

Knowledge, Access and Utilization of Sexual and Reproductive Health Services among Senior High School Students in the Sunyani West Municipality, Ghana

Titus Naangmenbabole Kpiinfaa^{1*}, Angelina Amoatema Korang², Edward T Dassah³, Justin Tuobeniyere⁴, Emmanuel V Aleser⁵ and Michael Mahamoud Mahamah⁶

¹School of Food and Health Science, Anglican University College of Technology, Ghana

²Seventh Day Adventist (SDA) Hospital, Ghana

³Department of Population, Family and Reproductive Health, Kwame Nkrumah University of Science Technology, Ghana

⁴Holy Family Nursing and Midwifery Training College, Techiman, Ghana

⁵Department of Family Medicine, University for Development Studies, Ghana

⁶Department of Nursing, Anglican University College of Technology, Ghana

*Corresponding Author

Titus Naangmenbabole Kpiinfaa, School of Food and Health Science, Anglican University College of Technology, Ghana.

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Abstract

Poor uptake of SRH services among adolescents affect the progress of reaching universal access to SRH services in Ghana. This study sought to assess adolescents' knowledge, access and use of SRH services in the Sunyani West Municipality. An analytical cross-sectional design was adopted with a quantitative approach to data collection. Questionnaire was used to collect data through simple random sampling techniques by balloting. Data were entered into Microsoft office Excel spreadsheet and analyzed using STATA version 12.1 and presented descriptively in tables and charts. Pearson Chi-square (X²) test was done to establish association between key independent variables and access to and utilization of SRHS at a significant level of 5% ($p \leq 0.05$). Also, statistically associated factors were further subjected into multivariate logistic regression. The findings revealed that awareness level was high (83.7%). Knowledge level was averagely high (51.2%) and slightly over half (59%) had ever accessed SRHS. About 70.5% have ever used SRH service, and factors affecting access to and utilization of SRH service were restrictive school rules (42.7%), shyness (67.7%), and financial difficulty (57.5%). Significantly associated factors were relationship status, level of education, age, and frequency of visits by closed associates. Conclusively, awareness was almost universal, and knowledge level, access to and utilization were all above average. Ghana Health Service and Ghana Education Service should introduce sexual and reproductive health education in the curriculum of schools to improve on adolescents' access to and use of SRHS.

Keywords: Knowledge, Access, Utilization, Sexual and Reproductive Health Services, Senior High School Students, Sunyani West District, Ghana

1. Introduction

Sexual and Reproductive Health (SRH) is one of the fundamental aspects of typical adolescent growth and development that consist of biological sex, masculine and feminine roles and identity, sexual abilities, sexual behaviors and reproduction maturities. Fortunately,

some of these young people pass through the adolescent stage into adulthood successfully, while others also acquire life-threatening health problems that can be prevented or can persist throughout adulthood [1].

Globally, it is estimated that about 1.7 million young people lose their lives every year through preventable health problems. Evidence suggests that adolescents who begin puberty experienced sexual and relationships difficulties. The United Nations International Children's Emergency Fund (UNICEF) reported over 208 million of adolescents who are either in-union or married to have had unmet needs of family planning [2]. Adolescents' sexual and reproductive health problems have been noted by the United Nations Population Fund Agency (UNFPA) to involve early pregnancy, early marriage, sexually transmitted diseases, and infections, including Human Immuno-Deficiency Virus (HIV) and Acquired Immuno-Deficiency Diseases (AIDs), unsafe abortion, risk of morbidity and mortality linked with pregnancy and child birth. In addition, many of these young people contract preventable Sexually Transmitted Infections (STIs) such as chlamydia, gonorrhea, syphilis, and trichomoniasis every year [3]. However, these excluded HIV, close to 5 million adolescents, and about 41,000 lives were lost in 2015 due to HIV [4]. Meanwhile only a few have the right to use suitable and inexpensive STIs facilities, and mostly, it is the female adolescents who usually bear the brunt or suffer the consequences [5].

In Africa, about 226 million people are adolescents which formed 19% of the global population, and 23 million of these adolescents do not meet their family planning needs; unintended pregnancy, unsafe abortion also contributed to about 41% of all adolescent deaths [1,6]. Also, in Sub Saharan Africa, STIs, HIV and AIDS awareness and access to specific Sexual and Reproductive Health (SRH) service utilization is now recognized as the primary reproductive health concern for teenagers, unprotected sex accounted for over 26% to 60% of new HIV infections that occurred among the youth [7]. These show that many adolescents in Africa are exposed to many risks due to their early experience in sexual activities that make them vulnerable to a lot of SRH challenges [8].

In Ghana, more than one-fifth of the Ghanaian populations of 30.8 million are between the ages of 10 and 24 years, 13% are within 15-19 years [9]. According to the Ghana Demographic and Health Survey (2014) and the National Population Council (NPC), (2018), for the past 15 years in Ghana, sexual activity before age 15 has risen to 61.6% in adolescents 15-19 years [10]. Also, in 2018, adolescent pregnancies were 12.3%, as against the 10% national target [11]. Nine regions registered the highest teenage pregnancies in Ghana including Bono Region, previously Brong Ahafo Region [12]. New HIV infections prevalence among adolescents have reduced from 2.4% in 2016 to 2.1% in 2017, which showed there had been a lot of progress made in improving contraceptive awareness and utilization among adolescents over the past years [10,12]. Even though these achievements have helped to enhance SRH of adolescents in Ghana, SRH problems are still common among adolescents, and their uptake of SRH services remain poor in Ghana as well as the Sunyani West Municipality. Hence,

the study sought to evaluate adolescents' knowledge, access and utilization of Sexual and Reproductive Health Service (SRHS) in selected Senior High Schools in the Sunyani West Municipality.

