ORIGINAL RESEARCH ARTICLE

Sexual and reproductive health service utilization and associated factors among high school learners in the Dawuro zone, Southwest Ethiopia

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Abstract

Adolescents' and youths' death in sub-Saharan Africa was the highest in the world according to the 2019 WHO fact sheet report. About 80% of the global youth in the age range of 15-24 years are living with unmet needs for sexual and reproductive health services. A school-based cross-sectional study was conducted from the 1st of September 2020 to the 30 of June 2021 in the Dawuro Zone, to assess the prevalence of sexual and reproductive health service utilization and factors associated with employing the binary logistic regression model. The prevalence of sexual and reproductive health (SRH) service utilization was 26% in this study. Discussion with family/peers on the SRH service issues, exposure to media, having pocket money, and previous awareness creation on SRH service issues were variables statistically significant with an adjusted odds ratio (AOR) with a 95% confidence interval (CI) of 1.81(1.27-2.26), 1.47(1.04-2.09), 1.54(1.09-2.2), and 2.82(2.01-3.95) respectively at p value< 0.05. The 26% was the low utilization of SRH service. (*Afr J Reprod Health 2022; 26[9]: 48-54*).

Keywords: Dawuro, learners, reproductive health, utilization

Résumé

La mortalité des adolescents et des jeunes en Afrique subsaharienne était la plus élevée au monde selon le rapport 2019 de la fiche d'information de l'OMS. Environ 80 % des jeunes du monde âgés de 15 à 24 ans vivent avec des besoins non satisfaits en matière de services de santé sexuelle et reproductive. Une étude transversale en milieu scolaire a été menée du 1er septembre 2020 au 30 juin 2021 dans la zone de Dawuro, pour évaluer la prévalence de l'utilisation des services de santé sexuelle et reproductive et les facteurs associés à l'utilisation du modèle de régression logistique binaire. La prévalence de l'utilisation des services de santé sexuelle et reproductive et les discussions avec la famille/les pairs sur les problèmes de service de SSR, l'exposition aux médias, le fait d'avoir de l'argent de poche et la sensibilisation antérieure aux problèmes de service de SSR étaient des variables statistiquement significatives avec un rapport de cotes ajusté (AOR) avec un intervalle de confiance (IC) à 95 % de 1,81 (1,27-2,26), 1,47 (1,04-2,09), 1,54 (1,09-2,2) et 2,82 (2,01-3,95) respectivement à la valeur p < 0,05. Les 26 % correspondaient à la faible utilisation du service de SSR. (*Afr J Reprod Health 2022; 26[9]: 48-54*).

Mots-clés: Dawuro, apprenants, santé reproductive, utilization

Introduction

Reproductive health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity, in all matters relating to the reproductive system and its functions and processes¹. High school learners are a subset of the young population in the age range of 15 to 24 years as World Health Organization (WHO) defines them. Young people aged between 15- and 24 years account for 15.5% (1.21 billion) of the total population of the world². Adolescents' and youths' death in sub-Saharan Africa was the highest in the world according to the 2019 WHO fact sheet report³.

There are about 80% of the global youth in the age range of 15-24 years, are living with an unmet need for reproductive health services^{4,5}. The young population in the age range of 10-24 years contains a huge proportion of sub-Saharan Africa

with 33.8% of the population in Ethiopia⁶. High school learners are both adolescents and youth and their age is prone to sexual urge and practice whether it is safe or not, which paves the way for the utilization of sexual and reproductive health (SRH) services⁷⁻⁹. SRH service utilization among youths and adolescents in the world is becoming an important concern to reports depicting that early pregnancy, sexual practice, sexually transmitted infections, and similar issues are escalating^{10,11}. Even though youths and adolescents are in great need of sexual and reproductive health services (SRHs) because of their susceptible stage, the majority wrongly perceive as if they are fine and do not need (SRHs)^{12,13}. Reports reveal that youths and adolescents confront various problems concerning SRHs utilization even if they have needs such as cognitive, financial, or geographic¹⁴.

As per the 1994 International Conference on Population Development (ICPD), adolescentfriendly services are the apposite and effective ways to address the SRH needs of adolescents and youth¹⁵. For global youths and adolescents living with unmet needs for SRHs, assessing the magnitude of utilization and factors affected among high school learners in the Dawuro zone was found to be of paramount importance. The main purpose of this study was to assess the magnitude of SRH service utilization and associated factors among high school learners in the Dawuro zone, Southwest Ethiopia.

