

HARAMAYA UNIVERSITY

POSTGRADUATE PROGRAMS DIRECTORATE

**SEXUAL AND REPRODUCTIVE HEALTH SERVICES UTILIZATION
AMONG YOUTHS: THE CASE OF ODA BULTUM UNIVERSITY
STUDENTS, EASTERN ETHIOPIA**

MPH THESIS

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ABBREVIATIONS AND ACRONYMS

AIDS	Acquired Immune Deficiency Virus
AOR	Adjusted Odds Ratio
AYRH	Adolescent and Youth Reproductive Health
AYSRH	Adolescent and Youth Sexual and Reproductive Health
CPR	Contraceptive Prevalence Rate
CSA	Centre for Statistical Agency
EDHS	Ethiopian Demographic Health Survey
FMOH	Ethiopian Federal Ministry of Health
FGM	Female Genital Mutilation
FP	Family Planning
HIV	Human Immune Deficiency Virus
HTP	Harmful Traditional Practice
ICPD	International Conference on Population Development
IHRERC	Institutional Health Research Ethics Review Committee
LMIC	Low and Middle-Income Country
MDG	Millennium Development Goals
OBU	Oda Bultum University
RH	Reproductive Health
RHS	Reproductive Health Services
RSB	Risky Sexual Behaviours
SGD	Sustainable Development Goals
SRH	Sexual and Reproductive Health
SSA	Sub Saharan Africa
STI	Sexually Transmitted Infection
UNFPA	UN Fund for Population Activities
UNICEF	United Nation International Children Emergency Fund
VCT	Voluntary Counselling and Testing
WHO	World Health Organization

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ABSTRACT

Background: In Ethiopian higher education institutions, only 46.6% of youths know what reproductive health mean and 44% know thier sexual and reproductive rights. Youths are facing multiple sexual and reproductive health problems due to inadequate awareness, less lived-in life experience, and inaccessible and poor quality sexual and reproductive health services, yet rarely considered as a priority health problem and hence, their sexual and reproductive health needs and issues remain unmet and unaddressed. However, there is scanty of information on utilization and determinants of sexual and reproductive health services among students in eastern Ethiopia particularly in Oda Bultum University.

Objective: To assess sexual and reproductive health services utilization among students in Oda Bultum University in Eastern Ethiopia, from September 1-30, 2024.

Method: An institutional-based cross-sectional study conducted among 566 randomly selected undergraduate students in Oda Bultum University using multistage stratified sampling technique. A pretested-structured questionnaire was used to collect the data from the participants through self-adminstered. Data were analyzed using StataMP/17. Descriptive statistics were used to describe outcome and independent variables. Bivariable and multivariable logistic regression analyses were used to identify factors associated with sexual and reproductive health services utilization. Adjusted odds ratio with its 95% confidence interval was used to report the association and significance declared at P-value<0.05.

Results: A total of 556(98.2%) of students participated in the study. The mean (\pm SD) age of students was 23.02 ± 7.33 years and 64.2% of the students were in age the group of 21-24 years. The overall, more than half, 325(58.5%) of the students were utilizing sexual and reproductive health services utilization (95%CI: 53.8%, 62.4%). Age of 20-24 years (AOR=1.85(1.08,3.17)), female (AOR=1.60(1.05,2.44)), attending secondary education at government school (AOR=3.77(2.02,7.02)), paternal education (AOR= 3.27 (2.03,5.18)), rich (AOR=2.92 (1.73, 4.92)), parental discussion on SRH issues (AOR=1.72 (1.12, 2.65)) and perceived affordability of SRH services (AOR=3.16 (1.99,5.03)) significantly associated with SRH services utilization.

Conclusions: This study revealed utilization of sexual and reproductive health service utilization of students was low compared to national adolescent and youth SRH strategic target/standard. In this study, age, gender, paternal education, wealth status, parental communication on SRH issues and perceived affordability of SRH services were significantly predictors of sexual and reproductive health services utilization of youth students.

Key-terms: Utilization, Sexual and Reproductive Health Services, Youth Students, Oda Bultum University, Ethiopia

1. INTRODUCTION

1.1. Background

Reproductive Health (RH) 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 to its functions and processes. It implies that people are able to have a satisfying and safe sex life and that they have the capability to reproduce and the freedom to decide if, when and how often to do so (Glasier *et al.*, 2006). The World Health Organization (WHO) defined adolescent as persons between the ages of 10 and 19 years and youth as people as those between the ages of 15 and 24 years (WHO, 2015). At the start of the 21st century, 25% of individuals in Africa were between the ages of 10 and 19—one third of the world's population (Roche *et al.*, 2018). Globally, youths struggle with a variety of SRH issues, including unintended pregnancy, unsafe abortion, and STIs including HIV, yet they are frequently misjudged as healthy and as not needing particular health treatments (Jaleta *et al.*, 2017). Youths all throughout the world require far better education and reproductive health care. This is evident from the concerning data on abortion, the risks of early pregnancy, and level of STI, all of which are on the rise thanks to ignorance, fear, a lack of medication, insufficient care, and increased sexual activity. As per estimates, between 30 million and 35 million abortions occur annually over the world, with roughly half being against the law (Tessema & Animut, 2020; Admassu *et al.*, 2022).

The world population is composed of 18% of adolescents and 26% of young people (10–24 years) (Bartram *et al.*, 2012). Over 21 million young people, or roughly 22% of Ethiopia's total population are youth (Tessema *et al.*, 2020; Admassu *et al.*, 2022). The risk of Sexual and Reproductive Health (SRH) issues is higher for youths from sub-Saharan Africa (SSA) than worldwide. Youths from this region have the highest risk of STIs; for example, more than half of all new HIV infections occur among them (Ringheim & Gribble, 2010).

The majority of peoples become sexually active during adolescences this put them at higher risks (Oljira *et al.*, 2016). Study have documented that early sexual initiator were more likely to report undesired consequences of sexual initiation like teenage pregnancy, not using condom at first sex and STIs and likely to have intimate partner higher age and involved in multiple sexual partners (Daba et al, 2016). Around the world, issues are getting worse, and many young people lack the knowledge or resources to deal with them. Globally, youth contribute 8.7 million abortions and 41% of new HIV infections (WHO, 2015).

Many adolescent are facing SRH problems due to they are less informed, less experienced and less comfortable with SRH access than adult (Kimo & Makuria, 2017). Adolescent are not

considered the health priority rarely design to meet their needs and low attention to training of health worker on adolescent sexual issues (Morris & Rushwan, 2015). Study suggested that adolescent are experiencing a range of social norm and practice that discriminate them due to their age and gender so that meeting SRH of sexually active adolescent for contraceptive, maternity care and others service are challenge (Coast *et al.*, 2019).

Gender inequality, sexual pressure, early marriage, polygamy, female genital cutting, unintended pregnancies, pregnancies spaced tightly apart, abortion, STIs, and AIDS are just a few of the significant SRH issues Ethiopian adolescents confront (Abebe & Awoke, 2014; Admassu *et al.*, 2022). Extreme poverty, unemployment, and lack of education all contribute to the challenges Ethiopian youngsters have with their SRH. Pervasive gender inequality is another underlying issue that has a detrimental influence on reproductive health and slows down overall development. To address the issues mentioned above, varieties of community-level initiatives fall under the purview of the reproductive health services (Admassu *et al.*, 2022).

Adolescents and Youths are an important resource for the future of their country and there is a need to invest in their health and development (Chandra-Mouli *et al.*, 2015). International conference on population and development (ICPD) in 1994 held in Cairo is one of the most demarcated time for adolescent because of shift in focus from infertility reduction to reproductive right of women and adolescent (UNFPA, 2016).

Ethiopian governments have promised to enhance the SRH of teenagers by providing them access to information and education as well as youth-friendly health care at a development key informant interview held in Cairo in 1994. However, most parts of the world continue to fall short of these promises, especially for young people who are not married (UNFPA, 2016). The comprehensive knowledge of HIV and other RH were there (Ariatna). National strategy for adolescent and young sexual and reproductive (AYSR) health aims to increase access to information, education and to promote health services utilization by youths (FMOH, 2016).

1.2. Statements of the Problem

Youths' early, unprotected intercourse can have detrimental effects. High social, economic, and health expenses are associated with pregnancy and STIs, such as HIV/AIDS, for those who are affected, their offspring, and society (Obregón, 2019). Each year, at least 111 million of the 333 million new STIs that are thought to be contracted across the world by young individuals aged less than 25 years (Panichkriangkrai *et al.*, 2020). Youths are vulnerable to sexual exploitation and are at disproportionately high risk of unintended pregnancy and STIs including HIV/AIDS (Wakjira & Habedi, 2022). Teenage pregnancy rates are still high in Africa, where 430,000

young people are infected with HIV every year; 2.6 million youth are living with the disease; and maternal death is one of the top causes of death for youth girls (MacPherson *et al.*, 2014). Studies conducted in Ethiopia revealed about 42.1% sexual risk behaviors, 19.% of teens reported had premarital sexual encounters, with the mean age of the first encounter at 16.48 years, 19.5% of youths had self-reported STIs, and 65 per 1000 women had abortions (Ayalew *et al.*, 2016; Ayehu *et al.*, 2016; Admassu *et al.*, 2022).

Youths are the most vulnerable group for RH problems due to their inclination to be engaged in risky sexual behavior (Ayalew *et al.*, 2016; Admassu *et al.*, 2022). Besides, the environment itself exposes students to greater opportunities and circumstances for engaging in risky behaviors related to SRH. Attracting youths to the clinical services has remained a challenge; however, there was a need to improve their health seeking behavior (UNFPA, 2016).

A significant proportion of death and morbidities among adolescent is attributed by SRH problems due to unprotected sex as they start to define and clarify their sexual values and frequently start to experiment with risky sexual behaviours (WHO, 2014).

As per Inter Agency Working Group on Reproductive Health (IAWG) report of 2018, HIV/AIDS related death of youths are nearly tripled and one in four women give birth before they reach 18, around 3.9 million girls aged 15-19 years undergo unsafe abortion yearly and 40% of girls married before the age of 18 years in least developed countries (IAWG, 2019).

Pregnancy, abortion and STIs including HIV are major ASRH risk results in adverse reproductive health outcome (Morris *et al.*, 2015). Adolescent girls which gave birth have higher risk of death in their early twenty, and babies are disposed to lower birth weight, more health complications and greater risk of neonatal death too (Chandra-Mouli *et al.*, 2014). Youth often lack the comprehensive and accurate information that they need in order to protect themselves from STI and HIV (Ayalew *et al.*, 2016; Ayehu *et al.*, 2016; Admassu *et al.*, 2022). Estimate for developing countries showed that 2.1 million youths are living with HIV/AIDS in 2016 and global birth rate of youths aged 15-19 years in 2018 was 44/1000 (WHO, 2018).

A report from Nigeria in 2009 showed that a young, aged 15-24 years are 3 times more likely to be infected with HIV/AIDS, 54% of adolescent girls have given childbirth and 60% of adolescent girls treated for complication of unsafe abortion (Sedgh G *et al.*, 2009). Finding from Rwanda showed that 20.8% of youth girls have begun child bearing and adolescents are 10 times to more likely to contract with HIV/AIDS than adults (Coast *et al.*, 2019). The Ethiopia 2016 EDHS report at national level showed that adolescent fertility rates was 80 birth per 1000 (20 per1000 in Urban versus 98 per 1000 in Rural) (CSA and ICF., 2016).

