

Uptake of Sexual And Reproductive Health Services and Associated Factors Among Rural Adolescents in Southern Ethiopia, 2020

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Abstract

Introduction: Although 25% of Ethiopia's population is an adolescent cohort of age 15-19 yrs, the Adolescent Sexual and Reproductive Health Service (ASRH) service utilization has not been adequately researched and addressed, and, therefore, they have had to deal with multiple reproductive health problems. Therefore, assessing the determinants of sexual and reproductive health service uptake in this age group is critical to boosting service use and, in doing so, reducing the burden of illness and disability among adolescents. And so, the motivation at the rear of this research was to look into the level of sexual and reproductive health services utilization and to find out determinants among adolescents who reside in rural districts of Guraghe zone, southern Ethiopia.

Methods: A community-based cross-sectional study was undertaken from May 1-30, 2020. A multi-stage method of sampling was employed. A total of 1028 adolescents have been randomly chosen and participated in the study. Pre-tested structured questionnaires were used for data collection. The data was encoded and entered into Epi-Data version 3.1 and exported for analysis to SPSS version 23. A bivariable logistic regression analysis was conducted, and variables with a p-value less than 0.25 were considered candidates for a multivariable logistic regression model. In multivariate logistic regression, variables with p-values <0.05 were declared as statistically significant.

Results: of the sampled 1028 participants, 1009 took part in the study and yielded a response rate of 98.1%. The study found that 281 (27.8%) of adolescents received sexual and reproductive health services. Accordingly, among these SRH service users (n = 281), provision of SRH information and education was the most common item received by 171(60.8%) of adolescents whereas relatively few respondents 32(11.4%) got safe and /or post-abortion care. Variables that became important determinants of SRH service utilization were; taking part in peer education (AOR:2.07; 95%CI:1.46-2.94), parental discussion (AOR:3.94; 95%CI:2.77-5.60), availability of youth clubs (AOR:3.15; 95%CI:2.22-4.49), and being knowledgeable on SRH issues (AOR:3.48; 95%CI: 2.44-4.96).

Conclusion: In the study area, sexual and reproductive health service utilization was low. Since most adolescents are enrolled in school, schools can be an excellent way to increase adolescents' awareness of SRH services through behavioral change communication (BCC). Furthermore, special attention should be given to promoting discussion between parents and adolescents and the creation and strengthening of youth clubs as important steps to improving the use of Sexual and reproductive services for adolescents by the relevant stakeholders.

Background

Adolescence is a decisive phase of human growth with rapid physical, psychosocial, intellectual, and emotional development and erotic and reproductive maturation [1, 2]. Progress towards universal health coverage requires keeping adolescents healthy, as adolescence represents a significant opportunity for successful

prevention and health promotion with life-course implications [3]. Healthy adolescents are also fueling economic growth by increasing productivity and halting poor health from spreading across generations. There is approximately 10-fold health, social, and economic return for every dollar spent on adolescent health [4]. Sexual and reproductive health (SRH) service is well described

as the combination of techniques, procedures, and services that prevent and respond to sexual health snags by ensuring sexual health and well-being [5, 6]. Adolescent sexual and reproductive health (ASRH) contributes to adolescents' physical and emotional well-being and encompasses their desire to remain free from unintended pregnancy, unsafe abortion, STIs (including HIV/AIDS), and other aspects of sexual abuse and pressure [7, 8]. The constellation of the ASRH services are; provision of information and education on SRH issues, counseling, and provision of modern contraception, volunteered HIV/AIDS counseling, and testing (VCT), STI diagnosis and management, and safe and/or post-abortion care [7-9].

Worldwide, there are up to 1.2 billion adolescents, of which 513 million are between the ages of 15 and 19, and 85% of all adolescents live in developing countries [10]. Adolescents make up as much as a quarter of the population in some countries and the number of adolescents is anticipated to boost in 2050, especially in low- and middle-income countries (LMICs), where access to health and social services, jobs, and livelihoods seems to be under pressure [11-13]. In sub-Saharan Africa, adolescents make up 23% of the population of the region [12]. Around 25% of Ethiopia's total population is covered by a cohort of adolescents [7, 14].