2. Materials and Methods

2.1. Study Design

The study employed an analytical cross-sectional study design with quantitative approach to assess the relationship between adolescents' exposure to SRH services and the outcome of knowledge, access and use of SRH services among adolescents in selected Senior High Schools in the Sunyani West Municipality [13]. It was a cross-sectional study because information on adolescents' knowledge, access and use of SRH services was gathered at a point in time in the Sunyani west municipality [14]. A quantitative method approach helps quantify the findings to answer a broader and more complete range of research questions. Also, quantitative method approach would provide a more comprehensive analysis of the Knowledge, Access and Utilization of SRHS among in-school adolescents to provide better feedback to be provided to policymakers.

2.2. Study Setting

Sunyani West Municipality was carved out of Sunyani East District now Sunyani Municipal, is one of the 27 Districts in the then Brong Ahafo Region, and now Bono Region of the Republic of Ghana. It was established in November 2007 through the Legislative Instrument (LI) 1881 and inaugurated on 29th February 2008 with Odom's as the administrative capital. The municipality has a population size of 84,630 people representing a 3.7 portion of the total population in the region. Out of this, males constitute 49.5% while females constitute 51.5%. There are 10,715 households in the Municipality of which 71% reside in urban areas, with the rest in rural areas. The average household size was 4.3 children. The youthful population in the Municipality accounts for 38.3% of the people depicting a wide base populace pyramid [15].

2.3. Study Sampling Procedures

Probability technique was used in the selection of schools in the Sunyani Municipality. By the probability sampling, a simple random sampling technique was used to select the required sample size of the target population from each of these academic levels (form one, form two and form three) in each of the four schools through balloting, whereby pieces' papers were numbered based on the required sample size and selected at random. Simple Random Sampling Technique also known as the lottery method; the process involved written of numbers from 1 to 50 in relation to the number of students in each class on pieces of papers included blank papers; the papers were put into three bows; each of the bow represented the levels in the 3 classes (Form 1, Form 2 and Form 3) [16]. The target population was then asked to pick the papers at random according to the proportionate number of the class. Those with numbers written on their papers were picked to form the sample size for the study and participated in answering the

questionnaire. Using this sampling technique was to help decrease the level of biasness in selecting items from the entire population [17]. In all, a total of 400 respondents from the four selected Senior High Schools were administered with the questionnaires in the study area.

2.4. Sample Size Calculation and Statistical Analyses

Before analysis, all completed questionnaires were checked for completeness and consistency manually. During this cross-checking on the questionnaires, wrong entries and inconsistent data recordings on the face of the questionnaires were corrected, and those questionnaires that were inappropriately filled or not correctly filled were removed. In all, seven (7) questionnaires were detected not correctly filled and were excluded in the analysis. So, therefore, the analyses of the results were presented based on a sample of 393 from an overall sampled total of 400 respondents. After that, the pre-coded data were keyed into Microsoft excel spreadsheet 2019 version and then transported into STATA version 12.1 (StataCorp LP 4905 Lakeway Drive, College Station, Texas 77845 USA). Again, data was coded by attaching values and bringing similar and related values into few and precise headings and cross-checked before analysis. Quantitative data was analyzed using descriptive and inferential statistics. Descriptive statistics were used to analyze respondents' socio-demographic characteristics, knowledge of sexual and reproductive health, access to SRH services, utilization of SRH services, perceptions of SRH, and factors that influenced access and utilization of SRH services.

All frequencies and percentages generated were presented into frequency tables, pie charts and bar graphs. Adolescent's knowledge of SRH services was measured by evaluating their responses to twelve (12) questions on SRH services among adolescents, including awareness, sources of SRH information, age to start sex, preventive methods of STIs, FP methods and side effects of contraceptive method use, and benefits of SRH information. Each correct response was coded to attract a score of "+1" while each "incorrect" or "undecided" ("don't know") response was assigned a score of "0". The scores for each adolescent were summed and graded as follows; scores 0-3 = poor, 4-7 = average and 8-12 = good. Inferential statistics was done using Pearson Chi-square (X²) correlation test to establish the association between respondents' socio-demographic characteristics and knowledge level, attitudes/perceptions, access and utilization of sexual and reproductive health services. The statistically significant level was set at 5% ($p \leq 0.05$) points for the analysis. The statistically associated factors were then subjected to further analysis using multivariate logistic regression to help determine predictive factors influencing respondents' knowledge, attitudes, access and

utilization of sexual and reproductive health services as well as the odd ratios of significant factors at 95% confidence level and 5% significant level.

2.5. Ethics Approval

The study was conducted in accordance with the Declaration of Helsinki and was approved by the Kintampo Health Research Centre (KHRC) Institutional Ethics Committee (IEC), Kintampo (KHRCIEC/2020-12). Participants gave informed consent to participate in the study before they were recruited into the study. For adolescents under 18 years, consent was obtained from a parent/guardian with assent from the adolescent.

