Research Article
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Youth-friendly health services utilization and associated factors among youths in Dinsho district, southeast Ethiopia

Abstract

Introduction: Ethiopia stands out among countries in sub-Saharan Africa for its limited use of youth-friendly health services and the prevalence of significant sexual and reproductive health challenges, accompanied by high rates of maternal, infant, and child mortality.

Objectives: This study aimed to evaluate the utilization of youth-friendly health services and the influencing factors among young individuals in Dinsho District, Southeast Ethiopia, in 2019.

Methods: A community-based cross-sectional study was conducted in Dinsho District between September 25 and October 15, 2019. The district was divided into three strata: urban, partially urban, and rural kebeles. We employed a systematic random sampling method to select household units, with study participants chosen randomly. Data entry was performed using Epi-Info version 7 and subsequently analyzed using SPSS version 21. Bivariate and multivariate analyses were carried out using logistic regression, with statistical significance set at a p-value below 0.05.

Results: Of the 377 youths selected, 373 (a response rate of 98.94%) participated in the study. Among these participants, 98 individuals (26.27%) accessed at least one of the services. Utilization of youth-friendly health services was significantly and positively linked to gender, particularly being female (AOR = 10.145; 95% CI: 3.133 – 32.857), and a family income equal to or greater than 116.94 (AOR = 12.438; 95% CI: 3.568 - 43.363). Conversely, living with friends (AOR = 0.034; 95% CI: 0.006 – 0.197), limited access to health facilities (AOR = 0.004; 95% CI: 0.001 – 0.021), and the absence of a romantic partner (AOR = 0.001; 95% CI: 0.000033 – 0.022) were negatively associated with the utilization of youth-friendly health services.

Conclusion & Recommendation: The utilization of youth-friendly health services by young individuals in Dinsho District was notably low. Enhanced efforts are required from primary healthcare units to raise awareness among youths regarding these services, effectively increasing their utilization.

Keywords: youth-friendly health services, Dinsho district, southeast Ethiopia

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Background

According to the United Nations (UN) and the World Health Organization (WHO), individuals aged between 15 and 24 years are considered youths.[1–3] From a demographic perspective, youths represent a significant group, constituting approximately one-fifth of the total population of Ethiopia,[4] This age group is marked by a phase of profound physical, psychological, and social transformations, which can expose them to heightened risks. Youth are a diverse cohort with varying backgrounds, behaviors, and lifestyles. Their needs differ based on gender, developmental stage, life circumstances, and socio-economic context.[5,6] Despite their diversity, youth universally seek health services with two core expectations: respect and confidentiality.[7]

Nations globally, including Ethiopia, have been urged to design programs that uphold the privacy, confidentiality, and dignity of young people, as advocated during the International Conference on Population and Development in Cairo, Egypt in 1994. This conference was pivotal in shaping current policies related to the sexual and reproductive health (SRH) of young individuals. Youth-friendly health services (YFHS) have been acknowledged and implemented as an effective approach to meeting the sexual and reproductive health needs of youth.[3,8–10]

However, despite a utilization rate of less than fifty percent, the utilization of youth-friendly health services in Ethiopia remains low, ranging between 21.2%,[11] 24.6%,[12] 32.2%,[13] 33.2%,[14] and 38.5%.[15] This limited utilization may be attributed to unresolved or unidentified factors influencing YFHS utilization in the country.

Nevertheless, young individuals in Ethiopia encounter numerous obstacles when attempting to access comprehensive sexual and reproductive health services. They frequently encounter challenges related to limited health information and restricted healthcare service availability. Research indicates that factors contributing to the low utilization of these services include a lack of sexual and reproductive health awareness, negative attitudes toward sexual and reproductive health, feelings of embarrassment, fear of judgment, adherence to strict cultural norms, insufficient privacy and confidentiality, and service unavailability.[16,17]

While some studies have explored youth-friendly health services utilization in our country, a reassessment was deemed necessary due to potential variations in findings arising from differences in study

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location and population characteristics compared to previous research. Moreover, previous studies predominantly focused on sexual and reproductive health service utilization and associated factors among young individuals in institutional settings (such as schools) and urban areas. This current study was designed to evaluate youth-friendly health services utilization and related factors among youths in the community, distinguishing it as a significant contribution. The distinct community-based nature of the study underscores the need for a fresh assessment, prompting the decision to undertake this research.

