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Sexual and Reproductive Health Service Utilization and Associated Factors among Adolescent and Youth in Dire Dawa City, Eastern Ethiopia

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Abstract

Background: adolescents and youth characterized by significant physiological, psychological, and social changes; these were put them at high risk for several sexual and reproductive health problems. Insufficient studies have addressed the burden and risk factors of young people's sexual and reproductive health services utilization in Ethiopia.

Objective: This study aimed to investigate the adolescents and youth sexual and reproductive health service utilization and associated factors in Dire Dawa City Administration, Eastern Ethiopia.

Methods: For the quantitative data, community-based cross-sectional study was carried out using multistage sampling technique. Data was collected using pretested interview-administered questionnaires and analyzed using SPSS version 24.0. Binary and multiple logistic regression analysis were done to determine the association between the dependent and independent variables. For the qualitative data, phenomenological study was conducted and thematic analysis was employed.

Results: This study revealed that the overall sexual and reproductive health service utilization was found to be 39.5%. Youths' preference regarding the services majority preferred special service hours designated for adolescents (55.6%), (46.9) preferred a discounted price (43.2%) preferred free service, (37% %) preferred young health providers of the same sex. Having discussion on sexual and reproductive health issues with family, living with partner/friend, convenient service hour, short distance from health facility, having sexual activity within the last 12 months were among the factors associated with sexual and reproductive health services utilization.

Conclusion and recommendation: This study revealed that the overall sexual and reproductive health service utilization was found to be low. Considering the physical and psychological changes of adolescents' the discussion on sexual and reproductive health matters is highly important and expected from every family.

Keywords: adolescent; youth; sexual and reproductive health; service utilization; dire dawa

Introduction

According to the World Health Organization, adolescents are defined as persons between 10 -19 years of age, youth are those age between 15-24 years old and they are characterized by significant physiological, psychological, and social changes; these put them at high risk for sexual and reproductive health problems. Adolescent and youth period is an important period in a person's life at which new behaviours are learned easier than adulthood. This period is again characterized by immature, exploration and experimentation behaviours of adolescents and youth and subjection to peer influences [1, 2,3, 4].

The world population is composed of 18% of adolescents and 26% of young people (10–24 years) which are about 1.2 billion in which almost 90% live in low-income countries [5, 6]. Adolescent and youth populations in Ethiopia have been increasing during the last few decades. Currently, adolescents constitute about 24% while young adults constitute about 30% of the total population [7]. Adolescent and youth sexual and reproductive health (AYSRH) refers to the physical and emotional well-being of adolescents and youth;

includes their ability to remain free from sexual and reproductive health problems. Adolescent and youth sexual and reproductive health is one vital component of adolescent health [8].

The major AYSRH services; including information and counselling on sexual and reproductive health issues, promotion of healthy sexual behaviours through peer education, family planning information, counselling and provision, condom promotion and provision, pregnancy test, human immune virus (HIV) testing and counselling, management of sexually transmitted infections (STIs), antenatal care, delivery services, postnatal care and prevention of mother to child transmission (PMTCT) of HIV, abortion and post abortion care, and appropriate referral linkage between facilities [9-11]. These services must safeguard adolescents' rights to privacy, respect, and informed consent, while respecting cultural and religious values and the rights and responsibilities of parents [12].

Globally adolescents and youth are facing different sexual and reproductive health problems such as unwanted pregnancy, unsafe abortion, sexual transmitted diseases (STDs) including HIV, however, they are usually mistakenly perceived as healthy and as if they are not in need of special health services [19, 20]. Adolescents and youth having survived all childhood health problems, have been enjoying a relatively low morbidity and mortality period in the past. At present, due to changing conditions such as civilization, urbanization and life style, the health of adolescents and youth is increasingly at stake [23]. Despite the growing needs, there is no adequate health service or counselling specifically suitable for this specific age group unlike children, mothers or adults. This indicates that the SRH needs of adolescents and youth as a group have been largely ignored to date by existing services [24].

In Ethiopia, more than one third of the population is found between the ages of 10-24, in which they are the most vulnerable to a range of reproductive health problems as a result of premarital sexual activities. According to Ethiopian demographic health survey (EDHS) showed that 23% of women aged 15-19 started child-bearing, while 40% were either mothers or pregnant with their first child by their 19 years of age [25 ,30, 34].

