8%) of them from the Limbe Heath District. This was also captured during the focus group discussion where majority attest to the fact that they are not aware of available SRHSs. *“We don’t know of any of such services” (FGD, RHL).*

One of the FGD participant had heard about SRHSs but had no idea where it was located. On the other hand, there were 643(43.2%) of them who had heard of the availability of these services. Out of those who had heard, less than half 274(42.6%) got this information from mass media (radio), 178(28.0%) from friends and 203(32.0%) from other sources such as family, community and teachers. More than half (151(52.2%) said the SRH services were located in Buea, and a second majority 84(29.1%) said Limbe. This was also revealed during the FGD with one of the participants specifying the location of a SRHS while majority had heard but did not know service location.

“I know where such services are located. It is in Molyko FREEMIND center” (FGD 4, Participant 5, BRH).

“I have heard of it but I don’t know where and how to access these services”(FGD 3, Participant 2, BRH).

Research Through Innovation

Moreover, the association between health districts and level of knowledge on availability on reproductive health services of the participants was significant with a chi square, $\chi^2=7.897$ and $P\text{-value}=0.01$. A total of 3 questions were used to determine knowledge on the availability of sexual and reproductive health services among students in the 3 health districts. The mean and SD for distribution were; Mean 2.4 ± 1.0 SD. Based on a scoring system, more than half 369(57.4%) of the student population had inadequate knowledge and 274(42.6%) had adequate knowledge on the availability of reproductive Health Services

Table 2: Availability of SRHSs in Limbe,Tiko and Buea HD

Variable	Buea No(%)	Tiko No(%)	Limbe No (%)	Total No(%)
Heard of available SRHS				
Yes	368(53.0)	90(38.0)	185(33.2)	643(43.2)
No	326(47.0)	147(62.0)	373(66.8)	846(56.8)
Total	694(100.0)	237(100.0)	558(100.0)	1489(100.0)
Source of information				
Friend	98(26.8)	26(29.9)	54(29.5)	178(28.0)
Radio	140(38.0)	41(45.6)	93(50.3)	274(42.6)
Others (teachers, family, community, hospital)	137(37.5)	23(26.4)	43(23.5)	203(32.0)
Location of SRHSs				
Buea	108(67.9)	19(55.9)	24(25.0)	151(52.2)
Limbe	18(11.3)	7(20.6)	59(61.5)	84(29.1)
Tiko	4(2.5)	6(17.6)	1(1.0)	11(3.8)
Others	29(18.2)	2(5.9)	12(12.5)	43(14.9)
Total	159(100.0)	34(100.0)	96(100.0)	289(100.0)
Knowledge on availability $\chi^2=7.897, P=0.01$				
Inadequate	228(62.0)	49(54.4)	92(49.7)	369(57.4)
Adequate	140(38.0)	41(45.6)	93(50.3)	274(42.6)
Total	368(100.0)	90(100.0)	185(100.0)	643(100.0)

Association of socio-demographic variables with level of Available SRHSs among students of Limbe,Tiko and Buea health district

Table 3 shows the factors associated with Adequate level of knowledge on Availability of SRH. In the bivariate logistic regression analysis, Students who come from homes with average monthly income of 40100-60000 CFA were 0.13 times poor in knowledge on availability of SRH services than those who come from homes with average monthly income of < 20,000 (AOR: 0.13; 95% CI: 0.04-0.44; $p=0.001$). In addition, Muslim students were 9 times more knowledgeable on the availability of SRH services than pagan children (AOR: 9.31, 95% CI:1.52-13.52, $P=0.039$)

Table 3: Association between Sociodemographic factors and knowledge of availability of SRHS