Methods

Study area and period

The study was conducted in the Dawuro zone. Dawuro zone is one of the six zones of the newly established 11th region of the Southwestern Ethiopia People's Region (SWEPR) of Ethiopia. Dawuro is the second largest zone in the region with a total population of 700,072 in 2021/22 G.C based on the projection from central statistics agency report of 2007. Of the total population, around 329,033.84 (47 %) are in the adolescent age group. At the zonal level, the majority of the population lives in rural areas and there are 49 high schools in the zone, with 45 and 2 governmental and private respectively. Health institutions in the Dawuro zone are one general hospital, two primary hospitals, 22 Health centers, 175 health posts, and other private clinics.

Study approach

A quantitative approach was used

Study design

An institution-based cross-sectional study was conducted from the 1^{st} of September 2020 to the 30 of June 2021.

Source population

All high school learners in the Dawuro zone were the target populations.

Study population

High school learners in selected high schools were the study population.

Inclusion and exclusion criteria

Learners who did not consent.

Sample size determination

By using a single population proportion with a 50% proportion,95% CI, and 5% margin of error the calculated sample size was 384. This sample was multiplied by 2 for design effect and it became 768 and adding 10 nonresponse rates the sample size planned was 845.

Sampling procedure

Twelve high schools out of 47 were involved in the study and the lottery method was used. Within the selected schools, a stratified sampling technique, which is an example of probability sampling, was employed following proportional allocation for grades.

Study variables

Dependent

Utilization of sexual and reproductive health services (yes/no).

Independent variables

Sociodemographic variables

Age, sex, grade level, marital status, residence, father's education level, mother's education level, the pocket money source.

Other variables

Exposure to media, discussion on SRHs issue, having sexual friends, and awareness on SRHs.

Operational definitions

Reproductive health service utilization

This is the utilization of one of the sexual and reproductive health services (family planning, abortion services, STIs or HIV testing and treatment, awareness of SRH services, and Discussions on SRH service utilization) in the last year¹⁶.

Data collection tool

A structured self-administered questionnaire was used to collect data.

Data quality control

A pretest was conducted in another school with 5% of the samples. The questionnaire was prepared in English and translated into Amharic then back to English to keep consistency.

Data processing and analysis

Data entry was conducted by using the CSpro version 7.5 and exported to the statistical package for social science (SPSS) version 21 for analysis. A binary logistic regression model was employed to assess the association between the outcome variable and explanatory variables. Variables with a p-value less than 0.25 in the bivariable analysis were included in the multivariable analysis. In the final model, the multivariable logistic regression model, variables with a p-value less than 0.05 were taken as statistically significant.

Results

Sociodemographic variables

Data were collected on 835 learners with a 98.8 % response rate out of 845 calculated samples. The age of learners ranged from 15 to 24 years with a mean \pm SD of 18.04 \pm 1.687 years. Six hundred ninety-nine (83.7%) of learners were in the age range of 15-19 years old (Table 1).

Table 1: Sociodemographic characteristics of highschool learners in the Dawuro zone, Southwest Ethiopia,2020 (n=835)

Variables	Frequency	Percentage	
Age(years)	1 2	<u> </u>	
15-19	699	83.7	
20-24	136	16.3	
Sex			
Male	414	49.6	
Female	421	50.4	
Grade Level			
Ten	311	37.2	
Eleven	305	36.5	
Twelve	219	26.2	
Residence			
Rural	416	49.8	
Urban	419	50.2	
Father's education			
No formal Education	273	32.7	
Primary education (1-8)	238	28.5	
Secondary education (9-12)	138	16.5	
Diploma and higher	186	22.3	
Mother's education			
No formal education	354	42.4	
Primary education (1-8)	260	31.1	
Secondary education (9-12)	108	12.9	
Diploma and higher	113	13.5	
Marital Status			
Unmarried	654	78.3	
Married	80	9.6	
Planning to marry	94	11.3	
Divorced	7	0.8	

The magnitude of sexual and reproductive health service (SRHs) utilization and associated factors

Two hundred seventeen respondents utilized sexual and reproductive health services, which shows that the overall magnitude of sexual and reproductive health service utilization was 26%. The utilization prevalence was 26.5% among the age range of 15-19 years. Grade eleven learners had a utilization prevalence of 26.9% (Table 2).

Factors associated with SRH service utilization

From the multivariable analysis, utilization of SRH service was significantly associated with study subjects who get pocket money, are exposed to media, discuss RH issues with family/friends, do have awareness of RH issues with AOR and 95 % CI of 1.54(1.08-2.2), 1.47(1.04-2.1), 1.81(1.27-2.26) and 2.82(2.01-1.99) respectively (Table 3).