Still there is huge gap in accessing adolescents and youth with sexual and reproductive health services in our country. Knowledge about adolescents and youth sexual and reproductive health service preferences to different attributes of health services, identifying reasons for low utilization of SRH services and ensuring supportive environment from parents, teachers, health workers and other relevant would maximize the available sexual and reproductive health service utilization rate [35]. Therefore, the main purpose of this study was to assess adolescent and youth sexual and reproductive health service utilization, and associated factors in Eastern Ethiopia.

Methods and materials

Study area and period

The study was conducted from January 1- 30/2022 in Dire Dawa City Administration in Eastern Ethiopia. Dire Dawa is one of the known and ancient cities in Ethiopia which is found around 515 km far from Addis Ababa in the East of Ethiopia. Dire Dawa has a total population of 453,000 in 2016 consisting of 227,000 males, 226,000 females, and 99,660 young people's (10-24 years) living in the administration. The total fertility rate (TFR) for the administration is 3.4 child/ woman and annual population growth rate of 2.9.

Study design and population

A community-based cross-sectional study design (using both quantitative and qualitative methods) were employed among adolescent and youth in Dire Dawa city administration, Eastern Ethiopia, 2021/2022. The source population for the study was all adolescents and youth living in Dire Dawa city administration in 2021/2022. For qualitative study the study subjects were key informants (health workers, teachers, and youth) in Dire Dawa City Administration. The study population was all adolescents and youth living in Dire Dawa city administration in 2021/2022 and included in the sample. For qualitative study the study subjects were purposively selected key informants (health workers, teachers, religious leaders, and youth) in Dire Dawa City Administration.

Eligibility criteria

All adolescents and youth living for more than six months in Dire Dawa city administration in 2021/2022 were included. Those adolescents and youth seriously sick at the time of data collection were excluded from the study.

Sample size determination

For quantitative study, the required sample size for the study was determined by using the single population proportion formula.

P= proportion of adolescent & youth utilized at least one SRH services 41% [45], D= margin of error 5%, 95% confidence level and non-response rate of 10%, n = $(z\alpha/2)^2$ p(1−p)/ D^2= (1.96*1.96) 0.41(1-0.41) / 0.05*0.05=372, n= 372, by using design effect which is 2, n=2*372, n=744 and 10% non-response rate gives =818. For qualitative study 6 FGD and 16 in-depth interviews were conducted on purposively selected participants in the study area.

Sampling techniques and procedures

A multistage sampling method was employed. First six administrative kebeles were selected randomly from the total ten kebeles, then the number of households having adolescent and youth with their parents/care-takers were identified in each selected kebele from health extension worker registration logbook. Moreover, the calculated sample size was proportionally allocated to each selected kebeles based on the number of households having adolescent and youth. Finally, the study subjects were selected within each selected kebele's by simple random method. If two or more adolescents found in selected household the one who was available at the time of data collection was considered for interview but if two or more adolescent/youth available during data collection only one adolescent/youth was selected by lottery method. For qualitative study purposive sampling technique was used. Participants were taken based on their relation with adolescents and youth in their experiences.

Study variables

Dependent variables

- SRH service utilization

Independent variables

- Socio-demographic and Individual factors,
- Family and household r/t factors,
- Peer and partners related factors,
- Health facility and community related factors.

Data collection instruments

Data collection tools were a pretested structured questionnaire which was adapted by reviewing different literatures and guidelines in line with the objectives of the study (42-54). The tool has four different parts; socio-demographic variables, family and household related factors, peer and partners related factors, community's and institution related factors. For qualitative data, interview guide was developed based on the focus group discussion (FGD) and in-depth interview guide and tape recorder was used

Data collection procedure and data collectors

Data were collected using the prepared interview-administered questionnaires after orientation given to the study participants by 10 data collectors and facilitators. Since the topic is sensitive issue and our participants were young, the health workers were facilitated the consent by wearing gown and gave to the participants a detail description mainly on the aim of the study, on each part of questionnaires, about consents, the right to participate or not, the right to withdraw at any time, and confidentiality issues and they secure the oral consent and then again obtained the written consent. Qualitative data was collected by the researchers.