Although the Convention on the Rights of the Child (CRC) watch over the right of adolescents to SRH services, neither the suppliers of these services nor the systems under which they work are equipped to come across the needs and to recognize the benefits of adolescents [3, 15, 16]. In developing countries including Ethiopia, health systems and programs are predominantly premeditated for either young children or adults and less weight is given to SRH services for adolescents especially for those residing in rural setups [3]. Although under-five mortality decreased by half during the duration of the Millennium Development Goals, advances in adolescent mortality have been delayed [17, 16]. There are over 1.2 million adolescent deaths worldwide every year [11, 16].

The consequences of neglecting adolescent SRH services are great; adolescents girls in particular face an increased risk of exposure to unintended pregnancy, HIV and sexually transmitted infections (STIs), sexual coercion, exploitation, and violence [13, 18]. Adolescent pregnancy often entangled with child marriage or decreased engagement in education is correlated with low maternal health outcomes [15, 16]. By year, nearly 16 million adolescent girls give birth, with the majority of these births taking place in the circumstance of early marriage, and 90% in developing countries [19]. 7.4 million adolescent girls still encounter an unplanned pregnancy, mostly because of a lack of a way to contraception [20]. A third (34%) of girls aged 15- 19 have begun childbearing in Ethiopia [21].

Globally, it is estimated that more than 220 million women in LMICs have an unmet need for family planning [22]. Up to 68% of adolescents in sub-Saharan Africa have an unmet need for contraception [20]. According to the 2019 Mini Ethiopian Demographic and Health Survey (mini-EDHS 2019), contraceptive usage among currently married women aged 15-19 years was just 36.5%, with injectable, implants, and IUD use of 27.5%, 5.9%, and 0.0%, correspondingly [23]. With 75% and 80% respectively, the propor-

tion of adolescents who have never been tested for HIV is highest among women and men aged 15-19 [21]. Limited studies conducted elsewhere in Ethiopia have shown that inadequate access to SRH services in general with a range of 21.5-41.2% [24-26].

The Federal Ministry of Health (FMOH) of Ethiopia has introduced various strategies to facilitate national-level adolescent and youth reproductive health services to overcome SRH problems [7, 14]. Too, youth-friendly health programs were developed to provide adolescents and young people with SRH services in harmony with the prevailing health facilities. Regardless of all the above, Ethiopia still has a major discrepancy in accessing reproductive health services for adolescents and young adults [7].

The sexual and reproductive health (SRH) service uptake of adolescents has not been adequately researched or addressed, despite 25% of the Ethiopian population being adolescents [27]. For this purpose, it is important to assess determinants of the use of reproductive health services to fire up the use of ASRH services and thus condense the weight of adolescent disease and reproductive health-related debilities. Furthermore, Take in and appreciating the utilization pattern of SRH services among adolescents will help for further planning of better service delivery [15]. Most of the studies on this subject area have so far been confined to the country's urban areas, with little details on rural areas [28, 29]. And so the motivation behind this study was to assess the level of use of ASRH services and to identify determinants among adolescents living in rural districts of the Guraghe zone, to provide evidence-based information and recommendations for potential interventions that could be undertaken.

Materials Methods

Study Design And Setting

A community-based cross-sectional study was conducted in the Guraghe Zone, central Ethiopia from May 1 to 30, 2020. The zone is situated 158 kilometers from Addis Ababa (Ethiopia's capital city) and 337 kilometers from Hawassa (the capital city of southern nation nationalities and people region). The total population of the Zone for the 2020 fiscal year was 1,807,689, of whom 1,568,940 (86.28%) resided in rural areas, and adolescents aged 15-19 years is estimated at 13.6% (245,845) of the total population. The zone is divided into 11 administrative districts which encompassed 174 rural kebeles (the smallest administrative unit next to a district in the Ethiopian government). There are 128 health facilities which are quantified as 74 health centers, 5 hospitals, 168 health posts, 30 private clinics.

Population

All adolescents in the rural districts in the Guraghe zone were the source population and all selected adolescents living in the selected districts during the study period were the study population. The study excludes participants who have been living in the study area for less than six months and adolescents who were seriously ill at the time of data collection.