Adolescent girls aged 15-19 years were seven times more likely to be HIV positive than boys (FMOH, 2016). As report shows that sexual activity, early pregnancies and STI including HIV infection rates are increasing among adolescents, so that adolescent and youth reproductive health becomes a concern (Ayalew *et al.*, 2016; Ayehu *et al.*, 2016; Admassu *et al.*, 2022). The main adolescent and youth health problems mentioned above could be justified by SRH service utilization. Ethiopian government launched several strategies to promote adolescents and youth SRH services but did not achieve remarkable success (FMOH, 2018). Studies reported despite the high rate of SRH problems only one out five adolescent are utilize the service (Bilal *et al.*, 2015). Factors reported to be associated with low utilization to SRH service are inaccessible and unattractive health facility, low parenteral discussion, restrictive cultural norm, feeling of shame, low SRH knowledge, poor quality of service and poor attitude of adolescent towards the behaviour of health providers (Ayehu *et al.*, 2016; Birhan *et al.*, 2018).

Discriminatory norm and customs prevent unmarried adolescent for contraceptive access while married adolescent are allow to prove their fertility soon after marriage even if national policies support greater access to both married and unmarried girls (Coast *et al.*, 2019). Study that focused on higher learning institute students revealed that one third of university students have had sexual experience. Of these, nearly two third was found to have sexual experience already before joining the university which evidences that SRH problems manifest early on and calls for interventions (Ayalew *et al.*, 2016; Ayehu *et al.*, 2016; Admassu *et al.*, 2022).

Concerning SRH services use, it is not enough as expected from the efforts tried in Ethiopia. SRH services uptake has great variation, 21.5% % in Nekemte (Binu *et al.*, 2018a) to 91% in Harar due to youth friendly services are available and accessible at community level SRH services use is high in this areas (Motuma, 2012), indicating different factors affecting uptake differently in different part of the country . There are very few studies on RH in Ethiopia, which is the justification for the choice of study issue. The majority of the few researches on teenage RH conducted in the nation are focused on schools. Even though there have only been a few studies on young people, some of them have been done in larger urban areas.

As a result, there is a paucity of comprehensively gathered and reliable data on young people's demands for SRH services as a whole. Therefore, this study conducted to close the knowledge gap on this problem and to pinpoint variables that would be beneficial to those promoting SRH programs that concentrate on the need and use of services for young people with reproductive health. This study anticipated to provide light on young people's requirements for SRH services and their use of such services. In summary, the study was anticipated to produce pertinent data that might be used to create RH programs that are suitable for this demographic segment.

1.3. Significances of the Study

The findings of this study could help Ministry of Education and Ministry of Health with their facilities and acting partners to intervene on the burdens and determinants of poor SRH services utilizations among youths learning at higher education institutions of the country in general and Oda Bultum University in particular. In addition, the findings of this study would help for planning, monitoring and evaluations of SRH service program activities undertaking to improve utilization of SRH services for better outcome and fighting preventable morbidities, disabilities and deaths of adolescents and youths because of poor utilization of SRH services. Besides, identified evidences on utilization level and associated factors of SRH services among youth at education institutions could be used as the baseline information for program planners and implementers who want to intervene on the abovementioned problem. Furthermore, information generated from this study would raise available literatures and helps future researchers on topic.

1.4. Objective of the Study

1.4.1. General objective

To assess sexual and reproductive health services utilization and associated factors among youth students in Oda Bultum University in Eastern Ethiopia, from September 1-30, 2024.

1.4.2. Specific objectives

To assess magnitude of sexual and reproductive health services utilization among youth students in Oda Bultum University, Eastern Ethiopia from September 1-30, 2024.

To identify determinants of sexual and reproductive health services utilization among youth students in Oda Bultum University, Eastern Ethiopia from September 1-30, 2024.

2. LITERATURE REVIEW

Sexual and reproductive health services include access to information and services on prevention, diagnosis, counselling, treatment and care, and need that all people can safely reach services without travelling for a long time/distance. Services and treatments must be equitable and affordable. It also requires adequate quality of care and providers do not discriminate users on the basis of sexuality, gender, ethnicity and age (Denno *et al.*, 2015). Studies shown that even with a lot of perceived barriers against the utilization of sexual and reproductive health service by adolescents, efforts in recent years needs to focused on not only ensuring health service availability but also making its provision adolescent friendly that is, accessible, acceptable, equitable, appropriate, and effective (WHO, 2009).

2.1. Sexual and Reproductive Health Services Utilization

The level of SRH service utilizations among youths observed differently across the world. A cross sectional study conducted in Nepal show only 9.2% of youth utilized SRH service (Bam *et al.*, 2015). Another cross sectional study done in Malaysia showed that only 6.9% of school adolescents utilized SRH services (Othman *et al.*, 2019). A cross sectional study done in Nigeria showed that uptake of SRH service by youths is 51% (Abiodun *et al.*, 2016). Another cross sectional study done in Mouchudi on SRH service showed that 37.5% of youth utilized SRH services (Ngomi, 2008).

Different studies done in Ethiopia regarding the utilization of SRH among adolescent and youth suggests lower SRH service uptake. An institution based cross sectional study done in Nekemte western Ethiopia showed that 21.1% adolescents were used SRH service (Binu *et al.*, 2018b). Similar study done in Tigray region, northern Ethiopia showed that 22% of adolescent were utilized SRH services (Bilal *et al.*, 2015). Similar study conducted in western Oromia on SRH service utilization showed that out of 1262 school adolescent and youths showed that SRH services utilization was 36.5% (Birhan *et al.*, 2018). Different studies conducted on SRH service utilization among youths on SRH services in AYFS were reported low. Institution based cross sectional study conducted in Hadiya zone south Ethiopia on the level of adolescent SRH service utilization on showed that 38.5% (Helamo *et al.*, 2017). On the other hand, institution based cross sectional study done in Bahir dar Northern Ethiopia showed that 32% of high school youth were utilize the service(Abebe *et al.*, 2014).

A cross sectional study done in Machakel district, northern Ethiopia showed that 21.5% of adolescent were used SRH services (Abajobir & Seme, 2014). Other study conducted in

Kachabirra district, southern Ethiopia on SRHS utilization among youths showed 47.2% of girl utilize the service out of 844 participants (Lejibo *et al.*, 2017). A cross sectional study done in Asella southeast Ethiopia showed that 61% of sexually active youth were utilize contraceptives service (Tejineh *et al.*, 2015).

A study findout that SRHS utilization by youth had a great variability depending on types of services. A cross sectional study done in Goba town showed that 67.3% of youth were utilize VCT service and among sexually active female adolescent 71% of them were utilize FP services (Gebreselassie *et al.*, 2015). Other cross-sectional study done in Gondar, northern Ethiopia showed that out of sexually active youth, 79.5% of them utilized FP and 72.2% of them were utilized VCT service respectively (Lejibo *et al.*, 2017).The study revealed that only 460(36.5%) of the respondents had ever sought some type of SRHS and with respect to type of SRHS utilized, 67.2% sought advice and 38.7% sought SRH information (Birhan *et al.*, 2018).

A study conducted in Arsi Zone Oromia Region, Ethiopia found that the overall utilization of SRH of adolescents were 30.1% (Wakjira *et al.*, 2022). Another similar study done in Dejen district Ethiopia showed that there is only 45.5% of SRH service use among young's (Simegn *et al.*, 2020). A cross-sectional study done in Nekemte showed that 157(21.2%) of overall youth had received at least one SRH services in the last twelve months (Binu *et al.*, 2018).

The study indicated that utilization of SRH services was low among adolescents, whereby half of SRH services that were known to be provided was HIV testing. Among 121 adolescents, only 42 (34.7%) used some of these services while the remaining 79 (65.3%) did not use the SRH services. The results indicated that among the services utilized by the adolescents, HIV was mostly used (18.2%), circumcision (0.83%), both circumcision and HIV testing (7.4%), HIV test and HIV testing and ANC (0.8%) (Ndayishimiye *et al.*, 2020).

2.2. Determinants of Sexual and Reproductive Health Services Utilization

2.2.1. Sociodemographic related factors

Based on the study done in Ethiopia, aged, educational status, knowledge of SRH rights were all associated with exercises of SRH service (Wakjira *et al.*, 2022). A cross sectional study done Gojam on SRH service uptake among youth revealed that those aged 15-19 years were twice as likely used SRH service than those age 10-14 years (AOR =2.18, 95% CI:1.13, 8.03)(Abajobir *et al.*, 2014). Other study reported that female aged 15-19 years were 3.3 times more likely to utilize SRH services (AOR=3.295, 95% CI: 1.411, 7.696) (Lejibo *et al.*, 2017).

Different studies suggested that SRH services utilization is higher among male adolescents. Cross sectional study done in Nepal showed that only 4.3% female adolescent utilize the service

whereas 12.5% of males were three times more likely than females to utilize SRH services (AOR:3.14) (Bam *et al.*, 2015). Another institution based study showed that utilization of SRH services was lower among female students (AOR=0.5, 95% CI=0.3,0.7) while unwanted pregnancy and abortion are reported by female students (Bilal *et al.*, 2015).

Others study conducted in Anchar eastern Ethiopia showed that male adolescent were 5.25 times more likely to ever use VCT service compared to females with (AOR=5.25, C.I=1.065, 25.87)(Ansha *et al.*, 2017). Unfortunately other study suggested female adolescent were 2.6 time utilize VCT service than male counterparts with (AOR=2.6 95% CI: 1.79, 3.80) (Feleke *et al.*, 2013). Other study find out that female adolescent were less likely to use RH service than male with (AOR=1.5, 95% CI: 1.3, 5.21) (Abajobir *et al.*, 2014) .

Studies revealed that religion can affect utilization of SRH services. Cross sectional study conducted in Anchar Eastern Ethiopia showed that Orthodox Christian followers were 2.45 times more likely to ever use contraceptives compared to Muslims (AOR=3.45, 95% C.I = 1.23, 9.68). Religious opposition 28 (17.6%) were the major reasons for not use contraceptives among sexually active Madawelabu university students (Ansha *et al.*, 2017).

Different studies on SRH service utilization reports being in secondary schools and above were associated with SRH service utilization. A cross sectional study done in Gondar town revealed that those in secondary education were 2 times more likely to utilize the service comparing with primary education (AOR =2.41 95% CI: 2.98, 7.11) (Abajobir *et al.*, 2014). A cross-sectional study showed those secondary education were 9 times more likely to utilize contraceptive (AOR=9 95% CI: 1.42, 54.14) (Feleke *et al.*, 2013). Other cross sectional study done in Mekele northern Ethiopia on SRH utilization revealed that service up take were reported low among higher grade student with AOR=0.4(95%CI=0.2,0.8) (Bilal *et al.*, 2015).

Study in USA showed that parental communication with adolescents regarding SRH issues associated with SRH service usage (AOR=1.6, 95% CI: 0.8-2.3). Different studies in Ethiopia correlated parental communication with SRH service usage. Among them study in rural East Gojjam Zone showed that the chance of services uptake was 4 times higher where adolescent-parent communication on RH topics (AOR=3.70, 95% CI: 1.895.68 (Abajobir *et al.*, 2014). Institution based study done in Dire Dawa, Ethiopia revealed parental communication on SRH issues associated with condom usage (AOR=1.9 CI: 1.0, 3.8) (Ayalew *et al.*, 2016).