3. Results

A total of 400 senior high school adolescents in the Sunyani West Municipality were involved in the study, and 393 questionnaires were retrieved and used in the analysis given a response rate of 98.3%. Average age was 17.13 years, and 83.7% were 16-19 years, 11.7% were between 13-15 years, and 4.6% of them were 20 years and above. About 50.1% were males, and 49.9% were females. About 87.3% were Christians, 11.2% were Muslims, and 1.0% belonged to the African Traditional religion. Almost the same proportions (37.2% and 35.9%) were in SHS one and two, and 26.9% were in SHS three. About 27.7% worked for pay, 48.6% were engaged in trading, and 11.0% engaged in teaching, and 0.9% was Secretaries. With caregivers' occupation, about 39.4% were farmers, 38.2% traders, 8.1% teachers, 4.3% were unemployed, and 2.5% of the caregivers were bankers. With relationship status, about 77.1% were single, 1.0% was married, 14.5% had boyfriends/lovers and 7.4% had girlfriends. About 29.8% were living with single parents alone (either mother or father), 60.3% were living with both parents, 1.8% was living with non-relations, 3.6% were living with grandparents and 2.0% were living with either boy or girlfriends.

About 93.9% had their biological parents alive, and 6.1% lose their biological parents. Regarding how comfortable adolescents felt living with the caregiver/guardian shows 73.8% were very comfortable, 19.8% were comfortable, 3.6% were uncomfortable, and about 2.8% were very uncomfortable. Regarding individuals who visited adolescents while in school shows 27% said only their mother paid a visit to them in school. Both parents' paying visit was 24.2%, only father was 11.9%, family members 11.5% and either boyfriend or girlfriend paying visit was 5.3%. Regarding the frequency of visit by closed family, relations show more than half (52.4%) of the adolescents said their closed family relations paid a visit to them once every term, 15.3% said every weekend and 3.8% said every day closed family relations paid a visit to them in school.

Variable	Frequency (N = 393)	Percentage (%)
Age category (X = 17.13; SD = 1.44)		
13-15 years	46	11.7
16-19 years	329	83.7
20 years and above	18	4.6
Sex		
Male	197	50.1
Female	196	49.9
Religion		
Christian	343	87.3
Muslim	44	11.2
Traditional	4	1.0
No religion	2	0.5
Level of education		
SHS one	146	37.2
SHS two	141	35.9
SHS three	106	26.9
Occupation of caretaker		
Unemployed	17	4.3
Teacher	32	8.1
Health worker	14	3.6
Banker	10	2.5
Farmer	155	39.4
Trader	150	38.2
Others	15	3.8
Relationship status		
Single	303	77.1
Married	4	1.0
Boyfriend lover	57	14.5
Girlfriend lover	29	7.4
Person living/stay with		
Single parent alone	117	29.8
Both parents	237	60.3
Non-relation	7	1.8
Grandparents	14	3.6
Boy/girlfriend	8	2.0
Others	10	2.5
Biological parents alive		
Yes	369	93.9
No	24	6.1
Comfortable staying with a person		
Very comfortable	290	73.8
Comfortable	78	19.8

Uncomfortable	14	3.6
Very uncomfortable	11	2.8

Table 1: Socio-Demographic and Economic Characteristics of Respondents

3.1. Knowledge of SRH Services

Table 2 indicates respondents' knowledge of SRH services. The majority (83.7%) was aware of SRH services, and almost all of them (93.9%) disclosed that adolescents should be provided with SRH services. Over three-quarters (85.5%) had ever been given SRH education, and 71.0% have had someone to discuss SRH problems with. More than three-quarters (84.7%) were provided with SRH counseling at school. SRH counseling services ever received at school shows about 55.6% had received counseling on personal hygiene, 17.1% had been counseled on STIs prevention,

and 11.4% carrier progression, 9.6% pregnancy preventions, and 6.3% had received counseling on nutrition and good dietary practices. Also, 82.7% said SRH counseling received at school was beneficial. Regarding how helpful was SRH information obtained shows 67.9% said SRH information was very good, 18.3% said good, 8.1% not good, and only 5.6% said information provided during counseling was bad. Overall knowledge score on SRH services shows that 50.4% had average knowledge of ASRH services, 26% had poor knowledge, and only 23.6% had good knowledge of ASRH services.

Variable	Frequency (N = 393)	Percentage (%)
Aware of SRH services in community		
Yes	329	83.7
No	64	16.3
Adolescents be provided SRH information		
Yes	369	93.9
No	24	6.1
Ever been given SRH education		
Yes	336	85.5
No	57	14.5
Have somebody to discuss SRH problem with		
Yes	279	71.0
No	114	29.0
School gives counseling on SRH services		
Yes	333	84.7
No	60	15.3
Type of Counseling provided by school		
Personal hygiene	185	55.6
Carrier progression services	38	11.4
Nutritional counseling	21	6.3
STIs counseling	57	17.1
Pregnancy prevention counseling	32	9.6
SRH information provided beneficial		
Yes	325	82.7
No	68	17.3
SRH information helpful to your education		
Very good	267	67.9
Good	72	18.3
Not good	32	8.1
Bad	22	5.6

Knowledge scores		
Poor (0-3 scores)	102	26.0
Average (4-7 scores)	198	50.4
Good (8-12 scores)	93	23.6
<i>Note: difference in totals are due to the non-applicable questions</i>		

Table 2: Respondents' Knowledge of Sexual and Reproductive Health Services

3.2. Sources of Awareness of SRH Services

Figure 1 indicates sources of respondents' awareness of SRH services. About 27% became aware of SRH services through healthcare providers, and 22% through the school programme.