Data quality control

The questionnaire was translated to Amharic, Oromic and Sumali languages and back translated to English. Pre-testing of the questionnaire was undertaken in 5% of adolescents and youth in kebeles that not included in the sample before the actual data collection take place and corrections on the instruments were made accordingly. An intensive training was given for all supervisors and data collectors (facilitators). Data collection process was supervised and checked for completeness, clarity and consistency by the facilitators and the principal investigator as soon as submitted.

Operational or Standard definitions

Adolescent and youth SRH Services includes access to information and services on prevention, diagnosis, counselling, treatment and care on STDs/HIV, abortion, unwanted pregnancy, modern contraceptive, sexual activities, and requires that all people can safely reach services without travelling a long distance or wasting time [9-11]. Adolescent and youth sexual and reproductive health services utilization is considered if adolescent and youth having sought or received at least one of the four SRH services that the study focuses on (modern contraceptive service, abortion care/safe

abortion service, HIV testing and counselling service, STI diagnosis and treatment service) in the last 12 months [48]. AYSRH service accessibility: The term accessibility in this study was applied to geographical accessibility based on adolescents' and youth own perception. Adolescents and youth who lived within 1.6-km (1 mile) radius distance from the nearest SRH service centre and from their home less than 30-min walking distance were classified as having high geographical accessibility and low otherwise [45].

Data analysis methods

Data were cleaned, edited, coded and entered to Epi data version 3.1; software then exported to SPSS version 24.0 for analysis. Descriptive statistics frequencies, proportions and summary statistics were used to describe the study population in relation to relevant variables. Binary Logistic regression was used to assess the presence of association between predictors & outcome variable and variables having p-value <0.25 were candidate for multivariable logistic regression. Odds ratio, P- Value < 0.05 with 95% CI was used to determine the significance, level of association between predictors and outcome variable. Thematic analysis was employed for qualitative data: First, the tape-recorded audio, & field notes or texts was carefully listened, transcribed and translated to English. Next, data coding was done and different themes were generated based on their thematic areas. Then themes were reviewed to see usefulness and representations of the data. Finally, after the themes were defined and named the analysis was written. Since, in this study the qualitative data was only to support the quantitative findings, only major findings of the qualitative results were reported (quoted).

Results

Socio-demographic characteristics of the study participants, A total of 810 adolescents and youths were participated in the study with a response rate of 99%. Majority (74%) of the participants were in the age between 15-19 years. The mean age of the study participants was 17.5±3.5 years. Majority of the respondents 445(55%) were males. More than ninety percent of the study subjects (92.6%) had formal education. Most, 660 (81.5%) of the participants were single and 550 (67.9%) of them were living with their both parents, the rest were either with relatives or alone (table 1).

Table 1: Socio-demographic characteristics of respondents on the study SRH service utilization and services preferences among adolescents and youth in DD City, Eastern Ethiopia, (n=810).

Variables		No.	%
Respondent's age	<15	50	6.2
	15-19	600	74.0
	20–24	160	19.8
Respondents' Religion	Orthodox	293	36.2
	Muslim	332	41.0
	Protestant	118	14.6
	Catholic	67	8.3
Respondents' Ethnicity	Oromo	320	39.5
	Somali	280	34.6
	Amhara	188	23.2
	others	22	2.7
Have you had formal education	Yes	750	92.6
	No	60	7.4

Respondents' educational status	Primary school	322	42.9
	Secondary school	233	31.1
	Certificate and above	195	26.0
Respondents' occupation	Student	480	59.3
	Employee	90	11.1
	No jobs	110	13.6
	Merchant	94	11.6
	Daily labourer	36	4.4
What is your current source of income, if you are unemployed?	Parents (family)	480	81.64
	Relative/Friends	100	16.9
	humanitarian organization	10	1.7

Family characteristics of participants

Concerning to the participants' family characteristics more than half (62.3%) of the participants have had both mothers and fathers alive and living together with them. Furthermore, 331(40.9%) of respondent's fathers and 290 (35.8%) of respondent's mothers' educational status were grade 1-8 and grade 12 and above respectively. Out of the total respondents, 470 (58.0%) reported that they have discussion habit on sexual and reproductive issues with in their family. About 26% of the participants' family support early marriage and early childbearing. On the other hand, 63.2% of the participants were reported their average monthly family income was less than 5000 ETB and only 98 (12.1%) of participants reported their average monthly family income was greater or equal to 10,000 ETB (table 2).