A study done in Bahir Dar, Ethiopia indicated that the barriers in utilizing reproductive health services were inconvenient health facility operating hours and fears of being seen by parents or people whom they know. Parental disapproval, lack of basic information and pressure from partners deterred them in accessing and utilizing the services (Tilahun *et al.*, 2022).

A higher age group and experience of RH problems were positively associated with utilization of youth RH services, but it was lower among those who cannot afford to pay for the services they received (Ayehu *et al.*, 2016). Utilization of SRH services among youth was associated and higher among youth aged 15–19 years, had reproductive knowledge, ever discussed on SRH issues and had the secondary level of educational attainment (Mekonnen *et al.*, 2022).

A study conducted in Nekemte, Ethiopia showed that the likelihood of SRH service utilization among young were about 3 times (AOR=3, 95% CI: 1.72-5.24] higher among respondents who discussed SRH issues with health workers than their counterparts. Those who had heard SRH issues from their schoolteachers were 64% (AOR=0.36, 95% CI: 0.21, 0.61) less likely to utilize SRH service. The odds of SRHS utilization was about 6 times [AOR=5.87, 95% CI: 3.38, 10.19) higher among respondents who ever had sexual contact than their counterparts. Respondents who had history of perceived STIs symptoms were 2.6 times (AOR=2.61, 95% CI: 1.24, 5.49) more likely to utilize the SRH service (Binu *et al.*, 2018).

A study conducted among adolescent suggested that those who exposed to SRH information (AOR=2.11, 95% CI: 1.22–3.6), aware of SRH service (AOR=1.83, 95% CI: 1.12–3.0), SRH service component (AOR=2.76, 95%, CI: 1.53–4.97), and distance from SRH facilities (AOR=2.28, 95%, CI: 1.13–4.62) associated with SRH service use (Liyeh *et al.*, 2021).

A study done in Gondar town, Ethiopia showed that utilization of contraceptives significantly associated and higher among those who had secondary educational, had discussion with family/relatives, peer groups, sexual partners and teachers, had a romantic sexual relationship and had a longer sexual relationship with contraceptives use (Abdurahman *et al.*, 2022).

2.2.2. Individual level factors

The level of knowledge, type of SRH services are main determinants of access and use of health service were as the primary reason for understanding of SRH service are the absence of awareness of youth friendly service (Mengistu & Melku, 2013). Study conducted in Nigeria shows about 82% adolescent/youth have had general knowledge on AYPHS but more than 79.5% are don't know specific health service provided, the most popular service known were FP, VCT and STIs (Ajike & Mbegbu, 2016).

Study in USA showed that parental communication with adolescents regarding to SRH issues associated with service usage (AOR=1.6, 95% CI: 0.8-2.3). A cross sectional study done in East Gojjam zone showed that the likelihood of services uptake was 4 times higher where there was adolescent-parent communication on RH topics (AOR = 3.70, 95% CI: 1.895.68 (Abajobir *et*

al., 2014). A cross-sectional study done in Dire Dawa in Ethiopia show parental communication on SRH issues associated with condom utilization (AOR=1.9 CI: 1.0, 3.8)(Ayalew *et al.*, 2016). An institution based cross-sectional study done in Hadiya showed that adolescent who know the availability of friendly RH services were five times more likely to utilize the service [AOR=4.96, 95% C.I:2.74-8.96] (Helamo *et al.*, 2017). An institution-based cross-sectional study Malaysia found that those with knowledge of SRH services were more likely to utilize the services (OR: 7.83; 95% CI: 3.36 to 18.21; P-value<0.001)(Othman *et al.*, 2019). Whereas qualitative study from rural Zimbabwe revealed that low adolescent SRH service utilization due to lack of adequate knowledge about SRH services provided (Kurebwa, 2017).

Advocating increasing awareness is essential to the success of any adolescent RH effort (19). A study conducted in Jimma Town, Ethiopia suggested that the overall knowledge for health services of RH, health services providers and source of information regarding sexual and reproductive service were 3.44, 3.78 and 4.68 respectively (Tilahun *et al.*, 2022).

Lack of access to SRH knowledge was an important reason for poor self-confidence among adolescents to discuss these matters. Moreover, the study also shows adolescents had favorable attitude towards use of health services for RH issues and problems. Lack of knowledge about existing SRH services and, combined with limited-service availability and long waiting time associated to seeking SRHS by young people. According to study findings, most of the challenges impeding SRH services' adoption connected to the negative attitude of health service providers and misconceptions of SRH services on the part of the young (Ndayishimiye *et al.*, 2020). Discussion with sexual partner, with peer and health workers are associated with SRH service utilization (Gebreselassie *et al.*, 2015).

A cross sectional study done in Nigeria revealed that those who had ever discussed SRH issues with parents were 50.7 times more likely to utilize SRH services than those who had not (P<0.001)(Abiodun *et al.*, 2016). A cross-sectional study done in Northwest Ethiopia showed adolescent parental discussion on SRH issues were 2.23 times more likely to use SRH services (AOR: 2.23, 95% CI: 1.43, 3.46)(Ayehu *et al.*, 2016).

Studies cited being sexually active associated with uptake of SRH services. Study done in Nepal showed that being sexually active within 12 months 10 times more likely to utilize (AOR: 10.31) SRH service (Bam *et al.*, 2015). An institution based study done in Nekemte Ethiopia on SRH service use revealed being ever sexually experienced six times more likely to utilize SRH service (AOR 5.9, 95% CI [3.4–10.2]) (Binu *et al.*, 2018).

A cross-sectional study also reported that those who ever had sexual intercourse were 4.32 times more likely to use SRHS compared to their counterpart (P-value=0.001)(Birhan *et al.*,

2018). School-based study done in Hadiya reported that those who never had sexual intercourse were 86.2% less likely to use than SRH service (AOR= 0.148 (95% C.I: 0.015- 0.415) (Helamo *et al.*, 2017). Another study done in Amhara region reported youth never had sexual intercourse were more likely to use SRH services (AOR=3.693, 95%CI: 1.266, 10.775) (Abebe *et al.*, 2014; Liyeh *et al.*, 2021). Adolescents who perceived themselves as high risk were 8.22 times more likely to ever use VCT (AOR = 8.22, C.I = 1.07, 35.74) (Ansha *et al.*, 2017). Another study done in Northwest Ethiopia revealed that thought that they had no risk of RH Problem were more likely to use SRH service (AOR=1.911, 95%CI: 1.13, 3.233) (Negash *et al.*, 2016).

Study was cited being exposed to SRH information are more likely to utilize the services than those who don't exposed to information. A mixed method study done in Harar, Eastern Ethiopia showed that using friends (AOR=3.65, 95 % CI: 1.81,7.32), healthcare providers [AOR=3.27, 95 % CI (1.18,9.00)] and schools [AOR=1.79, 95 % CI (1.00,3.19)] as source of information for SRH services were associated with utilization (Motuma *et al.*, 2016).

A cross sectional study done in Addis Ababa Ethiopia reported exposing to radio for information were three times higher to utilize SRH service (AOR= 2.64, 95%CI: 1.44, 4.81) (Yohannes, 2016) and another study reported use of SRH service associated with use of newspaper (AOR=3.79, 95%CI:1.85, 7.75) (Negash *et al.*, 2016). Similar study done in Assela; Ethiopia showed 27(26.7) of the sexually active respondents had utilized contraceptives in the last twelve months. In this study, 582(78.8%) of the study participants did not use SRH services in the last twelve months (Tejineh *et al.*, 2015).

2.2.3. Healthcare related factors

Regarding contraceptive awareness, injectables (33.3%), condom (30.3%) and loop were the most frequently mentioned contraceptive methods. However, only 37(5.9%) of the female respondents had ever used any modern contraceptive methods. The source of these services included health centers (65.0%), hospitals (26.5%), health posts (24.1%), private clinics (22.2%) and non-governmental health facilities (4.8%) (Admassu *et al.*, 2022). Majority of the participants, 116(54.8%) reported health facilities from where they received SRH services followed by NGO health facilities 46(29.3%). The most frequently utilized SRH services was Volunteer Test and Counseling 93(59.2%) followed by information and counseling on SRH issues 80(51%) and condom service 46(29.3%) (Binu *et al.*, 2018).

2.3. Conceptual Framework

The proposed conceptual framework demonstrates the multiple factors determining utilization of SRH service, and determinants of sexual and reproductive health services utilization includes sociodemographic, personal/student related factors and healthcare factors. As a summary, this conceptual framework shows multiple factors determine SRHS utilization (Figure 1).

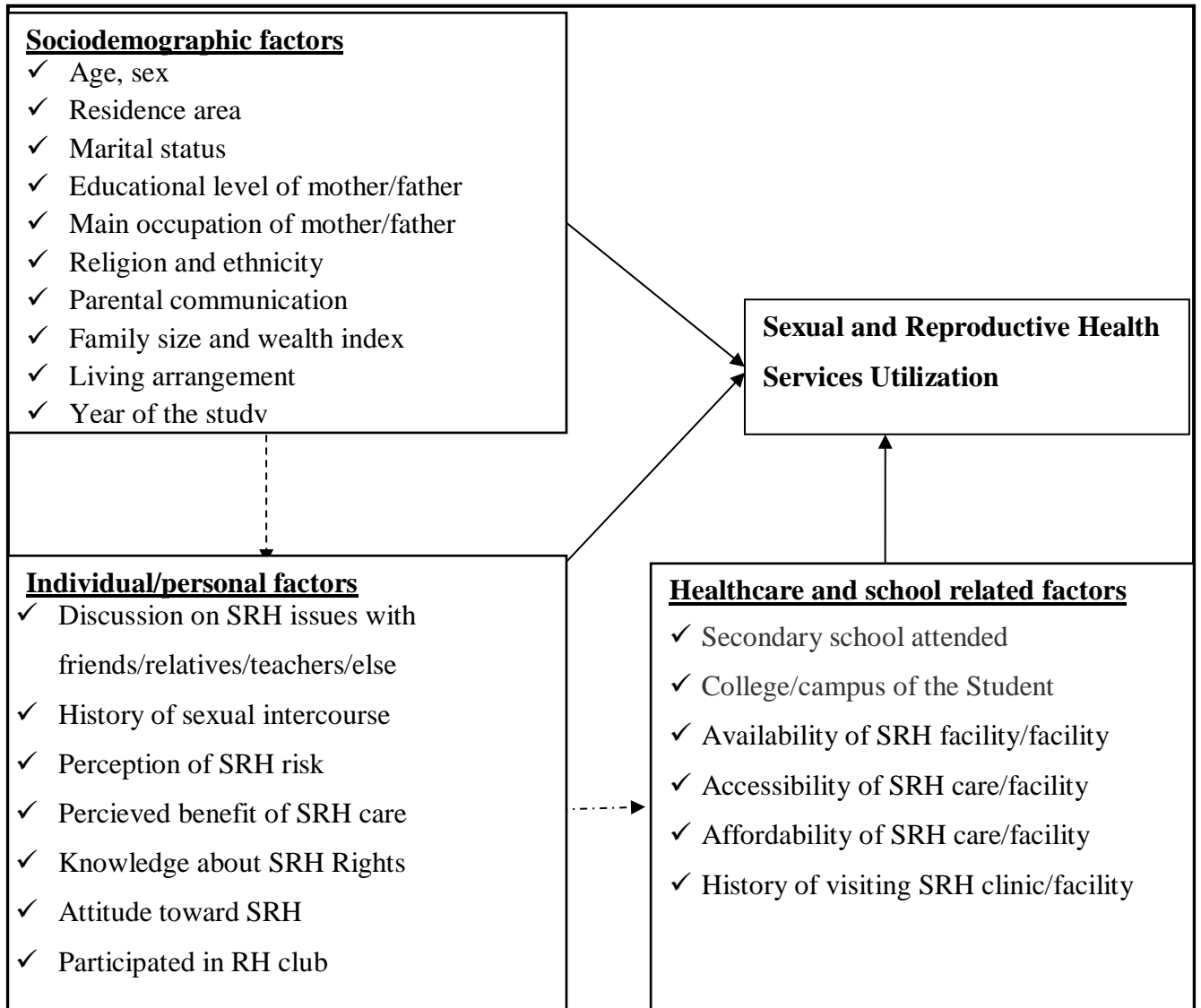


Figure 1: Conceptual framework for determinants of sexual and reproductive health services utilization among youth students in Oda Bultum University, Eastern Ethiopia, 2025