Methods and materials

Study area design and population: Community-based cross-sectional study design was employed from September 25 - October 15, 2019 on total sample size of 373 in Dinsho District which is located in Bale zone, Oromia Regional State, Ethiopia. It is located at 400 kilo meters in the Southeast direction from Addis Ababa (capital city of the country).

Sampling procedure and sample size determination: The estimated number of households and young individuals aged between 15 and 24 years in the Dinsho District was approximately 11,420 households and 10,832 youths, respectively. The district consists of ten kebeles, which were categorized into three strata: one urban, one partially urban, and eight rural kebeles. Through a lottery method selection process from an alphabetical list of kebeles, a total of five kebeles were chosen, comprising one urban kebele (Dinsho - 01), one partially urban kebele (Homa), and three rural kebeles (Abekara, Horasoba, and Zalokerari). Subsequently, the sample sizes for each selected kebele were determined proportionally based on the total population of households.

Source Population and Inclusion Criteria: The source population for this study comprised all individuals within the youth age group (15-24 years) residing in the Dinsho District administration. Participants included youths who had been residents of the Dinsho District for more than six months; however, individuals who were incarcerated, severely ill, or affected by mental health conditions were excluded from the study.

Data collection procedures

Data collection involved gathering information on the utilization of youth-friendly health services for sexual and reproductive health (SRH) purposes, which encompassed various services such as information and counseling on SRH issues, modern contraceptive use, condom usage, voluntary counseling and testing (VCT) for HIV, sexually transmitted infections (STIs) treatment, pregnancy testing, antenatal and postnatal care, abortion services, and post-abortion care. The data collection process also encompassed demographic and socio-economic characteristics, individual factors, and healthcare system variables.

A pre-tested and structured questionnaire, initially developed in English and later translated into Afan Oromo, was utilized for data collection. Data gathering was facilitated through interviewer-administered surveys. Four female nurses (level IV) conducted the data collection, which was overseen daily by two health officers (Bachelor of Science in Public Health). The data collectors approached and interviewed selected respondents after obtaining informed verbal consent. For respondents who were unavailable during the initial visit, two subsequent visits were made. In instances where the original respondents remained unavailable, the next household was approached for the interview process.

Data quality assurance

To ensure data quality, a two-day training session was conducted by the principal investigator for both data collectors and supervisors. The training covered essential aspects such as the study's objectives, ethical considerations, confidentiality protocols, data collection methods, strategies to reduce non-response rates, and fostering a shared understanding among data collectors and supervisors.

The questionnaire, initially developed in English (40, 41), underwent translation to Afan Oromo by language experts. A pre-test of the questionnaire was carried out on 19 youths (5% of the sample size) residing in an administrative kebele not included in the study, and necessary corrections were applied based on the feedback received. Privacy protection was ensured through informed verbal consent procedures.

During the data collection phase, supervisors and the principal investigator performed daily checks to verify the completeness and consistency of the gathered data. This meticulous monitoring approach aimed to maintain data integrity and quality throughout the study

Data processing and analysis

The data entry process was facilitated using Epi-Info version 7 software, renowned for its user-friendly interface that simplifies form creation, enhances data entry efficiency, and minimizes errors. Subsequently, the data underwent analysis using SPSS version 21 software. The findings were presented descriptively and analytically through textual descriptions, tables, and graphical representations. The level of youth-friendly health services (YFHS) utilization was quantified in proportions.

Bivariate and multivariate analyses were conducted utilizing binary logistic regressions to explore the relationships between dependent and independent variables. The deviance coefficient and Hosmer-Lemeshow test were employed to evaluate goodness-of-fit and ascertain adherence to assumptions necessary for binary logistic regression. Variables with a p-value < 0.25 in bivariate analysis and those deemed critical based on existing literature were entered into the multivariate regression models.

The final model was developed using a backward selection approach, with statistical significance determined at a p-value below 0.05. The outcomes were then depicted in textual summaries and tables, detailing the Adjusted Odds Ratios (AOR), 95% Confidence Intervals (CI), and corresponding p-values.

Ethical considerations

Ethical approval was obtained from the research review committee of Arsi University. Additionally, official letters of approval were obtained from the Dinsho District health office and administration office to conduct the study. Informed verbal consent was sought from all study participants before their involvement in the research.