Sample Size Determination and Sampling Techniques

By applying the single population proportion formula, the sample size was determined by considering the proportion (p) of adolescents who received 41.2% of SRH services from a study conducted in northwestern Ethiopia [26]. Besides, parameters such as the

95% confidence level, 5% margin of error, and a 10% non-response rate, and the design effect of 2.5 were used. For that reason, 1028 was the total sample size for the study. A multi-stage sampling technique was used to recruit participants to study. At stage one, Five districts were chosen at random from 11 rural districts, namely: Ezha (with 24 kebeles), Cheha (with 12 kebeles), MihurAkilil (with 12 kebeles), Meskan (with 11 kebeles), and Soddo (11kebles). At stage two 28 kebeles, were randomly selected from a total of 70 kebeles in the five districts mentioned above. The sample size was proportionally allocated to each entitled kebele. With the assistance of community health workers (CHWs), households with qualified participants were coded and a sampling frame was set up. It was practical to access each study participant by simple random sampling (i.e. computer-generated random number). In the selected Kebele, those eligible participants who were not available during data collection were re-examined three times. While more than one deserving adolescent was there in the chosen household, a lottery method was employed.

Data Collection Tools, Methods, And Personnel

Pre-tested structured questionnaires have been prepared through previous studies in the areas of interest [3, 14, 24-26]. The questionnaire comprised of multiple segments: socio-demographic and economic characteristics, access to SRH services, knowledge of SRH-related problems, respondents' lifestyle and sexual activity, and use of RH services. Via a face-to-face interview, 14 diploma nurses who had prior data collection experience with the supervision of 6 public health officers gathered the data. By going through the questionnaire one by one, all data collectors and supervisors were provided with intensive training lasting two days on the point towards the study, methods, and data collection techniques.

Data Quality Management

The questionnaire was first constructed in English, then translated into the local language by experts in that language, and finally retranslated into English by another translator to ensure accuracy. The pre-test was performed on 52 adolescents (5 percent of the sample size) who resided in one of the unselected kebeles. All the required modifications were implemented based on the pre-test outcome for better completion of the questionnaires. The reliability of the questionnaires was evaluated by SPSS by calculating the reliability index for practice issues (Cronbach's alpha), which was 0.77. Data collectors were supervised by field supervisors, and overall undertakings were monitored regularly by the principal investigator. All the data collected was checked for wholeness in advance of analysis. The data were collected somewhere there was no noise and disturbance in the quiet spot of the study participant's home.

Data Analysis

The data entry was done using EPI Data 3.1 and exported for analysis to SPSS version 23. Using descriptive statistical analysis, frequency, percentage, and mean for explanatory and response variables were run. Bivariate and multivariable models were run to assess any relationship between each independent variable (socio-demographic characteristics, health service variables, and sexual and reproductive health characteristics) and the outcome variable (sexual and reproductive health service utilization, i.e., at least once SRH service used). A bivariate binary logistic regression

analysis was done, and variables with p-value <0.25 was considered as a candidate for a multivariate logistic regression model. In multivariate logistic regression, variables with a p-value <0.05 were reported as statistically significant. The association between SRH service utilization and explanatory variables was reported with AOR and its 95%CI.

Definition and Measurement of Variables

Sexual and reproductive health (SRH) service utilization: when adolescents received at least one of the five important elements of SRH services; information and education on SRH matters, consultation and provision of modern contraceptives; STIs diagnosis and management, getting VCT service, and abortion and/or post-abortion care within the last 12 months [25, 26].

Adolescent: In this research, adolescents denote boys and girls between the ages of 15-19 [25, 28, 29].

Discussion on SRH issues: Adolescents who have discussed at least two SRH issues in the previous 12 months(Condom use, STI/HIV/AIDS, abstinence, unwanted pregnancy, contraception) together with health care providers, peers, sexual spouses, and/or parents [25].

Sexual exposure history: Adolescents who had sex in their lives have been identified as having a sexual encounter history and not otherwise [25].

Modern contraceptive service utilization: Adolescents that during the past 12 months have used any of the modern methods of birth control (oral contraceptives, condoms (male and female), injectables, implants, intrauterine devices, emergency contraceptive pills, and spermicidal agents) [25, 28].

Accessibility to SRH service: Applied to the perceived distance traveled by respondents to reach SRH service delivery points and/or time spent by them. Adolescents residing within a 1.6-km radius of the nearest SRH service center and/or reaching those service delivery points within a walking distance of fewer than 30 minutes were graded as having good and otherwise poor geographical mobility [25].