3. METHODS AND MATERIALS

3.1. Study Area and Period

The study was conducted in Oda Bultum University, eastern Ethiopia. Oda Bultum University is located in the West Hararge Zone between Chiro and Adama towns at 326 KM, East of Addis Ababa, capital of Ethiopia. It was established in 2016 and has one main campus in Chiro Town in Ethiopia. In 2023/24, there were total of nine Colleges/Institutes and 45 Departments/units in the University, hosting 6626 undergraduate students (4950 males and 1711 females); Of those, 2276 students (1836 males and 440 females) were freshman students without assign department (OBU, 2023). The University has one medium clinic and one anti-HIV/AIDS club for students and staffs. In 2023, there was one general hospital, a SRH clinic, eight health centers, 10 private clinics and 39 health posts in the district that Oda Bultum University located in (WHZHD, 2023). The study was conducted from September 1-30, 2024.

3.2. Study Design

An institution-based cross-sectional study was conducted.

3.3. Population

3.3.1. Source population

All undergraduate students in Oda Bultum University, Eastern Ethiopia

3.3.2. Study population

All randomly selected undergraduate students in Oda Bultum University during the study period were the study population

3.4. Inclusion and Exclusion Criteria

3.4.1. Inclusion criteria

Youth students who enrolled to regular and undergraduate programs of the study and available onsite/in learning/teaching education process/in campus/ during the data collection period.

3.4.2. Exclusion criteria

Those critically sick students who could not respond to interview during the study period.

3.5. Sample Size Determination

The sample size for the first specific objective, SRH services utilization is estimated by Epi-Info Version 7.2 using single population proportion formula. As proportion of SRH services utilization among youth students in the study area was unknown, we assumed it from previous study done in Ethiopia (21.2%) (Binu *et al.*, 2018) with the following assumptions: Confidence level of 95%, margin of error of 5%, design effect of 2 and 10% non-response rate. Thus, the minimum of 566 subjects are required for the first specific objective of this study.

Sample size for the second specific objective was computed by Epi-Info version 7.2 using two population proportion formula considering certain factors significantly associated with SRH uptake with 95% confidence level, 80% power of study, and 1:1 ratio unexposed to exposed group, 5% significance level and 10% non-response rate (Table 1).

Table 1: Sample size estimation for determinants of sexual and reproductive health utilization among youth students in Oda Bultum University, Eastern Ethiopia, 2024/25

Determinants	% of outcome unexposed group	AOR	Sample size with 10% non-response	References
Male	83	0.50	414	(Bilal <i>et al.</i> , 2015)
History of STI	6.8	2.6	462	(Binu <i>et al.</i> , 2018)
Age of 15-19	66	2.18	302	(Abajobir <i>et al.</i> , 2014)

Then, after comparing sample size estimated by each associated factor, the largest sample was considered as a minimum the sample size for second specific objective of the study (n=462).

Finally, after comparing above two sample sizes and the larger was considered and used for this study. Therefore, a minimum of 566 subjects were required to conduct the study.

3.6. Sampling Technique and Procedures

Multi-stage stratified sampling technique was used to select the participants. First, students in Oda Bultum University were stratified by college/institute and then, further stratified by the school, department/unit and year of the study. Then, minimum sample size required from each college/institute and their respective school, department/unit and year of the study were proportionally allocated using their actual numbers of regular undergraduate students, which reviewed from the latest students' registries at Associate Registrar of OBU in 2023/24. Then, a separate sampling frame was prepared in each college and their school, department/unit and year of the study and finally, eligible participants were recruited, invited and enrolled to study using simple random sampling technique (Table 2).

Table 2: Tabular presentation of sampling technique for sexual and reproductive health services utilization among youth students in Oda Bultum University, Eastern Ethiopia, 2024

Colleges/Institute	Year II	Year III	Year IV	Year V+	Total
	Population (Sample)	Population (Sample)	Population (Sample)	Population (Sample)	Population (Sample)
Institute of Technology	0(0)	144(19)	108(14)	84(11)	336(44)
College of Natural and Computational Sciences	317(41)	141(18)	212(28)	0(0)	670(87)
College of Health Science	63(8)	80(10)	0(0)	0(0)	143(18)
College of Agriculture	123(16)	146(19)	129(17)	0(0)	398(52)
College of Natural Resources and Environmental Sciences	69(9)	122(16)	98(13)	0(0)	289(38)
Institute of Land Administration	60(8)	80(10)	62(8)	0(0)	202(26)
College of Business and Economics	583(76)	321(42)	200(26)	0(0)	1104(144)
College of Social Sciences and Humanities	731(95)	212(28)	173(22)	0(0)	1116(145)
Law	0(0)	30(4)	34(4)	28(4)	92(12)
Subtotal	1946(253)	1276(166)	1016(132)	112(15)	4350(566)

3.7. Data Collection Methods

3.7.1. Data collection instrument

Data were collected using self-administered pretested-structured questionnaire that adapted from different literatures and national EDHS survey (CSA, 2016) and contextualized to the study purposes and local contexts. Initially, a questionnaire is developed in English language and then, translated to Afaan Oromo and back to English to check its consistency. The questionnaires contain information about sociodemographic characteristics, personal/individual related factors and healthcare, and school related factors as well as SRH services utilization.

3.7.2. Data collectors and supervisors

Data collection was facilitated by five nurses holding BSc degree and one master of public health degree expert will supervise the overall data collection process. Data collectors and supervisors were trained (by investigator) for two days on how to select the participants and conduct the study. The students were fill the questionnaire at the same time in the lecture halls.

3.7.3. Data collection procedures

Two facilitators on each department of the study were selected the day before the data collection who were the unit leader of each department that included. The purpose of this study was explained briefly to them and in order to identify the clarity of questions and their sensitiveness and pre-testing of the instrument will be conducted on 5% of the study subjects in a school other

than the selected department/unit of the colleges/campus/institutes. During the pre-testing discussion conducted with the participants on the problems they encountered during filling the questionnaires and correction incorporate in the final questionnaire. The participants were sat in a classroom by facilitators and after explaining the purpose of data collection, the tools have distributed to the youths who are agreed to the informed consent.

3.8. Study Variables

3.8.1. Dependent variable

Utilization of Sexual and Reproductive Health Services

3.8.2. Independent variables

Socio-demographic related factors: Age, sex, ethnicity, religion, residence area, marital status, year of the study, education status, mother's education, parental communication on SRH issues, wealth index, living arrangement, monthly pocket money.

Individual level Factors: Knowledge about SRH services, perception and attitude towards SRH services, history of sexual exposure, discussion on SRH issues with sexual partner, peer or health workers, substance use behaviours, year of the Study, sexual risk behaviours

Healthcare Related Factors: Accessibility of health facility, availability of service, access to information (Media such as TV/Radio), Internet/phone, peer, family, health worker.

3.9. Operational Definitions

Utilization of SRH Services: It was measured through the dichotomous response (yes or no) by asking whether a participant ever utilized one or more of SRH service components in health facilities in the last 12 months and the participant was considered yes/utilized SRH service when they utilized one or more of the following SRH services component (voluntary HIV counseling and testing, treatment and care of STI, contraceptive and abortion services and IEC/information on SRH issues) in the last 12 months and not utilized otherwise (WHO, 2012; FMOH, 2018).

SRH information/education service utilization: Youth who received information and education regarding to sexual and reproductive health issues from health workers are serving in any of the service providing points within the past 12 months (WHO, 2012; FMOH, 2018).

STI service utilization: Youth who ever received STI diagnosis and treatment service in life

Knowledge of SRH rights: Participant who scored at least mean score and above from composite index score computed/summed from 24 dichotomous (yes/no) items asking about knowledge of SRH rights each coded '1' when respondent answered right response and '0' for

a wrong response and the participant had good knowledge of SRH rights when scored at least a mean score and poor knowledge of SRH rights unless otherwise (Adinew *et al.*, 2013).

3.10. Data Quality Control

Five data collection facilitatorss and one supervisor who speaks English and Afaan Oromo languages were recruited based on their previous similar exposure and two days training given for all personels by investigator on how to select the participants, confidentiality and privacy of subjects and use questionnaires. A pretest conducted on 5% of the sample size on Dire Dawa University two weeks prior to actual data collection and amendments was made accordingly prior to use the tool. Principal investigator and supervisors checked the filled questionnaires before receiving from each facilitator and they randomly selected a filled questionnaire to cross check completeness and errors on spot. Overall supervision carried out by principal investigator.

3.11. Data Processing and Analysis

The completeness and consistency of the data were checked manually. Data were entered using EpiData version 3.1 and analyzed using StataMP/17 After checking for missing values and outliers/extreme values, data were recoded and composite indexes was created. Descriptive statistics were used to describe participants. Wealth index score was computed by Principal Component Analysis (PCA) using varimax rotation and considering validated scale containing 33 dichotomous (yes/no) items scale adapted to the study context and purpose and each items recoded as 1 for 'yes' and 0 for 'no' before doing PCA and three components were extracted each with total shared variance explained above 70% after all assumptions were meet and finally regression component score created/saved by and order ranked by using software. Composite index score computed from utilization of health facility in the last 12 months for one or more of the following SRH services: voluntary HIV counseling and testing, treatment and care of STIs, contraceptive counseling/services and IEC/information on SRH issues in the last 12 months and 'no' otherwise. Multicollinearity was checked using Variance Inflation Factor (VIF) for all independent variables. Bivariable logistic regression used to identify association between dependent and each independent variable. Independent variables with P-value<0.25 (Wood and Greenland, 2002) in the bivariable analysis considered in our multivariable analysis. Multivariable logistic regression was used to identify determinants of SRH services utilization. AOR (with 95% CI) used to report the association and significance declared at P-value<0.05. Overall model fitness tested by Hosmer and Lemeshow goodness of fit test at P-value>0.05

3.12. Ethical Consideration

Ethical clearance was secured from Haramaya University, College of Health and Medical Sciences Institutional Health Research Ethical Review Committee. Official letter of cooperation written from Haramaya University, College of Health and Medical Sciences to Oda Bultum University Administration and circulated to each College/Department to get formal permission. Data collectors were trained how to select study participants, handle confidentiality and privacy using consent form attached to a tool. Student name was be not written during data collection. The study purposes, procedures and durations, risks and benefits of the study was clearly explained to a participant. An informed, voluntary, written and signed consent obtained from each department head and participant while those who did not willing to engage in the study at any time would be allowed to do so.