Table 2: Magnitude of sexual and reproductive healthservice utilization among high school learners of theDawuro zone, Southwest Ethiopia, 2020 (n=835)

VariablesSRH Service Utilization No N (%)Age(years)15-19 $514(73.5)$ 20-24 104 (76.47) $22(23.53)$ SexFemale $322((76.5)$ 99 (23.5)Male $296(71.5)$ 118 (28.5)Grade LevelTen $229(73.6)$ $82(26.4)$ Eleven $223(73.1)$ 82 (26.9)Twelve 166 (75.8) 53 (24.2)Mother's Education LevelNo formal education $266(75.1)$ 88 (24.9)Primary education (1-8) 193 (74.2) 67 (25.8)Secondary education (9-12) 78 (72.2) 30 (27.8)Diploma and Higher 81 (71.7) 32 (28.3)Father's Education LevelNo formal education $206(75.5)$ 67 (24.5)Primary education (9-12) 103 (74.6) 35 (25.4)Diploma and Higher 139 (74.7) 47 (25.3)Get Pocket moneyYes $274(79.7)$ Yes $138(75.4)$ $45(24.6)$ Having sexual practiceNo $153(63.8)$ $87(36.2)$ Yes $138(75.4)$ $45(24.6)$ Having sexual practiceNo $506(72.9)$ $188(27.1)$ Yes $112(79.4)$ $29(20.6)$					
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Exposure to media K No 153(63.8) 87(36.2) Yes 465(78.2) 130 (21.8) Yes 138(75.4) 45(24.6) Having sexual practice No 506(72.9) 188(27.1)	Yes	274(79.7)	70(20.7)		
No 153(63.8) 87(36.2) Yes 465(78.2) 130 (21.8) Yes 138(75.4) 45(24.6) Having sexual practice No 506(72.9) 188(27.1)	No	344(70.1)	147(29.9)		
Yes 465(78.2) 130 (21.8) Yes 138(75.4) 45(24.6) Having sexual practice 506(72.9) 188(27.1)	Exposure to media				
Yes 138(75.4) 45(24.6) Having sexual practice 506(72.9) 188(27.1)	No	153(63.8)	87(36.2)		
Having sexual practice 506(72.9) 188(27.1)	Yes	465(78.2)	130 (21.8)		
No 506(72.9) 188(27.1)	Yes	138(75.4)	45(24.6)		
	Having sexual practice				
Yes 112(79.4) 29(20.6)	No	506(72.9)	188(27.1)		
	Yes	112(79.4)	29(20.6)		

Discussion

The prevalence rate of SRH service utilization in this study was 26% (95%CI: 23.06-28.84). This finding is in line with findings from Indonesia with a utilization rate of 24.3%¹⁷, and in the South Gondar, Wereta Ethiopia 24.6%¹⁸. However, this finding is much lower than other studies conducted in Enugu State of Nigeria 86.7%¹⁹ and Madawalabu University learners in the Oromia region of Ethiopia 80.5%²⁰, Hadiya zone, Southern Ethiopia 38.5%²¹, Awabel district of Northwest Ethiopia with the prevalence of 41%²², Debre Berhan town, Ethiopia 33.8%²³, Anchar District of east Ethiopia 45.8%²⁴. This discrepancy could be due to sociodemographic variation, socio-economic variation, or low awareness creation and awareness problems in the study compared to these studies. As indicated in figure 2, only 32% of the study participants showed awareness of SRH service issues. However, the knowledge status in the studies conducted in the Hadiya zone was 71.8%²¹. This shows that there is a big gap in the awareness status of study participants of the study as compared to others and it could be a possible reason for the high utilization rate. The other finding from the Anchar district reported that 79.9% of adolescents showed awareness of the SRH service utilization²⁴.

In this study, voluntary counselling and testing accounted for 42.4% of the SRH services utilized by respondents. This is in line with studies conducted in Mecha district²⁵, in Harar, east Ethiopia²⁶, Woreta, south Gondar²⁷, Nekemte, west Ethiopia whereby²⁸, 60.2%, 52.8%, 55.3%, and 59.2% of the study subjects utilized voluntary counselling and testing services respectively. Information on SRH service utilization was the second-highest component and accounted for 41%, which is consistent with the study conducted in Nekemte ²⁸ with 51% accessing information and education on SRH service utilization.

The majority, 48.9% reported that the school was a source of information for SRH service. This finding is in agreement with reports from western Ethiopia 67.74%²⁹ and east Ethiopia 31.5%²⁶. This could be owing to school-based education on SRH services by health professionals and teachers. In other studies from Nigeria 45.7% and Pakistan 71%^{30,31}, friends were reported as the major source of information. Mass media was the lowest (10.1%) source of information in the current study. However, in studies conducted in Nigeria and the Bale zone of Ethiopia, mass media was the main source of information on SRH service respectively^{32,33}. This could be caused by the lower coverage of SRH services in mass media in the current study.