Table 2: Respondents' family characteristics on the study SRH service utilization and services preferences among adolescents and youth in Dire Dawa City Administration, Eastern Ethiopia, 2021/2022 (n=810).

Variables		No.	%
Living status of respondent's parent	Yes, both alive	550	67.9
	No father only alive	75	9.2
	No mother only alive	130	16.1
	No both died	55	6.8
Occupation of your father	Marchant	395	48.8
	Employer	340	42
	Others	75	9.2
Educational status of your father?	Only read and write	55	6.8
	Grade 1-8	96	11.9
	Grade 9-12	328	40.5
	12 and above	331	40.9
Educational status of your mother?	Only read and write	100	**12.3**

	Grade 1-8	195	24
	Grade 9-12	225	27.8
	12 and above	290	35.8
Are you living with your father and mother?	Yes	505	62.3
	No	305	37.7
Do you have any SRH discussion with your family?	Yes	470	58
	No	340	42
Do you think your parent control and guide you?	Yes	700	86.4
	No	110	13.6
Do you think your parent discourage you to be access to SRH information & services?	Yes	340	42
	No	470	58

Respondents and peer characteristics

Among all the study participants 340 (42%) of them had sexually active partners and 26% of them had peer/partner pressure in their daily activities. Regarding to the participants' last 12- months experience of substance use: almost half 400 (49.4%) of the participants were reported that they have been used any one or more of the addictive substances. Nearly half, (49.4%) and 47.0% of participants were used alcohol and khat respectively. Majority, (28.3%) of the 'alcohol users' less frequent once in a monthly & 58.4% chewing less frequently once in a month. Majority (55.5% & 44.8%) of the participants had a peer who were drinking and chewing khat respectively (Table 3).

Table 3: Respondents' and peer substance utilization in Dire Dawa City Administration, Eastern Ethiopia, 2021 /2022.

Variables		No.	%
Do you have sexually active peer/partner?	Yes	340	42
	No	470	58
Do you have partner/peer pressure in your daily activity	Yes	210	26
	No	600	74
Have you taken any addictive substances in the last 12 months	Yes	400	49.4
	No	410	50.6
How do you feel about your sexual desire, after you drink Alcohols?	Increase than the usual	150	37.5
	I do have les feeling	130	32.5
	No difference than usual	120	30

Are you chewing khat?	Yes	380	47
	No	430	53
Frequency of chew khat (n=380)	Chewing once in a month	222	58.4
	Chewing weekly	40	10.5
	Chewing daily	80	21
	Only on holy days	38	10
Do you have a peer/partner drinking alcohol?	Yes	450	55.5
	No	360	44.5
Do you have a peer/partner chewing khat?	Yes	480	59.3
	No	330	40.7
Frequency of chew khat?	Chewing once in month	215	44.8
	Chewing weekly	160	33.3
	Chewing daily	105	21.9

Sexual and reproductive health service utilization of study participants

More than half 530 (65.4%) of the study participants were experienced some sort of sexual and reproductive health problems in their life. Moreover, 320 (39.5%) of the study participants were used at least one sexual and reproductive health services in the last 12 months. Among sexual and reproductive health service utilized, the most frequently utilized were, (30%) family planning services followed by (28%) safe abortion, (22%) HIV counselling services, (20%) STI diagnosis & treatment. Furthermore, more than half of the study participants use Condom (60.2%) and (20.4%) were use oral emergency contraceptive pills by male and female youth respectively (table 4).

Qualitative results

A total of 6 focus group discussion and 16 In-depth interviews were conducted with key informants and adolescents. The qualitative result indicated that, most participants in this study suggested that cultural barriers are a crucial factor contributing to the concealment of sexual and reproductive health problems by adolescents. Lack of positive interaction between mothers and daughters for various reasons such as embarrassment, negative attitudes, and fear of shame, and lack of adequate information on these issues were among major factors for not utilizing SRH services.