3.13. Information Dissemination

The findings of this study will be communicated to academic advisors and Haramaya University through oral and written report. It will be communicated to Oda Bultum University, Chiro Town and West Hararghe Zone Health Offices with their health facilities through seminars. Besides, the findings will be presented to national and international conferences and efforts will be made to prepare and publish a paper on peer reviewed intrernational journal.

4. RESULTS

4.1. Characteristics of Participants

4.1.1. Sociodemographic related characteristics

A total of 556 (98.2%) students were participated in the study. The mean±SD age of the students was 22.29±1.61 years with minimum and maximum age of 18 years and 24 years, respectively. And majority (79.9%) of the students were in age the group of 20-24 years old. Three hundred fifty-one (63.1%) of the students were male. More than a quarter (28.6%) and more than one-third (40.6%) of students' father and mother had no formal education, respectively. Half (50.2%) of the students were from household with family size of less than six and their family median family size and IQR were 6 and 4 respectively (Q1=4, Q3=8). One-third (33.4%) were from poor family and another one-third (33.3) were from rich family (Table 3).

Table 3: Socio-demographic characteristics of youth students in Oda Bultum University, Eastern Ethiopia, 2025 (n=556)

Characteristics		Frequency	Percent (%)
Age (in years)	18-19	112	20.1
	20-24	444	79.9
Sex	Male	351	63.1
	Female	205	36.9
Residence area	Urban	216	38.8
	Rural	340	61.2
Current marital status	Never married	490	88.1
	Ever married	66	11.9
Religion	Muslim	245	44.1
	Orthodox	164	29.5
	Protestant	91	16.1
	Catholic	38	6.8
	Other	18	3.2
Ethnicity	Oromo	277	49.8
	Amhara	121	21.8
	Somali	41	7.4
	Sidama	37	6.7
	Gurage	37	6.7
	Tigrai	25	4.5
Paternal education level	Other	18	3.2
	No formal education	159	28.6
	Primary education	148	26.6
	Secondary education	128	23.0
	College and above	121	21.8

Maternal education level	No formal education	226	40.6
	Primary education	166	29.9
	Secondary education	117	21.0
	College and above	47	8.5
Paternal main occupation	Farmer	248	44.6
	Employee (Gov't/private)	211	37.9
	Other	97	17.4
Maternal main occupation	Housewife	264	47.5
	Employee (Gov't/private)	195	35.1
	Other	97	17.4
Types of attended secondary school	Governmental only	416	74.8
	Private only	62	11.2
	Both	78	14.0
College	Agriculture	50	9.0
	Health Sciences	18	3.2
	Institute of Land Administration	25	4.5
	Natural & Computation Science	87	15.6
	Business and Economics	141	25.4
	Social Science and Humanity	142	25.5
	Institute of Technology	43	7.7
	School of Law	12	2.2
	Natural Resources and Environmental science	38	6.8
	4 th and above	161	29.0
Year of the study	3 rd	180	32.4
	2 nd	215	38.7
	<6	279	50.2
Family size	≥6	277	49.8
	Poor	186	33.4
Wealth index	Medium	185	33.3
	Rich	185	33.3
	Inside campus	495	89.0
Living condition	Outside campus	61	11.0
	<2000	345	62.1
Monthly pocket money	≥2000	211	37.9

4.1.2. Individual/personal and healthcare related factors

Two hundred seventy-three (49.1%) students reported having at least one sexual partner/friend and nearly a quarter (24.9) of students had a sexual experience in their lifetime. Out of those who ever had sexual experience, 53(38.7%) started sexual intercourse at age less than 18 years old, 84(66.7%) had multiple sexual partners in their life and 94(69.9%) started first sexual intercourse before joining the university. Nearly half (48.4%) of the students heard SRH issues /SRH services and mainly, they heard from friend/peers (30.1%) followed by parents/family members (23.0%) and then by teachers (16.0%). Of total students, around four out of ten (44.4%) and seven out of ten (75.1%) of students were ever discussed/talked SRH issues with parents and peers/friends, respectively. Around half (52.3%) and half (50.2%) of students had positive attitude toward SRH and good knowledge on SRH rights, respectively. Of total students, 44% had no any awareness about health facility/clinic offering SRH services in the campus at all and half (50.9%) did not know place where health facility/clinic in campus exactly located/found while 41.0% of the students never used clinic/health facility in the campus. Two-hundred thirty-four (42.0%) of the students had ever participated on RH clubs in the campus (Table 4).

Table 4: Personal/individual and healthcare related factors of youth students in Oda Bultum University, Eastern Ethiopia, 2025 (n=556)

Characteristics	Category	Frequency	Percent (%)
Having sexual partner/friend	Yes	273	49.1
	No	283	50.9
History of sexual intercourse	Yes	135	24.9
	No	421	75.1
If yes, age at first sexual intercourse (in years) (n=135)	< 15	22	16.1
	15-18	31	22.6
	19-20	47	34.3
	>20	35	27.0
If yes, with how many persons/sexual parner you did (n=135)	1	51	37.5
	2	54	39.7
	≥3	30	27.0
If yes, when did you started 1 st sexual intercourse (n=135)	Before join university	94	69.9
	After join university	41	30.1
Did you ever heard SRH	Yes	269	48.4
	No	287	51.6
If yes, from whom do you heard SRH issues/services primarily (n=269)	Parents/family	62	23.0
	Teacher	43	16.0
	Friends/peers	82	30.5
	Health workers/clinic	23	8.5
	TV/Radios	30	11.2
	Social Media	26	9.7
	Other	3	1.1
Did you ever discuss/talks on SRH issues with parent/family	Yes	247	44.4
	No	309	55.6

Did you ever discuss/talks on SRH issues with peer/friends	Yes	418	75.2
	No	138	24.8
Did you ever discuss/talks on SRH issues with other/elses	Yes	378	68.0
	No	178	32.0
Attitude toward SRH	Positive	291	52.3
	Negative	265	47.7
Knowledge about SRH rights	Good	280	50.4
	Poor	276	49.6
<i>Percieved benefit/importance using SRH services/facility</i>	Yes	259	53.4
	No	297	46.6
<i>Percieved health risk of risky sexual behaviours/malpractice</i>	Yes	261	46.9
	No	295	53.1
Percieved availability of SRH cares/services	Yes	247	44.4
	No	309	55.6
Percieved accessability of SRH services/health facility	Yes	283	50.9
	No	273	49.1
Percieved affordability of SRH services/health facility	Yes	176	31.7
	No	380	68.3
Ever participate in RH club	Yes	234	42.1
	No	322	57.9

Notes: RH: Reproductive health, SRH: Sexual and reproductive health

4.2. Utilization of Sexual and Reproductive Health Services

Regarding the magnitude of sexual and reproductive health services utilization, more than half, 325(58.5%) of youth students [95% CI: 53.8%, 62.4%] were utilizing sexual and reproductive health services in the last one year in Oda Bultum University, Eastern Ethiopia

4.3. Determinants of Sexual and Reproductive Health Services Utilization

In the bivariable analysis, age, paternal education, wealth index, discussing SRH issues with parents, discussing SRH issues with peer/friend, perceived benefit and affordability of SRH services/health facility, attitude toward SRH and participating in RH clubs were significantly associated with utilization of SRH services at $P\text{-value} \leq 0.001$ and sex, type of secondary school attended, perceived accessibility of SRH services/ health facility, knowledge about SRH rights and and past history of ever visiting health facility/clinic were significantly associated with utilization of SRH services at $P\text{-value} \leq 0.01$ while marital status, maternal education and family size were significantly associated with utilization of SRH services at $P\text{-value} < 0.05$. However, other predictors were not significant at $P\text{-value} < 0.05$ (Table 5).

Table 5: Bivariable logistic regression of determinants of Sexual and Reproductive Health service utilization of youth students in Oda Bultum University, eastern Ethiopia, 2025 (n=556)

Determinants		Utilization of SRHS		COR (95%CI)	P-value
		Yes (%)	No (%)		
Age (in years)	18-19	48(42.9)	64(57.2)	1	
	20-24	277(62.4)	167(37.6)	2.21(1.45,3.37)	0.000
Sex	Female	135(65.9)	70(34.1)	1.63(1.14,2.24)	0.007
	Male	190(54.1)	161(45.9)	1	
Residence area	Urban	133(61.3)	83(38.7)	1.24(0.87,1.75)	0.254
	Rural/semi-urban	192(56.3)	148(43.7)	1	
Marital status	Ever-married	46(69.7)	20(30.3)	1.74(0.99,3.03)	0.048
	Nevermarried	276(56.9)	211(43.1)	1	
College	Health science	12(66.7)	6(33.3)	1.44(0.53,3.88)	0.472
	Other ^{*a}	313(58.2)	225(4)	1	
Year of the study	Fourth and above	79(49.1)	82(50.9)	0.81(0.39,1.68)	0.680
	Third	112(62.3)	68(37.7)	0.98(0.66,1.50)	0.483
	Second	134(62.2)	81(37.8)	1	
Religion	Muslim	146(59.6)	99(40.4)	1.09(0.77,1.53)	0.629
	Non-muslim/Christian	179(57.6)	132(42.4)	1	
Ethnicity	Oromo	163(58.8)	114(41.2)	1.18(0.77,1.83)	0.447
	Amhara	75(62.0)	46(38.0)	1.35(0.81,2.26)	0.255
	Somali	23(56.1)	18(43.9)	1.06(0.52,2.17)	0.877
	Other ^{*b}	64(54.7)	54(45.3)	1	
Type of attended secondary school	Both	38(61.3)	24(38.7)	2.05(1.04,4.04)	0.038
	Government only	34(43.6)	44(56.4)	2.01(1.23,3.27)	0.005
	Private only	253(60.8)	163(39.2)	1	
Maternal education	Formal education	194(62.2)	118(37.8)	1.42(1.01,1.99)	0.044
	Not read/write	131(53.7)	113(46.3)	1	
Paternal education	Formal education	266(67.0)	131(33.0)	3.44(2.35,5.05)	0.000
	Not read/write	59(37.1)	100(62.9)	1	
Total family size	≤5	176(63.1)	103(36.9)	1.47(1.05,2.06)	0.026
	>5	149(53.8)	128(46.2)	1	
Wealth index of family	Poor	82(44.1)	104(65.9)	1	
	Medium	98(53.0)	87(46.0)	1.43(0.95,2.15)	0.087
	Rich	145(78.4)	40(21.6)	4.60(2.91,7.24)	0.000
Current living condition	Outside campus	36(59.0)	25(41.0)	1.03(0.60,1.76)	0.925
	Inside campus	289(58.4)	206(41.6)	1	
Perceived benefits of SRH care/facility	Yes	170(65.6)	89(34.4)	1.75(1.24, 2.47)	0.001
	No	155(52.2)	142(47.8)	1	
Discuss SRH issues with parents	Yes	169(68.4)	78(31.6)	2.13(1.50,3.01)	0.000
	No	156(50.5)	153(49.5)	1	
Discuss SRH issues with peer/friend	Yes	226(63.6)	152(36.4)	2.34(1.58,3.47)	0.000
	No	59(42.8)	79(57.2)	1	
Participating in RH club	Yes	159(67.9)	75(32.1)	1.99(1.40,2.83)	0.000
	No	166(51.6)	156(48.4)	1	
Availability of SRH clinic/facility	Yes	223(59.3)	153(40.7)	1.12(0.78,1.60)	0.554
	No	102(56.7)	78(43.3)	1	
Accessibility of SRH cares/facility	Yes	179(63.6)	104(36.4)	1.50(1.07,2.19)	0.019
	No	146(53.3)	127(46.7)	1	
	Yes	134(76.1)	42(23.9)	3.16(2.12,4.71)	0.000