Variable	Category	Knowledge on Availability of SRH		COR	95% CI	p-value	AOR	95% CI	p-value
		Inadequate No (%)	Adequate No (%)						
Name of Institution	BGS Buea	152(62.0)	93(38.0)	0.99	0.58-1.60	0.963	0.811	0.46-1.45	0.477
	GHS Limbe	64(53.8)	55(46.2)	1.39	0.83-2.32	0.208	1.34	0.72-2.52	0.360
	GHS Mbongo	28(42.4)	38(57.6)	2.20	1.19-4.03	0.011	1.63	0.81-3.250	0.170
	GHS Motombolombo	49(54.4)	41(45.6)	1.35	0.78-2.35	0.283	1.11	0.54-2.25	0.767
Age(years)	PCSS Buea	76(61.8)	47(38.2)	1.00	-	-	1.00	-	-Ref.
	10-14	83(55.7)	66(44.3)	1.00	-	-	-	-	Ref.
	15-19	269(57.5)	199(42.5)	0.93	0.64-1.35	0.703	-	-	-
	20-24	17(65.4)	9(34.6)	0.67	0.28-1.59	0.360	-	-	-
Sex	Female	229(55.0)	187(45.0)	0.91	0.53-1.56	1.56	-	-	-
	Male	140(61.7)	87(38.3)	1.00	-	-	-	-	Ref.
Monthly income	<20000	195(54.0)	166(46.0)	1.00	-	-	-	-	-
	20100-40000	19(42.5)	23(58.5)	1.42	0.47-1.76	0.282	1.36	0.70-2.64	0.360
	40100-60000	28(90.3)	3(9.7)	0.13	0.04-0.42	0.001	0.13	0.04-0.44	0.001*
Religion	>60100	23(69.7)	10(30.3)	0.51	0.24-1.10	0.088	0.22	0.05-0.90	0.206
	Pagan	10(90.9)	1(9.1)	1.00	-	-	1.00	-	-Ref.
	Christian	347(56.7)	265(43.3)	7.64	0.97-60.03	0.053	6.6	0.80-54	0.079
Significant others	Muslim	6(46.2)	7(53.8)	8.67	1.34-11.9	0.039	9.31	1.52-13.52	0.039*
	Alone	33(63.5)	19(36.5)	1.00	-	-	-	-	Ref.
	Parents	225(54.5)	188(45.5)	0.89	0.24-1.65	0.721	-	-	-
	Relative	91(60.7)	59(39.3)	0.62	0.51-1.73	0.284	-	-	-
	Others	20(71.4)	8(28.6)	1.29	0.41-1.54	0.191	-	-	-

* Statistically Significant. ^{Ref} Reference group.

Accessibility to SRHSs among students of Limbe ,Tiko and Buea municipality.

Concerning knowledge on accessibility, there was an insignificant association between the knowledge on accessibility to sexual and reproductive Health Services and the health districts ($X^2=1.259$, $P\text{-value}=0.097$). A total of 6 questions were used to determine knowledge on the accessibility to sexual and reproductive health services among students in the Limbe and Buea, Tiko health districts. The mean and standard deviation for the distribution were; Mean 3.2 ± 1.2 SD. Based on a scoring system, only 24(19.4%) had good knowledge and the majority 106(80.6%) had poor knowledge on accessibility on sexual and reproductive health services.

From table 5, less than one quarter 124(19.3%) of the participants said they had access to SRH services. Of those who had access, more only 44(35.5%) of the participants had visited the location just once, while 41(31.1%), 16(12.9%) and 23(18.5%) had visited the services twice, thrice and four or more times respectively. In addition, more than half 65(52.5%) of the participants said they had received sex education as service from the center. Of those who have access to SRHSs, majority 80.9%(93) are willing to recommend services to peers. The FGDs also captured the fact that participants expressed the need for SRHS and each took turns to express their views.

"Most at times we take decision before thinking then we regret after so we need such services to guide us in the right direction"(**FGD 3,Participant 6**)

"I think we really need the services because very little information gets to us young people and most of the things we get involved in is because of ignorance"(**FGD 3, Participant 4**).

"It will help us to know how to carry out safe sex to prevent STIs,the spread of HIV and unwanted pregnancies" (**FGD 4, Participant 8**).

"It will empower us the young people to talk about our sexuality"(**FGD 2, Participant 2**).

Concerning what could be done to improve access to SRHSs by young people,78.4%(91) of respondents think that if the services are AYFSRHS it will improve access.