Substance use: Using addictive substances such as alcohol, 'khat', or cigarette with either frequency of; more repeated than daily, daily, weekly or monthly in the past 12 months before the study [25].

Reproductive health service knowledge: Twelve questions were asked to adolescents encompassing the perceptions about SRH issues. An index that summarizes the level of knowledge and categorizes it as Knowledgeable if the summary index is equal to or greater than the mean [24, 25].

Availability of Youth clubs: Accessibility of places/rooms where young people can meet and gather SRH information, SRH services such as contraceptives, physical activities, social support, peer-to-peer discussion, with the aid of trained workers and volunteers to protect adolescents from negative events, anti-social behavior, crime, drug, and alcohol abuse that are a problem in this community [30-32].

Results

Sociodemographic Characteristics of Respondents

One thousand nine rural adolescents participated in the study, producing a response rate of 98.1%. The mean age of the adolescents was 17.07 ± 1.4 years and females were more than half (57.1%).

The largest proportion of adolescents (95.9%) were unmarried and over half (51.8%) attended high school. Guraghe belongs to the majority (90.8%) of the ethnic group and, by religion, more than half (54.9%) were Orthodox Christians. The mean family size was 5.15 ± 1.55 (Table1).

Table 1: Sociodemographic characteristics of rural adolescents in Guraghe zone, Southern Ethiopia, May 1-30, 2020

Variables Categories	Frequency	Percent
Age (n=1009)		
15-16	412	40.8
17-19	597	59.2
Sex (n=1009)		
Male	426	42.2
Female	583	57.3
Marital status (n=1009)		
Ever Married	41	4.1
Unmarried	968	95.9
Religion (n=1009)		
Orthodox	554	54.9
Muslim	380	37.7
Protestant	47	4.7
Catholic	28	2.8
Ethnicity(n=1009)		
Guraghe	917	90.9
Amhara	66	6.5
Wolaita	15	1.5
Hadiya	11	1.1
Current enrolment at school(n=1009)		
Yes	890	88.2
No	119	11.8
Educational status(n=1009)		
No formal education	87	8.6
Primary	403	39.9
Secondary	519	51.4
Occupational status(n=1009)		
Student	827	82.0
Daily laborer	104	10.3
Unemployed	78	7.7
Current living arrangement(n=1009)		
With bother parent	864	85.6
With mother only	81	8.0
With father only	40	4.0
With husband or wife	24	2.4
Mother's education level (n=969)		

No Formal education	531	54.8
Primary	301	31.1
Secondary	98	10.1
Diploma and above	39	4.0
Father's educational level (n=928)		
No formal education	387	41.7
Primary	321	34.6
Secondary	160	17.2
Diploma and above	60	6.5
Family size		
≤5	543	53.8
>5	466	46.2

Geographical accessibility to ASRH service delivery points

Concerning geographical ease of access, 437 (43.3%) of the participants accessed those service delivery points within a 30-minute walk from their residential home. The mean distance from the respondents' home to the nearest service delivery point was 2.1km. Health centers(60.2%) and private clinics(35.7%) were among the commonly accessed service delivery points. Other service delivery points accessed by adolescents were private pharmacies (32.4%), hospitals (24.5%), and health posts (13.8%). Around one-third (n=322, 31.9%) of respondents reported there had been youth clubs (YCs) near them and 209(64.9%) were not actively participated in those clubs.

Respondents' Attribute Related to Sexual And Reproductive Health

Of the total participants, 162 (16.1%) respondents had a sexual partner in the last 12 months, and 111(68.5%) of them had one sexual partner. The majority of those participants who already had sexual partners witnessed sexual intercourse, 87(53.7%). Over the past 12 months, 339 (33.6%) and 395 (39.1%) of study participants reported having a parenting discussion on SRH topics and peer-to-peer education, respectively. The major issues discussed with their parents were: abstinence (61.9%), prevention of STI/HIV/AIDS (67.5%), and contraception (31.8%). For the experience of participants in substance use over the last 12 months, 199(19.7%), 246(24.4%), and 113(11.2%) of respondents consumed alcohol, 'Khat', and cigarettes, respectively (Table2).