Affordability of SRH cares/facility	No	191(50.3)	189(49.7)	1	
Attitude toward SRH	Positive	193(66.3)	98(33.7)	1.98(1.41,2.79)	0.000
	Negative	132(49.8)	133(50.2)	1	
Knowledge about SRH rights	Good	178(63.6)	102(36.4)	1.53(1.09,2.15)	0.014
	Poor	147(53.3)	129(46.7)	1	
History of visiting health facility/clinic	Yes	207(63.1)	121(36.9)	1.60(1.13,2.25)	0.008
	No	118(51.8)	110(48.2)	1	

Note: COR=Crude Odds Ratio, SRHS=Sexual and Reproductive Health Services; SRH= Sexual and Reproductive Health, a=all other college/institute, b=Gurage, sidama, silte, wolayita and tigre

In the multivariable analysis, compared to being teenager/aged less than 20 years, being in the age group of 20-24 years [AOR=1.85(1.08,3.17)] was significantly associated with 85% higher odds of SRH services utilization. Compared to male, female [AOR=1.60(1.05,2.44)] was significantly associated with 60% higher odds of SRH services utilization. Compared to attending secondary education in private school only, attending secondary school in government school [AOR=3.77(2.02,7.02)] and both government/private school [AOR=2.80(1.23,3.39)] were significantly associated with higher odds of SRH services utilization. The odds of SRH utilization was about three times higher among students whose father had formal education [AOR=3.27(2.03,5.18)] compared to those whose father had no formal education. The odds of SRH utilization was three times higher among students from rich family [AOR=2.92(1.73,4.92)] compared to those from poor family. Having discussion/talks on SRH issues with parents [AOR=1.72(1.12,2.65)] was significantly associated with 72% higher odds of SRH utilization. The odds of SRH utilization was three times higher among students having perceived affordability of SRH services [AOR=3.16(1.99,5.03)] compared to those did not (Table 6).

Table 6: Multivariable logistic regression of determinants of sexual and reproductive health services utilization of youth students in Oda Bultum University, Eastern Ethiopia, 2025(n=556)

Determinants	Utilization of SRHS		COR (95%CI)	AOR (95%CI)	P-value	
	Yes (%)	No (%)				
Age (in years)	15-19	48(42.9)	64(57.2)	1	1	0.024
	20-24	277(62.4)	167(37.6)	2.21(1.45,3.37)	1.85(1.08,3.17)	
Sex	Female	135(65.9)	70(34.1)	1.63(1.14,2.24)	1.60(1.05,2.44)	0.028
	Male	190(54.1)	161(45.9)	1	1	
Current marital status	Ever-married	46(69.7)	20(30.3)	1.74(0.99,3.03)	1.51(0.79,2.89)	0.208
	Never married	276(56.9)	211(43.1)	1	1	
Type of secondary school attended	Private only	38(61.3)	24(38.7)	2.05(1.04,4.04)	2.80(1.23,3.39)	0.015
	Government only	253(60.8)	163(39.2)	2.01(1.23,3.27)	3.77(2.02,7.02)	0.000
	Both/either	34(43.6)	44(56.4)	1	1	
Maternal education	Formal education	194(62.2)	118(37.8)	1.42(1.01,1.99)	1.18(0.50,1.49)	0.272
	Not read/write	131(53.7)	113(46.3)	1	1	
Paternal education	Formal education	266(67.0)	131(33.0)	3.44(2.35,5.05)	3.27(2.03,5.18)	0.000
	Not read/write	59(37.1)	100(62.9)	1	1	
Total family size	≤5	176(63.1)	103(36.9)	1.47(1.05,2.06)	1.55(1.03,2.34)	0.037
	>5	149(53.8)	128(46.2)	1	1	
Wealth index of family	Poor	82(44.1)	104(65.9)	1	1	0.087
	Medium	98(53.0)	87(46.0)	1.43(0.95,2.15)	1.01(0.62,1.60)	
	Rich	145(78.4)	40(21.6)	4.60(2.91,7.24)	2.92(1.73,4.92)	
Perceived benefit of SRH service/facility	Yes	170(65.6)	89(34.4)	1.75(1.24, 2.47)	1.05(0.44,1.25)	0.263
	No	155(52.2)	142(47.8)	1	1	
Perceived health risky SRH behavior	Yes	167(64.8)	92(35.2)	2.10(1.40, 4.21)	1.47(0.97, 2.23)	0.073
	No	158(52.9)	92(47.1)	1	1	
Discuss about SRH issues with parents	Yes	169(68.4)	78(31.6)	2.13(1.50,3.01)	1.72(1.12,2.65)	0.014
	No	156(50.5)	153(49.5)	1	1	
Discuss about SRH issues with peers	Yes	226(63.6)	152(36.4)	2.34(1.58,3.47)	1.51(0.93,2.48)	0.099
	No	59(42.8)	79(57.2)	1	1	
Participating in SRH club/association	Yes	159(67.9)	75(32.1)	1.99(1.40,2.83)	1.26(0.80,2.00)	0.317
	No	166(51.6)	156(48.4)	1	1	
Accessibility of SRH cares/facility	Yes	179(63.6)	104(36.4)	1.50(1.07,2.19)	1.42(0.95,2.13)	0.086
	No	146(53.3)	127(46.7)	1	1	
Affordability of SRH care/facility	Yes	134(76.1)	42(23.9)	3.16(2.12,4.71)	3.16(1.99,5.03)	0.000
	No	191(50.3)	189(49.7)	1	1	
Attitude toward SRH	Positive	193(66.3)	98(33.7)	1.98(1.41,2.79)	1.28(0.83,1.99)	0.266
	Negative	132(49.8)	133(50.2)	1	1	
Knowledge on SRH rights	Good	178(63.6)	102(36.4)	1.53(1.09,2.15)	1.13(0.63,1.51)	0.911
	Poor	147(53.3)	129(46.7)	1	1	
History of visiting health facility/clinic	Yes	207(63.1)	121(36.9)	1.60(1.13,2.25)	1.19(0.77,1.84)	0.418
	No	118(51.8)	110(48.2)	1	1	

Note: AOR=Adjusted Odds Ratio, SRH= Sexual and Reproductive Health, SRHS=SRH Services; a= non-health b=guraghe, sidama, wolayita

5. DISCUSSION

In this study, 58.5% of the students had reported sexual and reproductive health services utilization in the last 12 months. This study revealed that that age (20-24 years), gender (female), paternal education, wealth index (rich), having parental communication/discussion on SRH issues and perceived affordability of SRH services/facility were significantly and positively associated associated with utilization of sexual and reproductive health services.

This study showed that only five out of ten (58.5%) youth students were utilizing SRH services indicating that a substantial number of the participants were not. This finding on the level of SRH services utilization is similar with cross-sectional study conducted in Nigeria (51%) (Abiodun *et al.*, 2016), Kachabirra, southern Ethiopia (50.2%) (Lejibo *et al.*, 2017) and Asella, southeast Ethiopia (61%) (Tejineh *et al.*, 2015). However, this finding was higher than cross-sectional studies conducted in Arsi Zone Oromia Region, Ethiopia (30.1%) (Binu *et al.*, 2018a; Wakjira *et al.*, 2022), Dejen district, northern Ethiopia (45.5%) (Simegn *et al.*, 2020) and Nekemet Oromia, Ethiopia (21.2%) (Binu *et al.*, 2018a). Beside, the finding was lower than a cross sectional study done in Goba town (67.3%) (Gebreselassie *et al.*, 2015) and Gondar, northern Ethiopia (79.5%) (Feleke *et al.*, 2013). However, the finding is lower than findings of institution based cross-sectional studies conducted in Nepal (9.2%) (Bam *et al.*, 2015), Malaysia (6.9%) (Othman *et al.*, 2019) and Mouchudi (37.5%) (Ngomi, 2008). This difference might be due to the differences in the settings, study population and educational background of participants and how studies measured outcome variables. For instance, the later, study conducted in Goba and Gonder Town among secondary school students given that participants and they measured outcome variables using two or three types of services which is incorrect when compared with currently existing standards of measuring outcome variable of this study. In this study, being in the age group of 20-24 years old associated with two fold significantly higher odds of SRH services utilization and this finding could be explained by the fact that the higher age group experience of RH problems positively associated with uptake of youth RH services, but it was lower among those who cannot afford to pay for services they got (Ayehu *et al.*, 2016). Beside, this findings is consistent with the findings of cross-sectional studies conducted in Gojam (Abajobir *et al.*, 2014) and northern Ethiopia (Lejibo *et al.*, 2017).

In this study, female was significantly associated with 60% higher folds of SRH services utilization. This findings consistent with study conducted in central Ethiopia (Feleke *et al.*, 2013) but inconsistent with studies conducted in Nepal (Bam *et al.*, 2015), western Ethiopia (Bilal *et al.*, 2015) and Anchar, eastern Ethiopia (Ansha *et al.*, 2017) and southwest Ethiopia

(Abajobir *et al.*, 2014). This difference could be explained by the fact that female are biologically more biologically, sexually and physically susceptible to sexual violences and then by more prone to sexual and reproductive tract health problems and for the fertility/reproductive reason too they are more likely to use SRH services than male by any means for many reasons. In this study, odds of SRH utilization was about three folds higher among students whose father had formal education compared to those whose father had no formal education. This finding is consistent with the study done in Nepal (Bam *et al.*, 2015), Ethiopia (Wakjira *et al.*, 2022), Gondar town (Abajobir *et al.*, 2014), Mekele, northern Ethiopia (Bilal *et al.*, 2015) and Dire Dawa (Ayalew *et al.*, 2016).

The odds of SRH utilization was three times higher among students from rich family compared to those from poor family. Definitely, this could be explained explain by the fact that rich are more likely to afford SRH services cost, more likely exposed to media, more likely regulary check themselves for health problems or more likely to visit to visit health care services as seen in this study too and also several explanation could be given to this finding. This finding is consistent with study done in Ethiopia (Wakjira *et al.*, 2022).

In this study, having discussion/talks on SRH issues with parents significantly associated with 72% higher folds of SRH utilization and this finding is consistent with study conducted in USA (Bam *et al.*, 2015), Madawelabu (Ansha *et al.*, 2017), Bahir Dar, Ethiopia (Tilahun *et al.*, 2022) and Nekemte (Binu *et al.*, 2018a) and Haramaya (Abdurahman *et al.*, 2022).