Table 4: Accessibility on sexual and reproductive Health Services

Variable	Buea No(%)	Tiko No(%)	Limbe No(%)	Total No(%)
Number of visits to SRHSs in last 6 months				
One	34(40.0)	4(26.7)	6(25.0)	44(35.5)
Two	24(28.2)	7(46.7)	10(41.7)	41(33.1)
Three	11(12.9)	1(6.7)	4(16.7)	16(12.9)
Four and more	16(18.8)	3(20.0)	4(16.7)	23(18.5)
Total	85(100.0)	15(100.0)	24(100.0)	124(100.0)
SRHSs offered				
Sex education	48(56.5)	9(60.0)	8(33.3)	65(52.4)
Condom use	17(20.0)	4(26.7)	8(33.3)	29(23.4)
Health education on HIV prevention	33(38.8)	7(46.7)	12(50.0)	52(41.9)
Others	12(14.1)	0	2(8.3)	14(11.3)
Willing to recommend to peers				
Yes	64(81.0)	13(100.0)	9(69.6)	93(80.9)
No	9(11.4)	0	4(17.4)	13(11.3)
Not sure	6(7.6)	0	3(13.0)	9(7.8)
Total	79(100.0)	13(100.0)	16(69.6)	106 (80.9)
Reasons for inaccessibility				
Lack of satisfactory services	11(28.2)	1(20.0)	3(27.3)	15(27.3)
Lack of confidentiality	16(41.0)	2(40.0)	7(63.6)	25(45.5)
Taboo	6(15.4)	4(80.0)	4(36.4)	14(25.5)
Culture	6(15.4)	1(20.0)	1(20.0)	8(14.5)
Service provider not welcoming	4(10.3)	2(40.0)	0	6(10.9)
Others	9(23.1)	1(20.0)	0	10(18.2)
Improvements on accessibility to SRHSs				
Create a AYFSRHS	60(75.9)	11(73.3)	20(90.9)	91(78.4)
Youth or Adolescent to head the unit	19(24.1)	2(13.3)	3(13.6)	24(20.7)
services out of the Hospital	7(8.9)	1(6.7)	0	8(6.9)
Others	4(5.1)	3(20.0)	1(4.5)	8(6.9)

Young people at higher risk of HIV/ STIs

I don't know	145(20.9)	49(20.7)	143(25.6)	337(22.6)
Not sure	40(5.8)	10(4.2)	33(5.9)	83(5.6)
No	48(6.9)	20(8.4)	38(6.8)	106(7.1)
Yes	461(66.4)	158(66.7)	344(61.6)	963(64.7)
Total	694(100.0)	237(100.0)	558(100.0)	1489(100.0)
Level of Knowledge on accessibility				
Inadequate	68(80.0)	11(73.3)	21(87.5)	100(80.6)
Adequate	17(20.0)	4(26.7)	3(12.5)	24(19.4)
Total	85(100.0)	15(100.0)	24(100.0)	124(100.0)

Association of socio-demographic variables with level of knowledge on Accessibility of sexual and reproductive health (SRH)

Table 5 presents the sociodemographic factors associated with the level of knowledge on the accessibility of SRH by the students. There was no statistical significance observed though students with income levels between 20100-40,000 were about 5 times more knowledgeable on the accessibility of SRH than those with income level below 20000 cfa (COR 4.56, 95% CI: 0.88-5.90, P=0.051).

Table 5: Association of socio-demographic variables with level of knowledge on Accessibility of SRHSs

Variable	Category	Knowledge on Accessibility of SRH		COR	95% CI	p-value
		Inadequate No (%)	Adequate No (%)			
Name of Institution	BGS Buea	47(83.9)	9(16.1)	0.50	0.17-1.48	0.213
	GHS Limbe	12(80.0)	3(20.0)	0.66	.15-2.96	0.583
	GHS Mbongo	9(100.0)	0	0.	-	-
	GHS Motombolombo	11(73.3)	4(26.7)	0.96	0.23-3.89	0.948
	PCSS Buea	21(72.3)	8(27.6)	1.00	-	-Ref.
Age (years)	10-14	26(83.9)	5(16.1)	1.00	-	-
	15-19	68(80.0)	17(20.0)	4.58	0.07-7.43	0.800
	20-24	6(75.0)	7(25.0)	2.44	1.0-7.70	0.900
Sex	Female	56(75.7)	18(24.3)	0.70	0.31-2.25	0.700
	Male	44(88.0)	6(12.0)	1.00	-	-Ref.
Religion	Christian	94(79.7)	24(20.3)	-	-	-
	Muslim	2(100.0)	0	-	-	-
	Pagan	4(100.0)	0	1.00	-	-Ref.
Monthly income	<20000	55(85.9)	9(14.1)	1.00	-	-Ref.
	20100-40000	4(57.1)	3(42.9)	4.58	0.88-5.90	0.051
	40100-60000	5(71.4)	2(28.6)	2.44	0.41-3.56	0.326
	>60100	9(81.8)	2(18.2)	1.36	0.25-2.33	0.722
Who do you stay with	Alone	115(93.8)	1(6.3)	1.00	-	-Ref.
	Parents	52(76.5)	16(23.5)	0.24	0.03-2.13	0.199
	Relative	25(78.1)	7(21.9)	0.72	0.07-8.05	0.793
	Others	8(100.0)	0	-	-	-

* Statistically Significant. ^{Ref} Reference group

Utilization of Sexual and reproductive Health Services

As represented in table 6, more than half of the study population 670(51.2%) reported that they think young people made use of available sexual and reproductive health services, however majority [1043(79.0%)] said they hadn't been in a position that needed to make use of such services. A minority 227(21.0%) who have been in such situation reported they sought help from the following: parents 113(48.1%); hospital 64(27.2%), friends 36(15.3%) and SRHSs 9(3.8%).