Table 2: Individual attributes related to sexuality and reproductive health among rural adolescents of Guraghe zone, southern Ethiopia, May1-30, 2020.

Variable categories	Frequency(n)	Percentage (%)
Had sexual partner/s(n=1009)		
Yes	162	16.1
No	847	83.9
Number of sexual partners(n=162)		
One	111	68.5
More than one	51	31.5
Had sexual intercourse within the last 12 months(n=162)		
Yes	87	53.7
No	75	46.3
Frequency of sexual intercourse(n=87)		
Once	35	40.2
>Once with the same partner	41	47.1
>Once with a different partner	11	12.7
Alcohol consumption pattern(n=1009)		
Ever users	164	16.2
Drink Within the last 1 yr.	141	13.9

Within the last 3 months	64	6.3
Frequency of alcohol consumption (n=164)		
Almost every day	4	2.4
At least once a week	14	8.5
At least once a month	52	31.7
At least once a year	58	35.5
Ceased currently*	36	21.9
'Khat' chewing pattern (n=1009)		
Ever chewer	246	24.4
Within the last 12 months	199	19.7
Within the last 3 months	113	11.2
Frequency khat chewing(n=246)		
Almost every day	9	3.6
At least once a week	52	21.2
At least once a month	88	35.7
At least once a year	71	28.9
Ceased currently*	26	10.6
Patterns of Cigarette smoking (n=1009)		
Ever smoke	113	11.2
Within the last 12 months	101	10.0
Within the last 3 months	48	4.7
Frequency smoking (n=113)		
Almost every day	3	2.6
At least once a week	9	7.9
At least once a month	29	25.6
At least once a year	43	38.1
Ceased currently*	29	25.6

* Adolescents who have taken none of the above substances in the past three months.

Knowledge of Adolescents Towards SRH Issues

Using 12 items with a minimum and maximum score of 0 and 12, the level of knowledge of adolescents on SRH issues was evaluated. Therefore, below half (43.8%) of respondents were knowledgeable (scoring above the mean = 4.67 (SD+ 2.07)) about SRH

related issues. The majority (62.1%) of respondents had information about SRH services and the school environment was found to be the most popular source of information (84.1%). At least one contraceptive method can be pointed out by nearly half (49.1%) of adolescents (Table3).

Table 3: Level of SRH knowledge among rural adolescents of Guraghe zone, Southern Ethiopia, May 1-30, 2020

Variable categories	Frequency(n)	Percentage(%)
Ever heard about SRH (n=1009)		
Yes	627	62.1
No	382	37.9
Source of information(n=627)		
From school	527	84.1
Radio	304	48.5
Television	60	9.6

Social media	81	12.9
Family members	202	32.2
Can mention at least one SRH service that should be delivered to an adolescent (n=1009)		
Yes	523	51.8
No	486	48.2
Know delivery points for SRH services (n=1009)		
Yes	513	50.8
No	496	49.2
Know SRH service provider(n=1009)		
Yes	498	49.3
No	511	50.7
Know the reasons for unintended pregnancy (n=1009)		
Yes	308	30.5
No	701	69.5
Know at least one way of avoiding pregnancy (n=1009)		
Yes	292	28.9
No	717	71.1
Know at least one type of STI(n=1009)		
Yes	382	37.8
No	627	62.2
Can mention at least one mechanism of STI prevention(n=1009)		
Yes	363	35.9
No	646	64.1
Know the place where STI case management are availed(n=1009)		
Yes	318	31.5
No	691	68.5
Know at least one benefits of contraceptive methods		
Yes	587	58.1
No	422	41.9
Know at least one type of contraceptive (n=1009)		
Yes	497	49.2
No	512	50.7
Knowledge by method mix(n=497)		
Condom	323	69.1
Oral contraceptives	216	46.2
Injectables	174	37.2
Implants	94	20.1
IUD	61	13.1
Overall knowledge		
Knowledgeable	442	43.8
Not knowledgeable	567	56.2

Sexual and Reproductive health services utilization among adolescents

In this study, only 281 (27.8%) of study participants utilized ASRH services and only 21 (7.5%) received all five SRH service items. Of those SRH service users (n = 281), 171 (60.8%) of adolescents were most likely to receive SRH information and education, followed by VCT, 121 (43.1%). One hundred eleven(39.5%) of adolescents were provided with at least one type of modern contraceptive methods. Whereas relatively few respondents 32(11.4%) got safe and /or post-abortion care (Figure1).