Also, about 17% were aware of the SRH services through social media platforms such as Facebook, WhatsApp, TV and Radio, 14% from school teachers, 8% from parents, and 4% at church, friends and all the sources constituted.

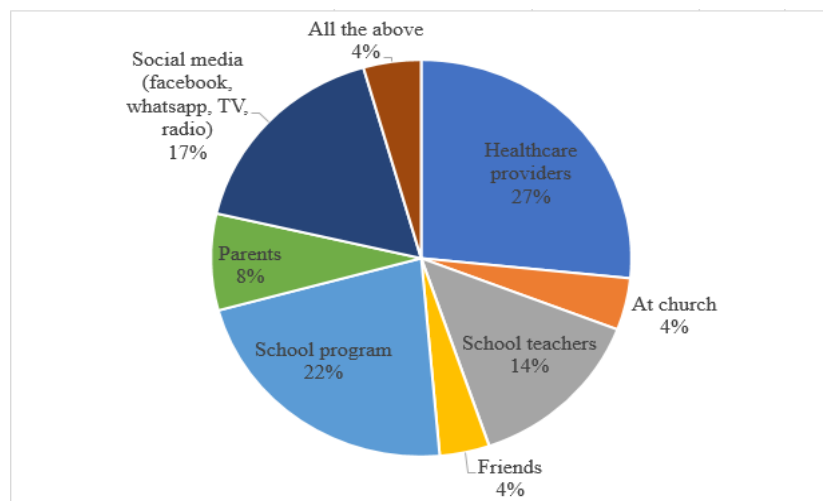


Figure 1

3.3. Adolescents Access to Sexual and Reproductive Health Services

Table 3 presents on respondents' access to sexual and reproductive health services. Slightly over half (59%) ever accessed SRH services, but only 41% of them did not. About 55.6% accessed the services through a visit of health workers to the school, 30.2% accessed the SRH services at health facility through closed relations such as parents and friends, and 14.2% on their evolution visited the health facility to access the SRH services. Respondents' last visit to the ASRH center showed over three-quarters (81.9%) had visited the SRH center the last 1-9 months and 18.1% had visited the center over the last one (1) year. Over two-thirds (66.8%) spent more time getting to the SRH center from school, and 33.2% spent less time before getting to the SRH services center. More than

three-quarters (83.6%) spent less than 30 minutes to 1 hour at the service center, and 16.4% had spent 2-4 hours at the SRH services center. About 62.5% did not encounter any difficulties accessing the SRH services, and 37.5% said to have experienced problems accessing SRH services. A little over three-quarters (77.2%) said their choice of SRH services was available, while 22.8% said their SRH services were not available. Also, about 76.7% said they have not made payment for the SRH services provided to them at the health facility, while about 23.3% had made payment for the SRH services provided to the health facility. Majority (86%) disclosed they would like to access the SRH service again, while very few (13.8%) disclosed that they would not like to access the SRH service again.

Variable	Frequency (N = 393)	Percentage (%)
Ever accessed SRH services		
Yes	232	59.0
No	161	41.0
Ways contacted healthcare providers		
Health team came to school	129	55.6
Was sent by closed relations	70	30.2
Went there willingly/self	33	14.2
Last visit to ASRH center		
1-9 months	190	81.9
Over a year	42	18.1
Spend more time at a service center		
Yes	155	66.8
No	77	33.2
Time spent to get to SRH center from school/home		
<30 minutes -1 hour	194	83.6
2-4hours	38	16.4
Encountered difficulty accessing SRH services		
No	145	62.5
Yes	87	37.5
Choice of service available		
Yes	179	77.2
No	53	22.8
Made payment for the service		
Yes	54	23.3
No	178	76.7
Wish to access the SRH service again		
Yes	200	86.2
No	32	13.8
<i>Note: the difference in the totals were due to the non-applicable questions</i> source: field survey, 2020		

Table 3: Access to Sexual and Reproductive Health Services

3.4. Preferred Sources for Accessing SRH Services

Figure 2 below showed the respondents preferred sources of accessing SRH services. Most (70.2%) preferred accessing SRH services at the hospital, 26.2% chose accessing the services at

the adolescents' health corners, 13.7% preferred the Planned Parenthood Association of Ghana (PPAG). Also, 1.5% preferred maternity homes, and 1.3% preferred buying the services from chemical shops.

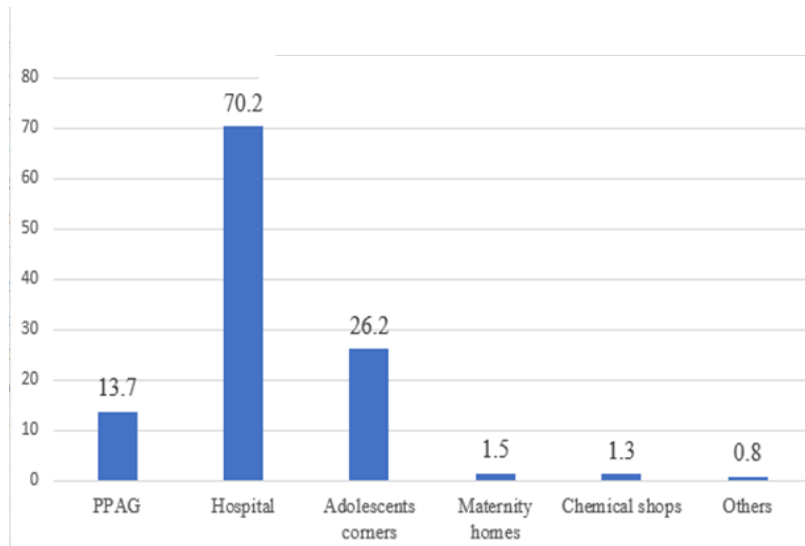


Figure 2

3.5. Type of SRH Service Ever Accessed by Respondents

Figure 3 below indicates the SRH services ever accessed by respondents. About 23% have ever accessed service on the treatment of sexually transmitted diseases such as gonorrhoea, candidiasis (white), syphilis and others, 22% have accessed service on menstrual and personal hygiene practices, and the same