Concerning where to go for help concerning sexual health issues, the members of the focus group had this to say:

"I have been in a situation where I needed help, but I talked with my elder sister" (FGD 4, Participant 1, RHB).

"A girl wanted us to have sex so I told my friends and we prayed together and they advised me. The girl told my sister and s told my mother" (FGD 1, 14year old, Participant 5, RHL).

"I have been but did not have any body to talk to because I was shy to talk to my parents so I kept it to myself" (FGD 3, 18year old Participant 4, RHB).

"I decided to handle it personally because of lack of trust" (FGD 4, 21 year old, Participant 7, RHB).

A majority 972(81.6%) were of the opinion that making SRHSs accessible will help curb spread of HIV among their peers. Most of the students 355(52.1%) made use of condoms with 186(60.8%) using it every time they had sex. Interestingly, majority of the participants in the FGDs who consented of being sexually active agreed to the fact that they use condoms during sex. They echoed thus,

“We use condoms at times” (FGD 1, 15 year old, Participant 6 RHL).

Respondents had several reasons why they used condoms. Participants explain thus,

“I use condoms Sometimes, when am not sure of the sexual partner and to prevent pregnancy”. (FGD 3, 19 year old, Participant 7, RHB)

Some respondents found Condom usage to be boring.

“I don’t use condoms because it’s boring. It’s like sucking sweets with the peelings” (FGD 3, 20 year old, Participant , RHB).

Concerning where they got their condoms, most of them 167(35.6%) got it from the pharmacy likewise 130(27.7%) from the hospital. Most of them 175(37.3%) had self-made decisions on condom usage. Majority of the students 1055(76.7%) had a health club in their school with 1077(78.5) agreeing sex education is taught. However most of them 706 (56.4%) said they don’t have HIV counselling and testing services in their respective institutions.

Concerning the service utilization, there was a significant association between the level of utilization and the health districts concerned ($\chi^2=10.088$, $P=0.001$). A total of 8 questions were used to determine knowledge on the utilization of sexual and reproductive health services among students in the Limbe and Buea and Tiko municipalities. Based on a scoring system, 786(52.8%) had poor utilization and 703(47.2%) had good utilization. About half 343(49.4%) of the student with good utilization on the sexual and reproductive service were from Buea.

Table 6: Utilization of SRHSs among students in the Limbe, Tiko and Buea municipality

Variable	Buea No(%)	Tiko No (%)	Limbe No (%)	Total No (%)
Think Young people using available SRHSs				
Yes	380(62.0)	100(50.5)	190(38.2)	670(51.2)
No	233(38.0)	98(45.5)	307(61.8)	638(48.8)
Total	613(100.0)	198(100.0)	497(100.0)	1308(100.0)
Been in a situation that needed SRHSs				
Yes	126(20.5)	31(15.0)	120(24.1)	277(21.0)
No	1043	79.0	378(75.9)	1043(79.0)
Total	615(100.0)	207(100.0)	498(100.0)	1320(100.0)
If yes, where did you go				
Hospital	33(31.4)	15(53.6)	16(15.7)	64(27.2)
Parent	39(37.1)	6(21.4)	68(66.7)	113(48.1)
Friends	21(20.0)	4(14.3)	11(10.8)	36(15.3)
Drug store	7(6.7)	0	6(5.9)	13(5.5)
SRH unit	5(4.8)	1(3.6)	3(2.9)	9(3.8)
Other	13(12.4)	2(7.1)	2(2.0)	17(7.2)
SRHSs curb the spread of HIV				
Yes	459(83.0)	156(78.0)	357(81.5)	972(81.6)
No	94(17.0)	44(22.0)	81(18.5)	219(18.4)
Total	553(100.0)	200(100.0)	438(100.0)	1191(100.0)
Use condom during sex				
Yes	107(79.9)	20(55.6)	39(65.0)	166(72.2)
No	27(20.1)	16(44.4)	21(35.0)	64(27.8)
Total	134(100.0)	20(55.6)	39(65.0)	166(72.2)
How often				
Every time I have sex	64(61.0)	13(68.4)	18(52.9)	95(60.1)
Sometimes	24(22.9)	4(21.1)	8(23.5)	36(22.8)
Not often	11(10.5)	1(5.3)	1(2.9)	13(8.2)
When I remember	6(5.7)	1(5.3)	7(20.6)	14(8.9)
Total	105(100.0)	19(100.0)	34(100.0)	158(100.0)
Where you bought condom				
Hospital	27(21.3)	5(15.2)	14(26.9)	46(21.7)
Pharmacy	59(46.5)	8(24.2)	19(36.5)	86(40.6)
Drug store	20(15.7)	8(24.2)	8(15.4)	36(17.0)
Roadside	24(18.9)	10(30.3)	11(21.2)	45(21.2)
Others	8(6.3)	3(9.1)	8(15.4)	19(9.0)
Who suggested condom use				
Myself	59(71.1)	6(7.2)	18(21.7)	83(100.0)