To ensure confidentiality and protect the participants' privacy, all information gathered during the study was treated with strict confidentiality. Each participant's identity was safeguarded through the use of unique codes rather than their names to maintain anonymity. Participants were assured of their right to withdraw from the study at any stage, respecting their autonomy and decision-making throughout the research process.

Result

Demographic & socio-economic characteristics of the study participants

A total of 373 participants aged between 15 and 24 years, achieving a response rate of 98.94%, actively participated in the study. Among the 373 youth respondents, 211 (56.6%) were female, resulting in a female-to-male ratio of 1.3:1. Furthermore, out of the total respondents, 222 (59.5%) fell within the 15-19 age bracket.

The study's demographic overview revealed that 284 (76.1%) of the youths resided in rural areas, 266 (71.3%) identified as Muslims, 361 (96.8%) identified as Oromos, and 342 (91.7%) reported their marital status as single (Table 1).

Table 1 Demographic & socio-economic characteristics of the study participants in Dinsho District, Southeast Ethiopia, 2019

Variables	Categories	Frequency (n = 373)	Percentage (%)
Sex	Male	162	43.4
	Female	211	56.6
Age group	15 through 19	222	59.5
	20 through 24	151	40.5
Residence	Urban	38	10.2
	Partially urban	51	13.7
	Rural	284	76.1
Religion	Muslim	266	71.3
	Orthodox	99	26.5
	Protestant	8	2.2
Educational level	Diploma	6	1.6
	12 complete	5	1.3
	Preparatory school (11-12 grade)	46	12.3
	Secondary school (9-10 grade)	133	35.7
	Primary school (1-8 grade)	183	49.1
Ethnicity	Oromo	361	96.8
	Amhara	10	2.7
	Guragie	2	0.5
Marital status	Single	342	91.7
	Married	31	8.3
Occupation	Government employee	6	1.6
	Daily laborer	78	20.9
	Student	245	65.7
	Merchant	44	11.8
Pocket money for daily expense	Yes	164	44
	No	209	56

Knowledge of youths, utilization of the services & barriers to YFHS

Among the total respondents, 140 (37.5%) individuals had prior awareness of Youth-Friendly Health Services (YFHS). The primary sources of information were health providers (100, 26.8%) and peers (92, 24.7%), followed by mass media (TV/radio) (40, 10.7%), school teachers (35, 8.4%), parents (17, 4.6%), and posters (17, 4.6%), respectively. Some participants received information about YFHS from multiple sources.

Out of the 140 (37.5%) respondents who had prior knowledge of YFHS, 139 (37.3%) were aware of the locations where these services were available. Surprisingly, despite this awareness, only 98 (26.3%) of them reported utilizing at least one YFHS service within the twelve months preceding the survey (Figure 1).

The key utilized components of Youth-Friendly Health Services (YFHS) among respondents included modern contraceptive usage by 45 individuals (12.1%), voluntary counseling and testing (VCT) for HIV by 40 (10.7%), pregnancy testing by 37 (9.9%), condom use by 18 (4.8%), information and counseling on sexual and reproductive health (SRH) issues by 18 (4.8%), treatment of sexually transmitted infections (STIs) by 17 (4.6%), abortion services by 17 (4.6%), post-abortion care by 6 (1.6%), antenatal care by 5 (1.3%), and postnatal care by 1 (0.3%). The accessed services originated from health centers (91, 24.4%), youth clinic centers (56, 15%), clinics (13, 3.5%), health posts (8, 2.1%), and hospitals (3, 0.8%), with some respondents utilizing services from multiple components and institutions.

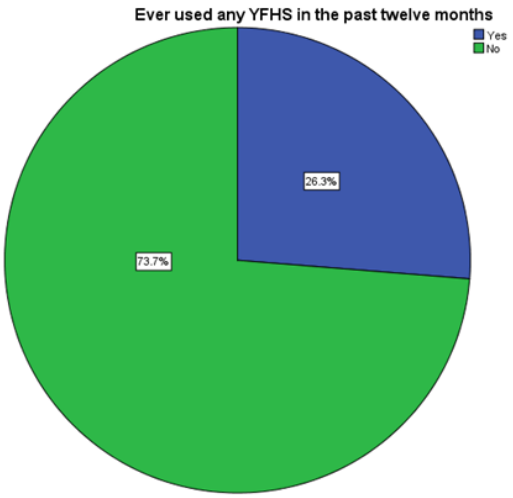

Figure 1 Utilization of YFHS among youths in Dinsho District, Southeast Ethiopia, 2019.