proportion (22%) have accessed counselling on boys-girl's sexual relationships. Also, 11% have accessed service on contraceptive methods use, 8% on how teenage pregnancy occurs, 5% on adolescent health corners and HIV/AIDS counselling services, 3% on breast and cervical cancer screening and 1% on abortion care services.

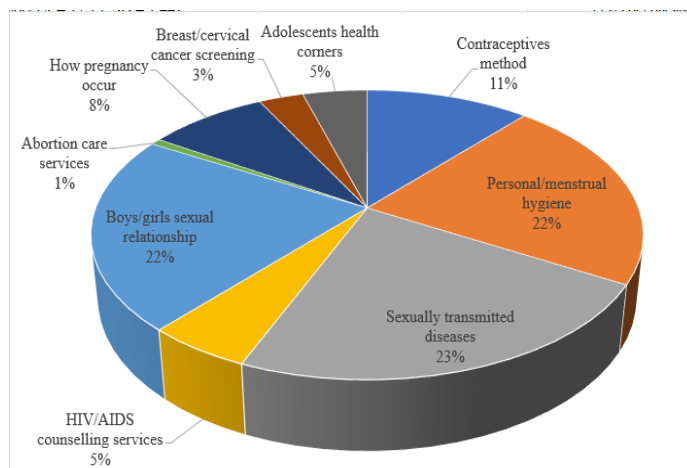


Figure 3

3.6. Utilization Level of Sexual and Reproductive Health Services

Table 4 below shows quantitative findings of respondents' utilization of sexual and reproductive health services. Nearly three-quarters (70.5%) have ever used SRH services, while about 29.5% have never used the SRH services. Among those who have never used SRH services, more than a third (44%) attributed their reasons for non-use to lack of knowledge and SRH services perceived not to be good for the health of adolescents. About 31% of them attributed their non-usage to fear of side effects associated with some of the SRH services such as contraceptives, and 15.5% of them said their parents do not allow them, while 9.5% said their

school teachers do not allow them to use the SRH services. In term of whether adolescents should be allowed to use SRH services, over three-quarters (85.2%) thought that adolescents should be allowed to use SRH services, while 14.8% do not agree to the use of SRH services among adolescents. Regarding ways adolescents can avoid pregnancy and STIs, nearly three-quarters (72.5%) said adolescents should abstain from having sex, 17.3% said they use of male condom, 6.1% use contraceptive pills, and 4.1% said they use of female condoms during sex. In term of ways SRH services utilization can be promoted among adolescents, about 69.2% said schools should provide them with health talk and education on SRH services to promote utilization, and 18.3% of them said

adolescents' reproductive health corners should be set in schools to promote utilization while 12% cited the need for services providers to engage adolescents more at the SRH service delivery center.

Variable	Frequency (N = 393)	Percentage (%)
Ever used SRH services		
Yes	277	70.5
No	116	29.5
Perceived reasons for not using SRH services		
Lack knowledge/not good for health	51	44.0
Fear/afraid of side effects	36	31.0
Parents do not allow me to use	18	15.5
School teachers do not allow me to use	11	9.5
Should adolescents be allowed to use SRH service		
Yes	335	85.2
No	58	14.8
Ways to avoid pregnancy and STIs		
Abstain from sex	285	72.5
Use of male condom	68	17.3
Use of female condom	16	4.1
Use of contraceptive pills	24	6.1
Promoters for adolescent's usage of SRH service		
School health talk/education	272	69.2
Set up adolescent friendly corners in SHS	72	18.3
Engage adolescents in SRH services	47	12.0
All the above	2	0.5
<i>Note: the difference in the totals were due to the non-applicable questions</i>		

Table 4: Utilization of Sexual and Reproductive Health Services.

3.7. SRH Services Adolescent Used Most

Figure 4 below shows the SRH services adolescents used most. About 23% mostly seek counselling on menstrual and personal hygiene practices, 20% utilised emergency contraceptives and 14% utilised services on STDs prevention. Also, 11% had utilised

service on boys-girls' sexual relationship counselling, and a similar proportion of 8% utilised HIV/AIDS counselling services and how to prevent teenage pregnancy. Only 7% has utilised adolescent health corners services, 5% utilised abortion care services and 4% breast and cervical cancer screening.