Strength and Limitation of the study

The strengths of this study were the larger sample size and higher response rates as well as participants were from different parts/regions of the country. As the limitation, this study could not be generalized to private colleges/university and it require potential abilities of respondents to remember information retrospectively. However, scientific procedures were employed to minimize possible effects. In addition, a pre-test of data tool, supervision, and adequate training for data collectors and supervisors were utilized.

6. CONCLUSIONS AND RECCOMENDATIONS

6.1. Conclusions

The magnitude of sexual and reproductive health services utilization among students in Oda Bultum University in Eastern Ethiopia was low. In this study, age, gender, paternal education, rich wealth index, parental communication/discussion on SRH issues and having perceived affordability of SRH services were significantly and positively associated with utilization of sexual and reproductive health services among youth students.

6.2. Reccomendations

Based on the findings, the following recommendations made to the following bodies:

- ✓ University has to collaborate with ministry of health in providing reproductive and sexual rights-related courses for all discipline students in higher institutions.
- ✓ The district health office and them could collaborate with university in providing quality SRH services for youth students and teach them starting from secondary education.
- ✓ Health workers in the campus could prepare program of counselling students about sexual and reproductive health issues and related rights.
- ✓ Parents would be advised to create platform/role-model forum to discuss SRH issues through parental communications at household level.

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8. APPENDICES

8.1. Information Sheet and Informed Voluntary Consent Form for Head of Oda Bultum University

My name is Aliyi Abraham. I am principal investigator of the study being conducting on Sexual and reproductive health services utilization among youth students in Oda Bultum University, Eastern Ethiopia for my Master's degree at Haramaya University, College of Health and Medical Sciences. I kindly request you to lend me your attention to explain you about this study and study participant.

The study title: Sexual and reproductive health service utilization among youth students in Oda Bultum University, Eastern Ethiopia

Purpose of the study: The main aim of this study is to write a thesis as a partial requirement for the fulfillment of a master's degree in general public health for the principal investigator. Moreover, the result of the study will be used as evidence and input to plan for improvement of SRH service to youth students

Procedure and duration: Data collectors administered questionnaires for youth undergraduate students to obtain relevant data for this study. Total 50 questions will take about 20-30 minutes. So I kindly request you to allow this study to be conducted in your institution/department.

Risks and benefits: The risk of participating on this study is very minimal, but only takes few minute from your student. There would not be any direct payment for reviewing in this study. But, the findings from this research will reveal important information for the institutions, Zonal health department and for health planners.

Confidentiality: The information that will be collect from this study will be confidential. There will be no information that will identify the participants in particular. The findings of the study will be general for the study community and will not reflect anything particularly of individual person. The data that we gather from them will exclude showing names.no reference will be made which link the participant to the research.

Rights: Giving permission for this study is fully voluntary. You have the right to permit or not for this study. If you decide to permit the study, you have the right to terminate the study at any time on behalf of your institution/department management if misdeeds and unethical procedures are observed during data collection process.

Contact address: If there are any questions or enquires any time about the study or procedures, please contact in this address of principal investigator: Aliyi Abraham; Mobile phone: 0912075961; Email: aliyiabraham8@gmail com or

Institutional Health Research Ethics review Committee; Office phone: +251-254-66-2012; Haramaya University, College of Health and Medical Sciences; P.O. Box 235, Harar, Ethiopia

Declaration of Informed Voluntary Consent:

I have read the information sheet. I have clearly understood the purpose of the research, the procedures, the risks and benefits, issues of confidentiality, the right of participation and the contact address for any queries. I have been given the opportunity to ask any questions for things that may have been unclear. I was informed that participant have the right to withdraw from the study at any time or not to answer any questions that they do not want. I am also informed that the institution has the right to stop this study from being conducted in the University if any mislead and unethical procedure observed during data collection in the institution/university premises. Therefore, I declare my voluntary consent on behalf of _____management to allow this study to be conducted in the University with my initial (signature).

Name and signature of Head of Oda Bultum University_____

Name and signature of Prinicpal Investigator_____

8.2. Information Sheet and Informed Voluntary Consent Form Participant

My name is _____. I am working as a data collector for the study being conducted in Sexual and reproductive health services utilization among youth students in Oda Bultum University, Eastern Ethiopia by Aliyi Abraham who is studying for his Master's degree at Haramaya University, College of Health and Medical Sciences. I kindly request you to lend me your attention to explain you about this study and study participant.

The study title: Sexual and reproductive health service utilization among youth students in Oda Bultum University, Eastern Ethiopia

Purpose of the study: The main aim of this study is to write a thesis as a partial requirement for the fulfillment of a master's degree in general public health for the principal investigator. Moreover, the result of the study will be used as evidence and input to plan for improvement of SRH service to youths.

Procedure and duration: I will administer you questionnaire to provide data pertinent to the study written on this paper. Total 50 questions will take 20-30 minutes. So I kindly request you to spare me this time to this question.

Risks and benefits: The risk of participating on this study is very minimal, but only takes few minutes from your time. There would not be any direct payment for reviewing in this study. But, the findings from this research will reveal important information for the institutions, Zonal health department and for health planners.

Confidentiality: The information that will be collected from this study will be confidential. There will be no information that will identify the person in particular. The findings of the study will be general for the study community and will not reflect anything particularly of individual person. The data that we gather from you will exclude showing names. No reference will be made which link the participant to the research.

Rights: Giving permission for this study is fully voluntary. You have the right to declare to participate or not in this study. If you decide to participate, you have the right to withdraw from the study any time if you consider something related to the study is wrong or not to answer any questions that you do not want to answer. This will not be able to you to lose any benefits you otherwise are entitled.

Contact address: If there are any questions or enquires any time about the study or procedures, please contact in this address of principal investigator: Aliyi Abraham; Mobile phone: 0912075961; Email: aliyiabraham8@gmail.com or

Institutional Health Research Ethics review Committee; Office phone: +251-254-66-2012;
Haramaya University, College of Health and Medical Sciences; P.O. Box 235, Harar, Ethiopia

Declaration of Informed Voluntary Consent:

I have read the information sheet. I have clearly understood the purpose of the research, the procedures, the risks and benefits, issues of confidentiality, the right of participation and the contact address for any queries. I have been given the opportunity to ask any questions for things that may have been unclear. I was informed that I can withdraw from the study at anytime or not to answer any question that I do not want to answer. Therefore, I declare my voluntary consent to participate in this study to be conducted in this community with my signature (initial) as indicated below.

Name and signature of Study Participant _____

Name and signature of Data Collector _____

8.3. English Version Questionnaire

Instructions: Circle/write the code corresponding to the answer for each question.

I. General information			
Sr.no	Characteristic/question	Response/category	Skip to
101	Date of interview (in G.C) (dd/mm/yyyy)	_____	
102	Name of Institute/College/Faculty	_____ _____	
103	What is your department?	_____	
II. Sociodemographic characteristics			
200	What is your age (in complete years)?	_____	
201	Sex	1. Female 2. Male	
202	What is your current marital status?	1. Single/Never-married 2. Married 3. Divorced 4. Separated 5. Widowed 6. Other/specfy_____	
203	Where did you come from? (your growing residence area where you spent majority of your age (before joining university)	1. Urban 2. Rural 3. Both rural and urban	
204	What is your religion?	1. Muslim 2. Orthodox 3. Protestant 4. Catholic 5. Other/specify_____	
205	What is your ethnic origin?	1. Oromo 2. Amhara 3. Somali 4. Guraghe 5. Sidama 6. Tigrai 7. Other/specify _____	
206	Type of secondary school that you have been attended before joining the university	1. Governmental only 2. Private only 3. Both/Either	
207	What is your year of the study/education (by year of the study) (1.Second Year 2.Third Year 3.Fourth Year 4.Fifth Year	

		5. Sith 6. _____	
208	What is the highest educational level of your father?	1. No formal education 2. Elementary school (grade 1-8) 3. Secondary school (grade 9-12) 4. College and above	
209	What is your father's main occupation?	1. Governmental employee 2. Private employee 3. Trader/Merchant 4. Farmer 5. Other/specify _____	
210	What is the highest educational level of your mother?	1. No formal education 2. Elementary school (grade 1-8) 3. Secondary school (grade 9-12) 4. College and above	
211	What is your mother's main occupation/work?	1. Housewife 2. Governmental employee 3. Private employee 4. Farmer 5. Others/specify _____	
212	Total family size; this is the number of persons living in family and shared common food for the last six month?	_____	
213	Does your family have habit of discussing /talking about SRH issues (with you)?	1. Yes 2. No	
214	Your living condition with the university?	1. Inside OBU 2. Outside OBU	
215	Have you had your own income source?	1. Yes 2. No	
216	If yes, how much on average per a month	_____ (in ETB)	
217	What is your average monthly pocket money you receive from your family?	_____ (in ETB)	

218. Wealth index (questions to assess the current status of your family wealth/economic condition (Could you tell me if you have the following in your house?))

Asset type		Response (Circle your response)	
I	Domestic animals	NO=0	Yes=1 (If ≥1)
218	Ox	No (0)	Yes (1)
219	Cow	No (0)	Yes (1)
220	Calf	No (0)	Yes (1)
221	Sheep	No (0)	Yes (1)
222	Goat	No (0)	Yes (1)
223	Horse	No (0)	Yes (1)
224	Donkey	No (0)	Yes (1)
225	Cock/Hen	No (0)	Yes (1)

II)	Durable assets		
226	Television	No (0)	Yes (1)
227	Radio	No (0)	Yes (1)
228	Electricity	No (0)	Yes (1)
229	Refrigerator	No (0)	Yes (1)
230	Conventional telephone	No (0)	Yes (1)
231	Mobile phone	No (0)	Yes (1)
232	Car	No (0)	Yes (1)
233	Motorcycle	No (0)	Yes (1)
234	Cycle	No (0)	Yes (1)
235	Cart	No (0)	Yes (1)
236	Gold, money	No (0)	Yes (1)
237	Ownership of the owned living house	No (0)	Yes (1)
238	Ownership of agricultural land	No (0)	Yes (1)
III	Productive assets		
239	Plough Plow	No (0)	Yes (1)
240	Axe	No (0)	Yes (1)
241	Hoe	No (0)	Yes (1)
242	Shovel	No (0)	Yes (1)
243	Sickle	No (0)	Yes (1)
244	Modern beehive	No (0)	Yes (1)
245	Traditional beehive	No (0)	Yes (1)
IV	Housing characteristics		
246	Indoor plumbing/ pipe water	No (0)	Yes (1)
247	Type of flooring	Earth/dung (0)	Cement/raw wood (1)
248	Toilet facility	Unsanitary or traditional pit latrine/ no toilet (0)	Sanitary or improved pit latrine (1)
	Other household materials		
249	Sofa	No (0)	Yes (1)
250	Bed	No (0)	Yes (1)
251	Table	No (0)	Yes (1)
252	Chair	No (0)	Yes (1)
253	Stove	No (0)	Yes (1)