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Among the 275 individuals who did not use YFHS, various variables were assessed to determine the factors hindering their utilization of services. Reasons cited by respondents for not utilizing YFHS included not perceiving any health issues as necessary for service utilization, mentioned by 144 (38.6%) respondents, lack of information or awareness about YFHS by 117 (31.4%), fear of being recognized by acquaintances by 88 (23.6%), uncertainty about where to access services by 46 (12.3%), geographical distance to health facilities by 25 (6.7%), concerns about service costs and adherence to cultural norms by 19 (5.1%), and apprehensions about service availability and confidentiality by 9 (2.4%). Multiple participants highlighted more than one potential factor influencing their decision-making.

Attitude of youths towards YFHS Utilization

The average score for youth attitudes towards Youth-Friendly Health Services (YFHS) across eight items was 27.21 (±3.32 standard deviation). Out of the 373 participants, 238 individuals (63.8%) exhibited an unfavorable attitude towards YFHS, with 237 (63.5%) among non-users and 1 (0.3%) among users (Table2).

Table 2 Attitude of youths towards YFHS utilization in Dinsho District, Southeast Ethiopia, 2019

Statements	Strongly disagree	Disagree	Not sure	Agree	Strongly Agree
YFHS are important for youths like you.	0	11(2.9%)	125(33.5%)	184(49.3%)	53(14.2%)
Youths should use YFHS for various SRH reasons.	0	0	10(2.7%)	245(65.7%)	118(31.6%)
Each youth should be aware of the importance of YFHS.	0	0	0	144(38.6%)	229(61.4%)
Both males & females should use YFHS for RH reasons.	0	24(6.4%)	160(42.9%)	174(46.6%)	15(4%)
Health providers assure confidentiality of youths.	4(1.1%)	212(56.8%)	152(40.8%)	4(1.1%)	1(0.3%)
Health providers are non-judgmental, their decision is participatory.	0	16(4.3%)	259(69.4%)	96(25.7%)	2(0.5%)
Health providers are friendly, so that you can go to the health center.	7(1.9%)	127(34%)	211(56.6%)	26(7%)	2(0.5%)
Costs of youth-friendly health services are fair.	0	185(49.6%)	109(29.2%)	76(20.4%)	3(0.8%)

Factors associated with utilization of YFHS

The correlation between demographic, socio-economic, individual, and health care system factors with the utilization of Youth-Friendly Health Services (YFHS) among study participants was examined using binary logistic regressions. Variables showing significance and candidate variables with a p-value < 0.25 in bivariate analysis were entered into multivariate regression analysis to explore the impact of independent variables on the outcome variable. The final model was developed using a backward conditional approach.

In bivariate logistic regression analysis, factors such as gender, age group, residence, religion, education level, marital status, employment status, current living arrangement, family size, daily pocket money, family income level, parental marital and educational status, parent's employment status, source of information, prior discussions about services, experience with SRH issues, attitude towards services, sexual behavior, and service accessibility were significantly associated with YFHS utilization.

During multivariate logistic regression analysis, the variables that remained significant included gender, current living arrangement, daily pocket money, family income level, father's employment status, source of information, discussions about services, service accessibility, preference for a health services provider, and sexual behavior.

The odds of YFHS utilization were 10.145 times higher among females (AOR = 10.145; 95% CI: 3.133 – 32.857) compared to males. Similarly, individuals with a family income of 116.94 birr or more were 12.438 times more likely to utilize YFHS (AOR = 12.438; 95% CI: 3.568 - 43.363) than those with lower family income levels.

Contrastingly, individuals living with friends were 0.034 times less likely to seek YFHS (AOR = 0.034; 95% CI: 0.006 – 0.197) compared to those living with their parents. Similarly, individuals without daily pocket money were 0.005 times less likely to seek YFHS (AOR = 0.005; 95% CI: 0.001 – 0.033) compared to those who received pocket money. Furthermore, individuals whose source of information was not health providers were 0.020 times less likely to utilize YFHS (AOR = 0.020; 95% CI: 0.001 – 0.282) than those whose source was health providers.