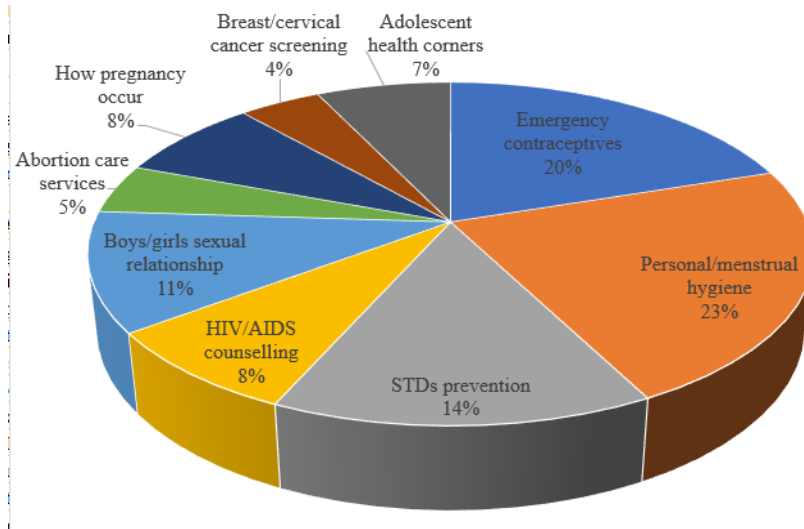


Figure 4

3.8. Predictors/Socio-Demographic Factors Influencing the Utilization of SRH Services

Table 5 summarizes the final logistic regression model of predictive socio-demographic factors influencing the utilisation of SRH services among respondents. Age of respondents was found to have a statistically significant relationship with SRH services utilisation as those who aged above 20 years were 8.94 times more likely to have used SRH services as compared to those who aged between 13-15 years (AOR = 8.94; 95% CI 0.98-80.82; $p = 0.04$). The respondents' level of education was again found to have a statistically significant relationship with the utilisation of SRH

services (AOR = 1.04; 95% CI 0.59-1.83; $p = 0.01$). Respondents who had higher level of education were found to have had increased utilization level of SRH services as compared to those of their counterpart had a lower level of education. Frequency of visits by closed associates was equally found to significantly influence the utilisation of SRH services (OR = 1.08; 95% CI 0.65-1.78; $p = 0.005$). Respondents who had their boyfriends or girlfriends as well as family members paying them a visit on campus once every month were 1.08 times more likely to have utilized SRH services than those who neither of their boyfriends, girlfriends and family members paying them a visit on campus.

Variable	Ever Utilized SRH service	Unadjusted OR (95%CI)	P-value	Adjusted OR (95%CI)	P-value
	Yes n (%)				
Age category					
13-15 years	36 (78.3)	1 (ref)	0.02	1 (ref)	0.04*
16-19 years	224 (68.1)	0.59 (0.28-1.24)		0.69 (0.31-1.52)	
20 years and above	17 (94.4)	4.72 (0.52-42.32)		8.94 (0.98-80.82)	
Level of education					
SHS one	108 (74.0)	1 (ref)	0.05	1 (ref)	0.01*
SHS two	104 (73.8)	0.98 (0.58-1.67)		1.04 (0.59-1.83)	
SHS three	65 (61.3)	0.55 (0.32-0.96)		0.47 (0.25-0.85)	
Relationship status					
Single	213 (70.3)	1 (ref)	0.99	1 (ref)	0.29
Married	3 (75.0)	1.26 (0.12-12.39)		1.41 (0.12-15.55)	
Boyfriend lover	40 (70.2)	0.99 (0.53-1.84)		1.12 (0.55-2.27)	
Girlfriend lover	21 (72.4)	1.11(0.47-2.60)		1.19 (0.49-2.88)	

Person who paid a visit					
Parents	72 (75.8)	<i>1 (ref)</i>	0.06	<i>1 (ref)</i>	0.60
Father	36 (76.6)	1.04 (0.45-2.38)		1.15 (0.49-2.67)	
Mother	74 (69.8)	0.73 (0.39-1.38)		0.67 (0.35-1.28)	
Family member	35 (77.8)	1.12 (0.47-2.61)		1.15 (0.48-2.74)	
Boy/girlfriend	15 (71.4)	0.79 (0.27-2.31)		0.83 (0.28-2.50)	
Others	45 (57.0)	0.42 (0.22-0.82)		0.61 (0.23-1.63)	
Frequency of visit					
Weekends of every month	91 (72.8)	<i>1 (ref)</i>	0.005	<i>1 (ref)</i>	0.34
Once every term	153 (74.3)	1.08 (0.65-1.78)		1.23 (0.72-2.08)	
No visitor	33 (53.2)	0.42 (0.22-0.81)		0.62 (0.22-1.69)	
<i>Predictors of Srh Services Utilization Was Statistically Significant At 5% (P<0.05)</i>					

Table 5: Predictors/Socio-Demographic Factors Influencing the Utilization of SRH Services

4. Discussion

This study used a quantitative method to determine knowledge, access and utilization of Sexual and Reproductive Health Services (SRHS) among Senior High School students in the Sunyani West Municipality. The findings have been discussed on knowledge of SRHS, access to SRHS, utilization of SRHS and factors affecting access and utilization of SRH services. Respondents' knowledge of sexual and reproductive health services influences their access and utilization of the SRH services. From the current study, young people's awareness level of SRH services was high as over three-quarters were aware of SRH services in the quantitative study but contradict the qualitative findings as most school counselors reported that adolescents were unaware of the existence of SRHS. The high awareness of SRH services among young people was equally reported in the Ghana Statistical Service 2014 Ghana Demographic and Health Survey [15]. But the current findings contradicted the findings of Dapaah et al., which indicated that adolescents were having low-level knowledge and awareness of SRH services and attributed this to the lack of information on SRH services to adolescents. Also, most sources of SRH information of young people were found to include social media, health workers, parents, friends/peers, and others. Some of these sources have been cited for having a significant influence on the knowledge level of SRH services, and adolescents could be misinformed about SRH services through these sources [18,19].