Sexual Partner	33(48.5)	14(20.6)	21(30.9)	68(100.0)
Don't remember	21(60.0)	6(17.1)	8(22.9)	35(100.0)
Sex education is taught in school				
Yes	490(77.0)	180(85.7)	407(76.9)	1077(78.5)
No	77(12.2)	16(7.6)	80(15.1)	173(12.6)
I don't	66(10.4)	14(6.7)	42(7.9)	122(8.9)
Total	633(100.0)	210(100.0)	529(100.0)	1372(100.0)
Health club in your school?				
Yes	453(71.9)	194(88.4)	408(77.4)	1055(76.7)
No	177(28.1)	25(11.4)	119(22.6)	321(23.3)
Total	630(100.0)	219(100.0)	527(100.0)	1376(100.0)
Utilization of SRH services x²=10.088, P=0.001				
Inadequate	351(50.6)	112(47.3)	323(57.9)	786(52.8)
Adequate	343(49.4)	125(52.7)	235(42.1)	703(47.2)
Total	694(100.0)	237(100.0)	558(100.0)	1489(100.0)

Association between socio demographic factors and knowledge of utilization of SRHSs among students in the Limbe, Tiko and Buea Municipality.

The factors between the demographic characteristics of the students and the knowledge of utilization of SRHS services was determined on a binary logistic regression. The crude odd ratios, significance observed at 95% CI. Factors that were significant were moved to multivariate analyses where they were further tested and the following was observed; Students from BGS Buea and GHS Limbe had a 31% and 49% chance of presenting with poor knowledge on the utilization of SRH services respectively than counterparts from PCSS Buea [(AOR, 0.50; 95% CI: 0.36-0.69; p<0.001) (AOR 0.33 95% CI: 0.23-0.47; p<0.001)]. Students of the age group 15-19 years had a 14% chance of having good knowledge on utilization of SRH services than students of the age group 10-14years old (AOR 1.29; 95% CI; 1.00-1.64 p=0.044) Female students had a 12% chance of being more knowledgeable than male students with respect to utilization of SRH services (AOR 1.23; 95% CI: 0.79-1.54; p=0.073).

Table 7: Association between socio demographic factors and knowledge of utilization of SRHSs