A 22-year-old female participant described her experience as follows: "I'd like to get more information on sexual transmitted diseases and about risky sexual behaviour; however, we are not comfortable to ask about these things at home". The above scenario was agreed by focus group discussion participants, a 25-year-old male teacher said "It is not comfortable in the society and if adolescents have a question about sex, they do not know where to go, so, their knowledge of sex is poor". Another 20-year-old female participants stated, "I'm really wanted to ask questions about sex from my mother. But I am not simply comfortable asking such questions".

A 30 years old female teacher said, "In some cultures, parents are the influential sources of knowledge, beliefs, attitudes, and values for children and the youth. If young people do not get information from their families, they will seek answers elsewhere and try to find answers through peers, the media or their observations of adult actions", so, family has had great responsibility. Research revealed that with an increase in the parent-adolescent communication and conversation the level of sexual risk decreases. One of the most important experiences reported by adolescent and youth in in-depth interview in this study was the modesty shown about the sexual reproductive health issues. The youth are ashamed to ask for information from adults who reluctant to discuss these issues. Hence, taboos, beliefs and traditions may prevent the youth from accessing

the necessary information. In many cultures, parents do not talk about sex with their children and therefore they are useful sources of information.

Many of adolescents and youth were complaining about the lack of coverage of sexual and reproductive health issues by the media. Most participants stated that the role of the media in the field of sexual and reproductive health was very insignificant. Most adolescents in the in-depth interview participated in this study believed that reproductive health information obtained through friends is not reliable and cannot be considered as a reliable source. Therefore, the media can eliminate these sources of non-academic information through proper training.

A 20 years old female youth in the in-depth interview said "in our current community there is no as such many sources of information for young people regarding to SRH services, only few advertisers and advertisement take place through the mass media in this regard".

A 28 years old male health professional in the focus group participants agreed with adolescents and youth and said "the media has a significant impact on educating of youth on sexual and reproductive health issues but the coverage in this topic was limited, but expected to provide accurate information on sexual and reproductive issues to youth".

Nearly all of adolescents and youth participants wanted sexual health education to be offered formally in their curriculum as a formal course similar to other courses. They were interested in taking a formal course on reproductive health starting from primary school. 17-year-old female youth participants said "we do not have medical books on reproductive health care in the schools…I wish we had a specific book for such things". Concerning to the sexual and reproductive health service preference majority of focus group discussants agreed that youths preferred special service hours designated for adolescents, serves with a discounted price, free service, young health providers of the same sex with adolescents, service time on weekend basis and service location where other users don't see them.

Table 4: Sexual and reproductive health characteristics and service utilization study participants on the study SRH service utilization and preferences among adolescents and youth in Dire Dawa City Administration, Eastern Ethiopia, 2021/2022 (n=810).

Variables		No.	%
Are you sexually active currently?	Yes	380	46.9
	No	430	53.1
Do you have sexual partner?	Yes	380	46.9
	No	430	53.1
Have you ever experienced sexual intercourse?	Yes	340	42
	No	470	58
How many sexual partners do have (n=380)	One	301	79.2
	Two or more	79	20.8
Ever discussed SRH issues with your partners/peers.	Yes	320	39.5
	No	490	60.5
Which topic you were discussed	Sexual issues	85	26.6
	Condom use	63	19.7
	STI/HIV/AIDS	58	18.1
	Unwanted pregnancy	54	16.9
	Contraception	60	18.7

Did you encounter any medical problems or illness in the last 12 months?	Yes	650	80.2
	No	160	19.8
Have you ever experienced SRH problems?	Yes	340	42.0
	No	470	58.0
Have you utilized SRH services in the last 12 months?	Yes	320	39.5
	No	490	60.5
Which SRH services you have been utilized	Family planning services	96	30.0
	HIV counselling services	70	22.0
	STI diagnosis & treatment	64	20.0
	Safe abortion services	90	28.0