Notwithstanding, the high awareness of SRH services among respondents could also be attributed to the proliferation of technological devices such as radio and TV, and the use of internet and social media platforms like Facebook as well as health education provided by health workers, school teachers and parents contributed to the awareness level of adolescents. These information sources shared similarities with studies conducted by Kamble et al., and the World Health Organization which also cited these sources for having an influence on adolescents' knowledge regarding SRH services [1,20]. Findings further indicate more than half had knowledge on personal and menstrual hygiene

practices, and less than a third had knowledge on other SRH areas such as STIs prevention, pregnancy preventions and nutrition and good dietary practices. However, the overall knowledge level of respondents on SRH showed less than half had a relatively good knowledge level, and a little above half lacked knowledge or had a poor knowledge level of SRH services. The fairly good knowledge level regarding the access and utilization of SRH services could be attributed to the health talk and education provided through healthcare providers and during the school programme. Notwithstanding, the 2014 Ghana Demographic and Health Survey equally showed that, young people had a relatively high level of knowledge of contraceptives and HIV as well as Ajika and Mbegbu study in Ikeja, Lagos State, Nigeria attributed young people relatively high knowledge level to the information received at adolescent and youth-friendly health facilities and from friends/peers [15,21]. In contrast to the current study's findings were study findings by Dapaah et al., which findings reported high knowledge of adolescents and youth regarding sexual and reproductive health services. Also, respondents' knowledge of pre-marital sexual relationship showed almost two-thirds had their first sexual partner between the ages of 15-17 years, and nearly a third had their first sexual partner at the age of 18 years and above. Knowledge of respondents of sexual initiation period contributed to a healthy sex life and the utilization of sexual and reproductive health services. These findings were also found to share similar relations with the findings report of United Nations Education Scientific and Cultural Organization and Woog & Kågesten of the Guttmacher Institute study in developing countries on adolescents sexuality and age, and the access and utilisation of SRH services noticing that most adolescents and young people are initiating sex in early age [6,22]. Access to sexual and reproductive health services such as contraceptives, safe abortion services, counseling, cancer screening, and management and treatment of STIs are vital to promote healthy sexual and reproductive health living among adolescents and young people. From the current study, access to SRH services further showed a little over half had ever accessed SRH services, and only less than half of the respondents did

not access the services. Lack of access to SRH services could be attributed to respondents' poor insufficient knowledge level regarding the services.

The 2018 report of the World Health Organization cited the need for improved knowledge of adolescents to enable access SRH services, and as well opt for SRH services that best suit their choice of the available SRHS at any point in time [1]. But the 2016 Ghana Health Service report associated adolescents and young people lack of access of SRH services to social values, norms, and societal construct to posed barriers and impediments to adolescents and young people non-access and utilization of SRH services [12].

Also, findings again showed little over half had accessed SRHS through the visit of health workers to the school. Less than a third had accessed the SRH services at health facility through the help of closed relations such as parents and friends. This was contradicted by the findings of Tamang, et al., in South Africa which report shows that adolescents had better access to SRH services, and has attributed this to their level of education and economic factors such as improved household income to have contributed to the positive change and increased access and utilization of SRH services among adolescents and young people [23].

Adolescents access to SRH services in the current study showed about a third have ever accessed SRH services on the treatment of STDs such as gonorrhoea, HIV/AIDS, candidiasis (white), syphilis and others, less than a quarter have accessed counselling service on menstrual and personal hygiene practices, and on boys-girl's sexual relationships, and less than tenth had accessed service on contraceptive methods use breast and cervical cancer screening and abortion care services. These findings were lower in proportion compared to studies conducted by Tamang, et al., in South Africa; and Amankwaa et al., in Ghana [11,23]. Findings further showed that almost three-quarters of adolescents preferred accessing SRH services at the hospital, and the least preferred access sources were adolescents' reproductive health corners, Planned Parenthood Association of Ghana. This could be attributed to the perceived high cost of SRH services at the health facility and other barriers such as lack of confidentiality and trust of health workers, cost of transportation to the service centre, and difficulty of obtaining permission from school authority contributed to them not accessing SRH services at the health facility. These findings, however, shared similarities with Akatukwasa et al., and Tamang et al., studies which equally cited poverty, a culture of society, and the act of feeling shame and shyness were reported as the major obstacles to adolescents accessing SRH services at the health facility [23,24].

The use of SRH services among adolescents in senior high school in the study showed adolescents who have ever utilized SRH services was nearly three-quarters, while almost a quarter have never used the SRH services. The poor utilization of SRH services among young people was attributed to unawareness of services,

financial challenges and adolescent being afraid of parents and school authorities punishing them for visiting the health facility. Findings were found to shared similarities with Gere mew et al., and United Nations Population Fund, but was found to showed dissimilarities with the findings of Asabi, & Annaba study in Ghana [3,25,26]. Types of SRH services most often utilized showed that, nearly three-quarters of adolescents wished to abstain from having sex, and among those who ever used SRH services less than a quarter had used male condom, contraceptive pills and female condoms during sex. Utilization of SRH services was low, and the low utilization of SRH services could be due to poor knowledge regarding the services and lack of availability of the preferred methods of SRH services [26]. The low utilization of SRH services shared similarities with the 2014 Demographic Health Survey which findings equally said SRH service use was low among young people but said utilization of contraceptive was high among married young women with a secondary or higher education. Various factors influenced adolescents' access and utilization of SRH services. Hence, findings showed few adolescents cited restrictive school rules to have affected their use of SRH services and been shy to visit the health facility to ask for SRH services. These reported barriers could be influenced by the Ghanaian socio-cultural environments that do not allow young people to engage in open discussions on sex and other matters relating to the male and female reproductive system with the elderly. Notwithstanding, these barriers were found to share similarities with, and studies, but findings were different from Dockalova et al., study which findings showed that young people who were living in rural areas were marginalized groups to have access to family planning services [20,27,28].