Variable	Knowledge of Utilization of SRHSs		COR	95% CI	p-value	AOR	95% CI	p value
	Inadequate No (%)	Adequate No (%)						
Name of Institution								
BGS Buea	261(58.5)	201(43.5)	0.49	0.35-0.67	<0.001*	0.50	0.36-0.69	0.0001*
GHS Limbe	240(67.4)	116(32.6)	0.31	0.22-0.43	<0.001*	0.33	0.23-0.47	0.0001*
GHS Mbongo	83(41.1)	119(58.9)	0.91	0.62-1.34	0.626	0.98	0.65-1.47	0.923
GHS Motombolombo	112(47.3)	125(52.7)	0.71	0.49-1.02	0.065	0.73	0.50-1.06	0.098
Age (years)								
10-14	257(58.0)	186(42.0)	1.00	-	-	1.00	-	-Ref.
15-19	501(50.7)	488(49.3)	1.35	1.07-1.69	0.010*	1.29	1.00-1.64	0.044*
20-24	28(49.1)	29(50.9)	1.43	0.82-2.49	0.204	1.23	0.79-2.51	0.242
Sex								
Female	502(51.0)	482(49.0)	1.23	0.99-1.53	0.056	1.41	0.79-1.54	0.073
Male	284(56.2)	221(43.8)	1.00	-	-	1.00	-	-Ref.
Monthly income								
<20000	443(50.9)	428(49.1)	1.00	-	-	-	-	-
20100-40000	60(53.1)	53(46.9)	0.91	0.62-1.35	0.655	-	-	-
40100-60000	30(49.2)	31(50.8)	1.07	0.64-1.80	0.800	-	-	-
>60100	36(56.3)	28(43.8)	0.81	0.48-1.34	0.406	-	-	-
Significant others								
Alone	44(48.4)	47(51.6)	1.00	-	-	-	-	-
Parents	554(54.4)	465(45.6)	1.06	0.53-2.12	0.873	-	-	-
Relative	165(50.0)	165(50.0)	0.79	0.51-1.21	0.271	-	-	-
Others	23(46.9)	26(53.1)	0.94	0.59-1.49	0.781	-	-	-

*Statistically Significant. Ref. Reference group

Discussion

In this study, 56.8% of the respondents had not heard of available SRHSs thus poor knowledge on availability of SRHSs was recorded at 57.4%. This was concurred by a study conducted in Rwanda, Ghana and Cameroon [8,14,17] In another related study,

overall knowledge on availability of sexual and reproductive health services was at 78%, with suboptimal level of knowledge consistent with service uptake [18]. In the FGD, majority of the members had not heard about available sexual and reproductive health services. This findings were similar with related studies conducted in Burkina Faso, Ghana, Malawi and Uganda, where the young people reported that they were not aware of where to go for SRH service [19].

Accessibility to sexual and reproductive health services.

The level of knowledge of young people on accessibility to SRHS was poor at 80.6%. Of the 43.2% who had heard of the availability of these services, only 19.3% of them reported to have ever had access to this service. A large proportion of 80.7% had not access these services due to problem of inaccessibility such as; lack of satisfactory services, lack of confidentiality, culture, and attitude of some health providers and timing. These findings were similar with a review by Abubakari *et al* [20] were feeling embarrassed, ashamed or afraid by young people were some of the most reported barrier that hindered access to SRH services by young people. It further explained that this emotion was usually as a result of the attitude of some health service providers [21]. Another study revealed shyness, resistance from religious groups and families, insecurities from political instability, and inadequate training of service providers, among others, were seen as barriers to accessing sexual and reproductive health services [14]. Operation hours of SRH services was seen as not convenient by young people in another study [20].

Utilization of Sexual and reproductive Health Services by young people

Though 51.2% respondents said they think young people are making use of sexual and reproductive health services, the study recorded inadequate level of knowledge of SRHS concerning utilization of services at 52.8% and 79% said they had not been in a situation that needed such services. Of the 21% who had been in situation needing sexual and reproductive health, only 3.8% sought help at the sexual and reproductive health unit with the rest seeking help from hospital general consultation, parents, friends. This was also highlighted in the FGD where the young people had to sort help rather from grand mother, sister or brother. This could be due to lack of knowledge, fear, lack of confidentiality, and the judgemental attitude of service providers. Low utilization was consistent with studies conducted in North West Ethiopia and Bahir Dar with 28.8%, 32% of respondents utilizing services respectively [22,23]. This was also the case of a study conducted in Northwest and south west of Cameroon (14). Students of the age group 15-19 years had a 14% chance of having good knowledge on utilization of SRH services than students of the age group 10-14years old. This was also seen in a study conducted in Nepal that reported low utilization of SRHS with a positive association of services utilization among those aged 15-19years[24]. A majority of 65.3% were of the opinion that making sexual and reproductive health services accessible to youths will help curb spread of HIV among their peers. This was seen in the fact that though 72.2% used condoms during sex, young people from the focus group discussion said the seldom used condoms and that using condoms was like sucking sweet in a wrapper as concurred by Godia *et al* [12]. This could also be seen from the findings with CDC 2022 where condom use among sexually active students decreased from 61% in 2009 to 54% in 2019 [25,26].

Conclusion

There was inadequate knowledge of availability, accessibility and utilization of SRHSs at 57.4%, 80.6%, 52.8% respectively. From the findings of this study, insufficient knowledge about available sexual and reproductive health services has influenced access and utilization of services.

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