Moreover, individuals who did not have a romantic partner were 0.001 times less likely to utilize YFHS (AOR = 0.001; 95% CI: 0.000033 – 0.010) than those with a romantic partner. The study also revealed that individuals residing far from an YFHS facility (walk greater than an hour) were 0.004 times less likely to utilize YFHS (AOR = 0.004; 95% CI: 0.001 – 0.021) compared to those residing close to a facility (walk an hour or less). Additionally, individuals without romantic sexual partners were 0.001 times less likely to utilize YFHS (AOR = 0.001; 95% CI: 0.000033 – 0.022) compared to their counterparts (**Table 3**).

Discussion

The study identified the overall level of Youth-Friendly Health Services (YFHS) utilization among youths in Dinsho District to be 26.3% (95% CI: 21.8% - 31.1%).[18] This indicates a relatively low proportion (less than fifty percent).

This finding is consistent with a study conducted in Woreta town, Northwest Ethiopia, where 24.6% of participants accessed reproductive health services.[18] However, it was lower than studies conducted in Bahir Dar town, Metekel Zone, Harar town, and Metekele town, Ethiopia, where 32.2%, 33.2%, 63.8%, and 69.1% of participants utilized at least one YFHS service within the past year of the studies,[13,14,18,19] respectively.

The variance in utilization rates could be attributed to differences in the demographic and socio-economic characteristics of the participants and the specific study locations. Additionally, disparities in barriers like lack of information/awareness about services and the availability of YFHS facilities in the study area may contribute to these discrepancies.[14]

Furthermore, the primary deterring factors for non-utilization of YFHS among youths in the study area included 144 (38.6%) of youths not seeing any health issues, hence deeming YFHS unnecessary, 117 (31.4%) reporting a lack of information/awareness about YFHS, 88

(23.6%) expressing fear of being recognized by acquaintances, 46 (12.3%) unsure where to access services, 25 (6.7%) facing challenges of long distances to nearby health facilities, and 19 (5.1%) expressing concerns about service costs and cultural norms. These factors suggest that a significant portion of non-utilization by youths is linked to knowledge gaps and attitudes towards YFHS.[14]

Similarly, a study in the Metekel Zone highlighted major hindering factors for not utilizing reproductive health services among youths, including not perceiving any health issues as necessary (31.2%), lack of information on YFS (12.5%), service delivery institutions being distant (11.4%), uncertainty about service access (9.9%), concerns about service costs (5.3%), fear of parental reactions (3.8%), and cultural/religious barriers (3.4%).[14]

Among the investigated independent variables, the gender of respondents showed a significant and positive association with YFHS utilization. Female participants were 10.145 times more likely (AOR = 10.145; 95% CI: 3.133 – 32.857) to utilize YFHS compared to male participants. Similarly, in a study conducted in the Metekel Zone, Northwest Ethiopia (14), the likelihood of utilizing reproductive health services among females was 1.97 times greater (AOR = 1.97; 95% CI: 1.9 - 4.9) than males. This finding may suggest that females are more susceptible to sexual and reproductive health challenges, leading to higher rates of seeking healthcare services compared to males.

Conclusion

This study had showed that low proportion of the youths visited different health facilities to utilize YFHS in the past twelve months preceding the survey, in Dinsho District. This might predispose youths to sexual & reproductive health problems; which in turn might affect youths' productivity that have serious implications for the future as well as the present.

The major deterring factors for not utilizing YFHS by youths in the study area was; youths didn't face any health problem hence they consider YFHS is not necessarily followed by lack of information/ awareness about YFHS, fear of being seen by people whom they knew & don't know where to go.

Sex, living arrangement, pocket money, family income level, source of information being health provider, ever discussed with health provider, accessibility of health facility and sexual behavior were found to be independently associated with YFHS utilization among youths in the study area.

Ethics approval and consent to participate

Ethical clearance for this study was acquired from the Institutional Review Board (IRB) of Arsi University College of Health Sciences following the approval of the research proposal by the Research Ethics Committee. A supporting letter was issued by Arsi University College of Health Sciences to the Dinsho District Health Office. Subsequently, the Dinsho District Health Office provided supportive letters to all study kebeles. The purpose of the study was effectively communicated by the data collectors to the study participants, and verbal consent was obtained from all participants with a strict emphasis on maintaining participant confidentiality throughout the study process.

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Conflicts of interest

The authors declare there is no conflict of interest.

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