Also, a little over two-third of adolescents cited lack of knowledge and access to SRH information had affected their knowledge in the access and utilization of SRH services. Adolescents' knowledge of SRH services is a key factor to the access and utilization of SRH services, and this was found to share similarities with Binu et al., study in Ethiopia, and Lluvia et al., study in Kenya which equally found adolescents to lack knowledge of SRH services, and thus affected their access and utilization of SRH services [29,30].

Again, findings from the current study also indicated over half of the adolescents cited financial difficulties as a barrier and the presence of a close relation such as family member and friend at health facility affected their access and utilization of SRH services. To add, more than a third of adolescents said they felt ashamed been seen at the SRH center to access SRH services, and less than half said that they are always afraid to disclosed to the health workers about their personal health secret on SRH issues. Personality traits such as been ashamed and afraid of discussing SRH issues with health workers and parents could be attributed to the fear of victimization of been perceived as a bad person or been tagged with name calling of been deviant/bad boy or girl, and thus prevent most adolescents from accessing the services. These findings were found to shared similarities with, but different from

the findings of which cited among other barriers to include the affordability of STI services [6,28].

Also, frequency of visit by closed associates such as parents, family members and friends was also found to have a borderline statistically significant association with adolescents having good/positive attitude/perceptions toward SRH services as those who had closed associates (parents, friends) visiting them once every term were found to have had an increased chance of 1.86 times (2 folds) of having a good attitude toward SRH services as compared to their counterpart who parents/friends visit them weekends of every month. However, respondents who worked for pay were found to have had a statistically significant association in the univariate analysis as those who do not worked for pay had a probability increased chance of 1.69 times of having good attitudes toward SRH services as compared to those who worked for pay. The influence of socio-economic factors such as educational attainment and frequency of visit were equally reported among others by, and World Health Organization to have a significant influence on the attitude and perceptions of adolescents toward the access and utilization of SRH services [31,32].

Additionally, age of respondents in the current study was found to have a statistically significant relationship with SRH services utilisation as those who aged above 20 years were 8.94 times more likely to have used SRH services compared to those aged between 13-15 years. Age as a variable determined the utilisation of SRH services because age predicts the maturity of adolescents thus influencing SRH services access and utilisation. Level of education of respondents was again found to have statistically significant relationship with the utilisation of SRH services because educational attainment determined the knowledge level of adolescents and thus exposed them to a lot of information regarding SRH services which could influence their use of the service. The frequency of visits by closed associates was equally found to significantly influence the utilisation of SRH services. These significant variables were found to share similarities with United Nations International Children Education Fund report, which cited a higher prevalence of utilization of STIs management services among youth 20-24 year-year-old than adolescents aged 15-19-year-olds [2].

Also, similar findings were reported by World Health Organization; and United Nations Education Scientific Cultural Organization [1,6]. Notwithstanding, the level of education of respondents was found to show significant association with the access of SRH services as those who were in SHS form two and three were more likely to access SRH services as well as the relationship status of respondents as those who had either boyfriends or girlfriends had an increased percentage chance of accessing SRH services. Also, the type of person who pays visit to adolescents on school campus was equally found to have had significant influence on adolescents' access to SRH service as those who had their boyfriends and girlfriends as well as family members to have visited to them on

campus were more likely to have access SRH services. However, these findings were found to have dissimilarities with; and Akatukwasa et al., study, which cited mismanagement of SRH concerns of adolescents to influence their access to SRH services [24,26].

4.1. Strength and Limitations

A major strength of this study was that being a population-based study that employed probability sampling method, the study population was randomly selected through simple random sampling to give representation of the study respondents in the study area. However, the study had some limitations. The study did not include all schools in the municipality but only concentrated on four (4) public schools leaving the private and vocational schools, and therefore findings might not give an overall view of all schools in the municipality. To add, the study also involved adolescents' sexual activities and family planning practice, and this has limited some of the responses they might provide due to fear of been mocked by peers and parents. The study was also limited to Ghana and areas where the practice of family planning and contraceptive use was allowed.

5. Conclusion

Adolescents awareness of SRH services was high. Knowledge of SRH services was averagely high (51.2%), and 48.8% had good knowledge of SRH services. Slightly over half (59%) had ever accessed SRH services, and more than three-quarters (83.6%) had spent less than 30 minutes to 1 hour at the service center. SRH services ever accessed shows 23% accessed STDs treatment such as gonorrhoea, candidiasis (white), and syphilis. Factors influencing access and utilization of SRH services include; restrictive school rules (42.7%), feel shy visiting the health facility (67.7%) and financial difficulty (57.5%). Significant predictive factors influencing access and utilisation of SRH services were; relationship status, level of education, ever worked for pay, age of adolescent, and frequency of visits by closed associates.

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Data Availability Statement

Data are available upon reasonable request.

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