Factors associated with RH service utilization

After controlling confounding effect, variables that were statistically significant with sexual and reproductive health service utilization on bivariate analysis were entered in to multivariable logistic regressions. Based on this analysis, having discussion on SRH issues with their family, living with partner/friends, convenience service hour, distance from health facility, having sexual activity within 12 months. Adolescents and youth who were living with partner/friends were about two times more likely to utilize SRH service than those who were living with their parents (AOR = 2.40, 95% CI= 1.55–4.82). In these study adolescents who were perceived SRH service delivery hour is convenient 4.42 times more likely utilize SRH services than those who perceived the service hour is inconvenient (AOR: 4.42, 95% CI=2.22 - 6.63). A shorter distance to a healthcare facility was also found to be significantly associated with SRH service utilization. Adolescents and youth who have had health facility located at nearby were about 1.5 times more likely to utilize reproductive health services as compared to those who come from distance (AOR = 1.54, 95% CI: 1.05, 2.25). Adolescent and youth who had a discussion with family on sexual and reproductive health issues were about 3.8 times more likely to use sexual and reproductive health services than those who had no discussion (AOR = 3.8, 95% CI: 3.11- 5.42). Adolescents and youth who have had sexual activity within 12 months were nearly 2 times more likely to use the services than their counterparts (AOR = 1.95, 95% CI: 1.10, 3.44) (Table 5).

Table 5: Factors associated with adolescent and youth sexual and reproductive health service utilization in Dire Dawa City administration, Eastern Ethiopia, 2022 (n=818).

Variables	SRHSutilization		COR (95%CI)	AOR (95%CI)	
	Yes	No			
Age of respondents					
<15 years	7	43	1	1	
15-19 years	240	360	0.40(0.92.95)	1.86(0.52-.05)	
20-24 years	73	87	1.80(1.19-.52)	1.20(0.19-.54)	
Sex of respondents					
Male	150	295	1	1	
Female	170	195	2.42(1.92-.98)	1.50(0.28-.87)	

Marital status of respondents				
Married	69	81	1	1
Single	251	409	(1.135-3.726)	2.56(0.674.89)
With whom are you living with				
Parents	140	365	1	1
Relatives	45	65	3.01(1.14-.41)	5.02(0.24-8.04)
Alone	43	47	3.24(1.21-8.21)	1.20(0.19-5.54)
Partner/friend/husband	92	13	2.44(1.21–.11)	2.40(1.55–4.82) *
Do you think SRH services delivery time convenient for youth?				
Yes	130	230	2.51(1.22-.08)	4.42(2.22-.63)*
No	190	260	1	1
Have you open discussion on SRH?				
Yes	210	260	3.17(1.53 - 6.58)	3.81(3.11 – 5.42) *
No	110	230	1	1
Perceived waiting time for service.				
Short	182	190	2.08(2.44-4.25)	1.2(0.09-4.51)
Medium	115	215	1.79(1.49-4.58)	1.18(0.54-7.55)
Long	23	85	1	1
Health facility located or found				
Nearby	216	190	1.95(1.22-3.19)	1.54(1.05-2.25)*
Distant/far	104	300	1	1
Have you had sexual activity in the last 12 months?				
Yes	180	160	1.32(1.12-3.79)	1.95(1.10-3.44)*
No	140	330	1	1

Discussion

This study revealed that the overall sexual and reproductive health service utilization was found to be 39.5%, which was much smaller than study conducted in Mandalay city, Myanmar (67%), and Gondar town, Ethiopia (79.5%) (58, 54). This variation was possibly due to economical, and socio demographical variations, for example, the study in Myanmar was conducted in the age group of 15–24, and maternal care also included in the service package which may inflate the figure in Mandalay city. In contrast, the study done in Gondar town specifically focused on those adolescent and youth who had sexual exposure, this could be potentially increased the likelihood of service utilization. However, adolescents' and youth service utilization in this study was slightly closer to similar study conducted in Jimma town, Ethiopia 41.1% and in Addis Ababa, 40%, and Awabel district northwest Ethiopia 41% [59-60, 46]. But this study finding was greater than study conducted Machakal district 21.5%, Northwest Ethiopia, Debre Berhan town, Ethiopia, 33.8%, and Woreta town, South Gondar, North West Ethiopia 24.6% [60, 45, 48].