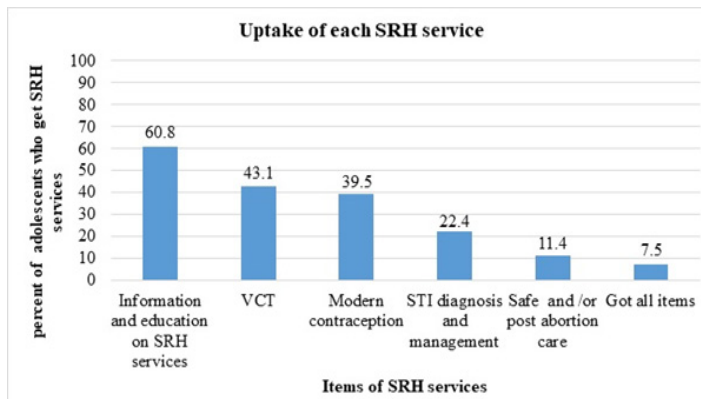


Figure 1: Shows the percentages of SRH services utilized by ad-

olescents in rural districts of Guraghe zone, southern Ethiopia, May1-30, 2020(n=281).

Determinants of SRH Service Utilization

As multivariable logistic regression analysis, variables that became important determinants of the use of SRH services were: having a peer to peer education, having a parental discussion, availability youth club, and being knowledgeable on SRH issues.

Unlike adolescents without peer education, adolescents who participated in peer education were twice as likely to have practiced SRH services (AOR:2.07; 95% CI:1.46-2.94). The availability of a youth club in their neighboring environment influences SRH service usage. The probability of using the SRH service was 3.2 times higher for adolescents who reported that there is a functioning youth club in their community compared to adolescents from where there is a lack of youth club (AOR:3.15; 95% CI; 2.22-4.49). It was noted that having a parent discussion on the SRH topic had a positive impact on the adoption of SRH services. The likelihood of using SRH was 3.9 times higher for adolescents who had a parental discussion compared to their counterparts (AOR:3.94; 95% CI:2.77-5.60). Similarly, knowledgeable adolescents were 3.4 times more likely to use the services compared to their counterparts (OR:3.48; 95% CI:2.44-4.96) (Table 4).

Table 4: Results of the Bivariable and Multivariable logistic Regression Analysis to Identify the Determinants of SRH Service Utilization among rural adolescents in Guraghe Zone, Southern Ethiopia, May1-30, 2020.

Variable Categories	SRH services utilization		COR(95%-CI)	AOR(95%CI)	p-value	
	Yes(%)	No(%)				
Age						
15-16	109(26.5)	303(73.5)		1		
17-19	172(28.8)	425(71.2)		1.12(0.85,1.49)		
Sex						
Female	147(25.2)	292(68.5)		1	1	
Male	134(31.5)	292(68.5)		1.36(1.03,1.79) *	1.24(0.87,1.75)	0.225
Current enrolment at school						
No	27(22.7)	92(77.3)		1	1	
Yes	254(28.5)	636(71.5)		1.36(0.86,2.14) *	1.48(0.82,2.67)	0.195
Educational status						
No formal education	20(23.1)	67(76.9)		1		
Primary	93(23.1)	310(76.9)		1.01(0.58,1.74) *	0.77(0.39,1.49)	0.440
Secondary	168(32.4)	351(67.6)		1.60(0.94,2.73) *	1.18(0.62,2.25)	0.602
Current living arrangement						
With husband/ wife	5(20.8)	19(79.2)		1		
With father only	9(22.5)	31(77.5)		1.10(0.32,3.78)		
With mother only	20(24.7)	61(75.3)		1.24(0.41,3.77)		
With bother parent	247(28.6)	617(71.4)		1.52(0.56,4.12)		