From the multivariable binary logistic regression model, study participants who discussed SRH service issues with their family/friends were 1.81(AOR=1.81,95%CI (1.27-2.26)) times more likely to utilize SRH service compared to those who do not discuss. This finding is consistent with studies conducted in Mecha district³⁴, Gojjam³⁵, Awabel²², Gondar Town³⁶, Nigeria³⁷, and the united states of America³⁸. This could be attributed to confidence developed during a discussion with family/friends on SRH issues and significant differences that occurred as an outcome. Communication is the most powerful means to share ideas and develop confidence in sexual and

	SRH Service Utilization		P value	COR (95%CI)	P value	AOR (95%CI)
	Yes N (%)	No N (%)		. ,		
Sex						
Male	118(28.5)	296(71.5)	0.101	1.297 (0.95-1.76)	0.15	1.27(0.91-176)
Female	99 (23.5)	322(76.5)		1		1
Having pocket money						
Yes	70 (20.3)	274 (79.7)		1		1
No	147(29.9)	344(70.1)	0.002	1.67(1.2-2.3)	0.013	1.54 (1.086-2.2)
Exposure to media						
No	130 (21.8)	465 (78.2)		1		
Yes	87 (36.3)	153 (63.8)	< 0.0001	2.03 (1.46-2.82)	0.031	1.47 (1.04 - 2.09)
Discuss SRH issues						
with peers/Family						
No	65 (17.5)	306 (82.5)		1		1
Yes	152 (32.8)	312 (67.2)	< 0.0001	2.3 (1.65-3.2)	.001	1.81 (1.27 – 2.26)
Awareness of RH						
issues						
Yes	114 (42.7)	153 (57.3)	< 0.0001	3.36 (2.4 - 4.6)	< 0.0001	2.82 (2.01-3.95)
No	103 (18.1)	465 (81.9)		1		
Having sexual practice		. ,				
Yes	29 (20.6)	112 (79.4)	0.109	1.4 (0.9-2.23)	0.359	1.25 (0.78 - 1.99)
No	188 (27.1)	506 (72.9)		1		1

Table 3: Multivariable logistic regression analyses of sexual and reproductive health service utilization among high school learners of the Dawuro zone, Southwest Ethiopia, 2020 (n=835)

reproductive health-related service utilization. Being shy due to poor communication with friends or family could be avoided after open discussion.

Learners who have pocket money were 1.54 (AOR=1.54, 95% CI (1.9-2.2)) times more likely to utilize SRH service compared to their counterparts. This is comparable with a study conducted in Ethiopia³⁴. Learners who have no problem with money are more likely to use any service that needs money and this could be owing to this.

In this study, respondents with exposure to media were 1.47(AOR=1.47,95%CI (1.04-2.09) times more likely to utilize SRH services. This could be a combined effect of discussion on SRHs issues with family/friends and better school-based information sources on SRHs issues as elicited in this paper. The other significant variable in this study was awareness. Study subjects who had awareness of SRH service issues were 2.82(AOR=2.82,95CI (2.01-3.95) times more likely to utilize SRH service compared to their counterparts. This finding is in agreement with studies reported from Mecha district³⁴, Gojjam³⁵, Awabel²², Gondar Town³⁶, Nigeria³⁷, and the united states of America³⁸. Discussion on SRH service issues with family/peers develops the level of awareness and this could be attributed to open discussion. Though sexual intercourse was not significant in this study, it was significant in other studies like a report from Mecha district³⁴, Awabel²², and were reported. Social-desirability bias could have affected the responses of this study.

Conclusion and recommendation

The prevalence of sexual and reproductive health service utilization among high school learners in this study is 26%. This finding indicated the lowest utilization rates in Ethiopia. Promotion of SRH service through different media is pivotal to positively escalating the utilization percentage of SRH service among adolescents and youths of the Dawuro zone. Awareness creation on SRH service utilization demands collaboration of health sector with other relevant stake holders.

Author contribution

Fanos Yonas and Asrat Chernet took part in research design, data collection, data analysis, interpretation, and manuscript development.

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Ethical approval

During the initial conceptualization of the paper, ethical approval to conduct the study was granted by

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Wolaita Sodo University Ethical review board. A letter granting permission to conduct the study was obtained from Wolaita Sodo University Dawuro Tarcha campus to Dawuro zone educational departments and then woreda districts. No personal information was included in the study and the study subjects consented to it before data collection.

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Conflict of interest

Both authors declare that they have no conflict of interest.

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