The finding of this study showed that considerable proportion of the adolescents and youth reported that, adolescent's and youths' preference regarding the service place and person serving varies widely; but the majority prefers special service hours designated for adolescents (55.6%), and a discounted price (46.9%), free service (43.2 %), and young health providers of the same sex (37%). This finding was agreed with the study conducted in Addis Ababa, Ethiopia [26]. In this study, the result found that living arrangement were played an important role in young people's utilization of SRH services. Adolescents and youth who were living with their partner/friend were about two times more likely utilized SRH services than those who were living with their parents (AOR = 2.40, 95% CI = 1.55–4.82). This study result was consistent with the study conducted in Debre Berhan town, Ethiopia (45).

However, this finding was contradicting the study conducted in Gondar town where adolescents living with their parents utilized SRH services more likely than their counter parts (54). This could be due to relatively high parental monitoring (86.4%) in our setting. In addition to this, even though majority of the respondents in this study were living with both their parents, the families' habit of communication on sexual and reproductive issues were quite low (58%). Communication of sexual and reproductive health issues within the family allows the adolescent to enhance their knowledge, build their confidence and in turn scale up their tendency to use those services in demand. Several studies revealed that discussion on sexual and reproductive health issues with sexual partner and peers increase the chance of service utilization [59, 61].

Similarly, this study showed that adolescent and youth who had discussions on SRH issues with their family were found to be about four times more likely to use SRH services than those who didn't have the opportunity to discuss the matter. This finding was in line with the study conducted in Debre Berhan town, Central Ethiopia [45]. A study done in Bahir Dar; Ethiopia indicated that the barriers in utilizing reproductive health services were inconvenient health facility operating hours [53]. Similarly, this study revealed that adolescent and youth who were perceived SRH service delivery hour is convenient 4.42 times more likely utilize SRH services than those who perceived the service hour is inconvenient (AOR: 4.42, 95% CI=2.22 - 6.63). This could be because of the fact that if the SRH service delivery facility opening hour is convenient for youth they can utilized better.

This study revealed that, shorter distance to a healthcare facility was also found to be significantly associated with SRH service utilization. Adolescents and youth who have had health facility located at nearby were about 1.5 times more likely to utilize reproductive health services as compared to those who come from distance (AOR = 1.54, 95% CI: 1.05, 2.25). This finding was supported by the study conducted in Woreta town, South Gondar, North West Ethiopia, Awabel district northwest Ethiopia and study conducted in Nepal [48,46, 40]. Adolescents and youth who have had sexual activity within 12 months were nearly 2 times more likely to use the services than their counterparts (AOR = 1.95, 95% CI: 1.10, 3.44). Nearly similar finding was obtained with study conducted in East Gojjam area, Goba town, Ethiopia and study conducted in Nepal [55, 61, 40].

Conclusion

The findings of this study indicated that sexual and reproductive health services among young people in the study area were low. Among sexual and reproductive health service utilized, the most frequently utilized were, family planning services followed by safe abortion services, HIV counselling services, and STI diagnosis & treatment were from higher to lower proportion. Having discussion on sexual and reproductive health issues with family, living with partner/friend, convenient service hour, short distance from health facility, having sexual activity within the last 12 months were among the factors associated with sexual and reproductive health services utilization.

Abbreviations

AIDS: Acquired Immune Deficiency Syndrome, AYSRH: Adolescent and Youth Sexual and Reproductive Health, FGD: Focus Group Discussion, SRH: Sexual and Reproductive Health, YRH: Youth reproductive health, YSRH: Youth Sexual and Reproductive Health, EDHS/DHS: Ethiopian Demographic and Health Survey, F/P: Family Planning, MDG: Millennium Development Goal, STI: Sexually Transmitted Infections.

Data Sharing Statement: We confirm that all the data underlying the findings are within the manuscript.

Ethics and Consent Statement

The study was carried out after ethical approval was obtained from Dire Dawa University, Institutional review board (IRB). Information was given to the study participants about the purpose, procedures, and potential risks. Furthermore, data were collected after getting informed written consent from all study participants. For those study subjects age less than 18 years, assent was obtained from their family.

Author Contributions

L.A. analyzed the data and led the report writing, contributed to the study design, data collection and revision of the draft; A.G. data analysis and report writing; D.F. research conceptualization, data curation, contributed to the study design. All authors have read and agreed to the summited version of the manuscript.

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