Mother's education level					
No Formal education	130(24.5)	401(75.5)	1	1	
Primary	79(26.2)	222(73.8)	1.10(0.79,1.52) *	0.76(0.51,1.13)	0.182
Secondary	38(38.8)	60(61.2)	1.95(1.04,3.07) *	1.20(0.69,2.09)	0.506
Diploma and above	14(35.9)	25(64.1)	1.73(0.87,3.42) *	1.99(0.88,4.51)	0.096
Father's educational level					
No formal education	99(25.6)	288(74.4)	1		
Primary	88(27.4)	233(72.6)	1.17(0.84,1.63) *	0.87(0.57,1.33)	0.613
Secondary	61(38.1)	99(61.9)	1.61(1.08,2.39) *	1.54(0.89,2.80)	0.067
Diploma and above	22(36.7)	38(63.3)	1.68(0.95,2.98) *	1.18(0.59,2.34)	0.688
Family size					
>5	113(24.21)	353(75.8)	1	1	
≤5	168(30.9)	375(69.1)	1.40(1.06,1.85) *	1.08(0.76,1.53)	0.251
Geographical accessibility					
Far	131(22.9)	441(77.1)	1	1	
Close	150(34.3)	287(65.7)	1.76(1.33,2.32) *	1.29(0.90,1.84)	0.166
Availability of Youth clubs					
No	127(18.5)	560(81.5)	1		
Yes	154(47.8)	168(52.2)	4.04(3.02,5.41) *	3.15(2.22,4.49)**	0.000
Ever had sexual partner/s					
No	229(27.0)	618(73.0)	1		
Yes	52(32.1)	110(67.9)	1.27(0.89,1.83)*	1.43(0.90,2.27)	0.129
Ever had a parental discussion on SRH issues					
No	114(17.0)	556(83.0)	1	1	
Yes	167(49.3)	172(50.7)	4.73(3.53,6.35) *	3.94(2.77,5.60)**	0.000
Participated in peer to peer education					
No	134(21.8)	480(78.2)	1	1	
Yes	147(37.2)	248(62.8)	2.12(1.60,2.81)*	2.07(1.46,2.94) **	0.001
Knowledge of SRH issues					
Knowledgeable	88(15.5)	479(84.5)	1		
Not knowledgeable	193(43.7)	249(56.3)	4.22(3.14,5.67)	3.48(2.44,4.96)**	0.000

Key 1: Reference category; AOR=Adjusted odds ratio, COR= Crude odds ratio, *Statistically significant at p-value<0.25, ** Statistically significant at p-value <0.05

Discussion

The Adolescent Sexual and Reproductive Health (ASRH) program is one of the core components of health indicators for young people's immediate and long-term SRH needs [3, 8]. This research has attempted to examine the use of SHR services by adolescents in the rural setting of the Guraghe zone. This study showed that the use of SHR services by adolescents was only 27.2%. This suggests that the majority of participants in the study did not have the recommended content of SRH services from the WHO. The finding in the current study is lower than similar studies conducted in Tanzania (33.1%), Debre Birhan town (33.3%) and Awabel district (41.2%), Adama town (34.0%), and Jimma Zone (41.1%)

[25, 26, 33-35]. This may be due to disparities in the availability or accessibility of youth clubs, socio-economic status, location of residence, and geographic accessibility in which the current study was carried out among rural adolescents.

In connection with individual components of service, only 16.9% and 12.0% of adolescents received information and education on SRH and VCT services respectively, which is lower relative to similar studies conducted elsewhere in Ethiopia [25, 28, 29]. The use of family planning has been evaluated by asking for at least one type of family planning method in the last 12 months and only 11.0% of adolescents were offered at least one type of contracep-

tive, which is lower than the Mini-EDHS 2019 report(36.5%) [23] and studies conducted in Ghana (49%), Gondar city (79.5%), Goba city (71.4%), Mekele city (85.8%), Anchar district (39.3%), and Awabel district(25.4%) [26, 28, 29, 36-38].

This could be explained by the differences in the study area in which the current study was conducted among rural adolescents, where it may be difficult for the majority of respondents to find information education communication (IEC) on the key SRH services, and the inaccessibility of SRH service delivery points, which could lead to poor service compliance. The current study in which significant segments of adolescents were unable to obtain the majority of SRH service. This has well supported by several studies carried out elsewhere also showed that low utilization among rural adolescents [24, 36, 39-41]. Inaccessibility of service may be the potential reason for poor coverage of all SRH services in the current study area, and, therefore, a concerted effort and collaboration among local government and non-government stakeholders is needed to make services more accessible to boost the SRH service provision.

According to this report, having a parental discussion positively affects the adoption of ASRH services. Those teens who had a parental discussion about SRH concerns were more likely than those who did not discuss the use of SRH services. This was supplemented by numerous studies in Africa [25, 26, 28, 38, 42]. This may be because, without restriction, adolescents who discussed SRH issues with their parents would have gained more information and experience about SRH services and would thus allow them to practice the services.

For those adolescents who participated in peer education about SRH issues, the chances of using the ASRH service were greater. This is supported by similar studies done in Awabel district, Northern Ethiopia [26], Gondar town [28], Kenya, and Myanmar [43, 44]. This could be because peer groups/friends are composed of individuals from similar age groups, which often provide an opportunity to exchange thoughts and information with little or no restrictions on various SRH issues. This would result in greater demand for and use of the ASRH service.

The current study found that the likelihood of using ASRH services is higher among adolescents who are knowledgeable about SRH issues, than their counterparts. This is supported by a similar study done in northern Ethiopia [24]. This is plausible because the more adolescents have sufficient knowledge of SRH, such as its benefits, content, and service delivery points, the more they comply with the SRH services recommended. As a result, stakeholders need a collaborative effort to enhance adolescents' knowledge through behavioral change communication interventions about SRH services to ultimately increase uptake of the ASRH services.

In their nearby environment, the availability of a youth club determines the use of the ASRH service. In contrast to those adolescents who reported that there was no youth club in their community, those very adolescents from where the existence of a youth club was more likely to make use of SRH services. This is in line with research undertaken in African countries [30-32]. The potential reason may be that as youth clubs are accessible to adolescents,

they could improve SRH service uptake by increasing peer-to-peer dialogue that young clients feel more secure and confident in finding services [30, 45, 46]. Therefore, the collaborative endeavor of concerned bodies to expand such youth clubs to unreachable districts has proven to be an applicable strategy for delivering SRH services to young people.

This research has both strengths and limitations. The study results may have important policy implications for the further improvement of SRH services. While attempts have been made to minimize the potential flaws of this report, readers should be cautious when interpreting the findings. Since it has some sensitive problems and was focused on self-reports, respondents may be responsible for social desirability biases and may have contributed to underreporting of some SRH services. Finally, there could be a chance of recall bias because adolescents were inquiring about certain events that had already come about beforehand in this study.

Conclusion

In the study area, overall ASRH service utilization was low. Information and education about SRH services and Voluntary counseling and testing for HIV were relatively the commonest SRH services uptaken by adolescents. Determinants for ASRH services utilization were recognized for having a peer to peer education on SRH topics, adolescents' knowledge on SRH issues, parental discussion on SRH issues, and availability of youth clubs. Since most adolescents are enrolled in school, schools can be an excellent way to increase adolescents' awareness of SRH services through behavioral change communication (BCC). Moreover, due emphasis must be put on the promotion of parent-to-adolescent dialogue, the establishment, and strengthening of youth clubs by the concerned bodies, as necessary steps to improve the use of SRH services.

Declarations

Abbreviations

- AOR: Adjusted Odds Ratio
- ASRH: Adolescent Sexual and Reproductive Health
- EDHS: Ethiopian Demographic Health Survey
- FMOH: Federal Ministry of Health
- SRH: Sexual And Reproductive Health
- VCT: Voluntary HIV/AIDS Counseling, and Testing;
- WHO: World Health Organization

Ethics Approval And Consent To Participate

Ethical clearance was obtained from Wolkite University, College of Medicine and Health Sciences, Research Ethics Committee ahead of the study was run. Also, a letter of permission was got from the Guraghe Zone Health Department. Health offices of each district wrote official letters of support to different kebele executives. Following clarification about the rationale of the study, verbal informed consent was obtained from the participants. For those study participants aged less than 18 years, informed written consent was obtained using standard disclosure procedures from their parents or guardians. By omitting any personal identifier from the questionnaires, the confidentiality of information was maintained. Besides, the adolescents were assured that neither the interviewer nor their parents would have access to their responses. The information was stored in a secure area where no one, except the principal investigators, had access to it.

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