III. Sexual behaviours and attitude/perception about SRH			
300	Do you ever had boy friend/girl friend	1. Yes 2. No	
301	Have you ever had sexual intercourse?	2. Yes 2. No	If No, go to 305
302	If yes, at what age did you have first sexual intercourse (write age in complete years)	_____	
303	If yes, when did you start first sexual intercourse?	1. Before joined university 2. After joined university	
304	If yes, how many sexual partners have you ever had in your life time?	_____	
305	Have you ever heard information/know about sexual and/or reproductive health issues?	1. Yes 2. No	If No, go to 307
306	If yes, what is your (main) source of information about reproductive health issues?	1. Parents 2. Peer 3. School teacher 4. Internet 5. Health personnel 6. Media 7. RH club 8. University student clinic 9. Other/specify _____	
307	Have you discussed any of the SRH services listed below at least once with your partner in the past 12 months?	SRH issues: 1. Condom, 2. STI/HIV/AIDS prevention, 3. Abstinence, 4. Unwanted pregnancy 5. Contraception 6. Abortion 7. emergency contraceptive 8. fertility 9. GBV & its solution	
308	Have you discussed any of the SRH services listed below at least once with your friends/relatives in the past 12 months?	1. Condom, 2. STI/HIV/AIDS prevention, 3. Abstinence, 4. Unwanted pregnancy 5. Contraception 6. Abortion 7. emergency contraceptive 8. fertility 9. GBV & its solution	
309	Have you discussed any of the SRH services listed below at least once with your parents in the past 12 months?	1. Condom, 2. STI/HIV/AIDS prevention, 3. Abstinence, 4. Unwanted pregnancy 5. Contraception 6. Abortion 7. emergency contraceptive 8. fertility 9. GBV & its solution	
310	Did you discuss on at least two of the above-mentioned issues with your health workers in the last 12 months?	1.Yes 2.No	

311	Is it important to talk or discuss about sexual and or reproductive issues with somebody else?	1. Yes 2. No	
312	Did you ever participate in reproductive health club?	1. Yes 2. No	
313	Based on prior risky behaviors, do you perceive yourself as risk for acquiring HIV/AIDS?	1. Yes 2. No	
314	If yes, what factors influence for the (first) sexual intercourse?	1. Alcohol 2. Substance abuse 3. Peer influence 4. Love relation ship 5. Other/specify_____	
315	Youths should use SRH services for various reasons.	1. Strongly agree 2. Agree 3. Neutral 4. Disagree 5. Strongly disagree	
316	Youths have the right to use SRH Services	1. Strongly agree 2. Agree 3. Neutral 4. Disagree 5. Strongly disagree	
317	Only female should use SRH services.	1. Strongly agree 2. Agree 3. Neutral 4. Disagree 5. Strongly disagree	
318	Each Youths should be aware of the importance of SRH services	1. Strongly agree 2. Agree 3. Neutral 4. Disagree 5. Strongly disagree	

IV. Knowledge about SRH rights			
400	Do families have right to decide about their female child to be circumcised?	1. Yes 2. No	
401	Can a girl dismiss her arranged marriage without her families' agreement?	1. Yes	

		2. No	
402	Do youths have a right to mate selection without their families' consent?	1. Yes 2. No	
403	Can a married woman say no to have children if she does not want?	1. Yes 2. No	
404	Does a woman have a right to say no to have sex, regardless of her boy friend's wishes?	1. Yes 2. No	
405	Do youths have the right that their use of reproductive health services is to be kept confidential?	1. Yes 2. No	
406	Should a man get sex whenever he wants irrespective of his girlfriend's wishes?	1. Yes 2. No	
407	Do youths have the right to ask each other for HIV testing before sexual engagements?	1. Yes 2. No	
408	Do youths have the right to have information on reproductive health facilities?	1. Yes 2. No	
409	Do youths have the right to be free from all forms of discrimination because of their reproductive and sexual orientations?	1. Yes 2. No	
410	Do boys have no special right to be protected from sexual exploitation and abuse?	1. Yes 2. No	
411	Do youths have the right to get knowledge of reproductive rights at higher education institutions?	1. Yes 2. No	
412	Do girls have the right to access to autonomous reproductive choices including choices relating to safe abortion?	1. Yes 2. No	
413	Do girls have the right to resist genital mutilation against their families' will?	1. Yes 2. No	
414	Do youths have a full right to access all SRH services without parents' consent?	1. Yes 2. No	
415	Do youths have the right to decide about reproductive health issues of themselves without their parents' consent?	1. Yes 2. No	
416	Do all women have the right to autonomous reproductive choices to use any type of contraceptives?	1. Yes 2. No	
417	Do girls have the right to autonomous reproductive choices without their partner's consent?	1. Yes 2. No	
418	Do students have a right to freedom of assembly and political participation to influence governments to place priority on SRH?	1. Yes 2. No	
418	Do students have the right to access new reproductive technologies?	1. Yes 2. No	
420	Do you think that all students (boys/girls) must be free to enjoy and control their sexual and reproductive life?	1. Yes 2. No	
421	Do youths have the right to form an association or clubs that aims to promote their sexual and reproductive health?	1. Yes 2. No	
422	Do unmarried woman have the right to maternity leave with adequate social security benefits?	1. Yes 2. No	
423	Do unmarried couples have the right to use contraceptives without condom?	1. Yes 2. No	

V. Healthcare related factors			
500	Is there a centre or club for information and education about SRH in your school?	1. Yes 2. No	
501	Is there SRH clinics in your school?	1. Yes 2. No	
502	How far is sexual and reproductive clinic from your school?	1. Short walking distance 2. Medium 3. Very far	
503	If you ever used RH clinic how would you describe the service provided to you?	1. Good friendly, welcoming 2. Moderate welcoming, asked too many unnecessary 3. Bad he/she was harsh and denied me service, I feel shamed	
504	Do you know any SRH facility?	1.Yes 2.No	IF no, goto 506
505	If yes, who told you?	1. Parent 2. Friend 3. Teacher 4. Read on from notice board 5. From media 6. Other/specify	
506	Do you have get treatment for reproductive health problems?	1.Yes 2.No	
507	Which services are being offered in reproductive health facility? Thick all correct answers	1. Family planning(contraceptive, condoms) 2. Voluntary counselling and testing HIV(VCT) 3. Treatment of sexually transmitted infection/disease 4. Abortion care 5. Treatment of all disease 6. Pregnancy test and care 7. Counselling 8. Sport and recreational activities	
508	What types of SRH problems do you know?	1. Unintended Pregnancy 2. Un safe abortion 3. STIs/HIV 4. Other specify_____	

Part VI: Utilization of Sexual and Reproductive Health Service			
601	Have you ever visited any sexual and reproductive health service in facility?	1. Yes 2. No	
Have you ever utilized any of the following SRH services			
602	SRH information and Education?	1. Yes 2. No	If No, skip to 603
603	If YES, what type of information and education you received? (you can encircle more than one response)	1. Information and education related to sexual health 2. Information and education related to Contraception 3. Information and education related to SIT diagnosis, and treatment 4. Information and education related to VCT 5. Information and education related to safe abortion 6. Information and education related to Antenatal, Intra natal and Postnatal care 7. Other specify_____	
604	Family planning/ Contraceptive service	1. Yes 2. No	If No skip to 606
605	If YES, what type of method do you use? [methods other than male condom are filled by female respondents' only]	1. Male condom 2. Pill 3. Injectable 4. Implant 5. IUCD 6. Female condom 7. Other/specify _____	
606	VCT and HIV testing	1. Yes 2. No	
607	Diagnosis and treatment of STI	1. Yes 2. No	
608	Abortion care service [by female respondents' only]	1. Yes 2. No	If No skip to 611
609	Would you return to health facility again?	1. Yes 2. No	If yes, skip to 611
610	IF no, what the reason is for won't return to SRH facility?	1. Takes too much time 2. Too difficult to get there 3. Costs too much 4. Too embarrassing 5. Not enough privacy 6. Mis treated by staff 7. No of same sex available 8. Other (specify)_____	
611	Have you ever missed any SRH service you required?	1. Yes 2. No	If no, skip to 613

612	If yes what is the reason for not utilizing the service	1. Not encounter any problems 2. I found friends and felt ashamed 3. The clinic is closed 4. The service provider refused to give the service/ was harsh 5. Other(specify)_____	
613	Do you think SRH health clinics are affordable by all adolescent?	1. Yes 2. No	
614	What other factors prevent youth from following SRH service? (Condom, STI/HIV/AIDS prevention, Abstinence, Unwanted pregnancy, Contraception, Abortion, Emergency contraceptive, fertility, GBV & its solution	Please describe_____	

End Thanks

9.4. Curriculum Vitae

PERSONAL DATA:

LAST NAME: ABDELLA

First Name: ALIYI

Middle Name /Other Names: ABRAHIM

Physical Street Address: West Hararghe Chiro, Ethiopia

Telephone Mobile: +251912075961

Telephone Office: +255511314

Email 1: aliyibrahim8@gmail.com

Marital Status: Married

Date of Birth: 15/September/1988 Gender: Male

Country of Origin: Ethiopia

Present Nationality: Ethiopian


Languages and Fluency Level: English Excellent, Amharic Excellent, Afan Oromo my Mother Tongue

EDUCATION: Degree Earned

✓ BSC, Haramaya University School of Public Health, Harar, Ethiopia, 2007---2010,

WORK HISTORY:

1. **Chiro General Hospital Chief Executive Officer, Oromia Regional Health Bureau, Ethiopia, July 2019 To present, Supervisor, Dr. Boqona Guta (+251900505749) & Mr. Amedin Mohamed (+251910110143)**

 Determine the organization's mission, vision and values

- ✚ Establish corporate policies
- ✚ Ensure effective organizational planning
- ✚ Direct and supervise the overall activities of the hospital
- ✚ Provide proper financial oversight
- ✚ Ensure adequate resources and proper utilization.
- ✚ Oversee fee waiver and exemption system and quality management activities
- ✚ Support, monitor, and assess the overall performance of the Hospital
- ✚ Give sessions for new Board members and ensure ongoing education for the members
- ✚ Ensure legal and ethical integrity and maintain accountability
- ✚ Ensure community involvement in hospital service planning and delivery
- ✚ Enhance the organization's public standing. Prepare Annual Plan of PHEM and Research Core Process of Oromia Regional Health Bureau.
- ✚ Coordinate, participate and lead different PHEM preparedness and response plan.

2. Head of Health Planning, Budgeting, Monitoring and Evaluation Directorate, West Hararghe Zone, Oromia Region, Ethiopia, Dec. 2015 to June. 2019, Supervisor, Mr Melese Lemi (+251911075253)

- ✚ Participate on woreda based national planning at regional level
- ✚ Organize, coordinate and involve in preparing annual zonal planning in collaboration head of PHCU, district head, representative of admin, district finance and concerned partners
- ✚ Coordinate and provide HMIS, e-HMIS, CHIS TOT trainings to woreda health planning coordinators with partners, regional health bureau.
- ✚ Develop detail activity implementation plan, coordinate, monitor and evaluate program activities progress on regular basis.
- ✚ Responsible in managing the overall planning and implementation process technically, financially, and administratively
- ✚ Managing and coordinating overall operations of routine surveillance activities, measles and polio SIAs, measles and AFP surveillance and other campaign activities at zonal level
- ✚ Updating the regional and zonal task force regularly on the progress of activities and shares with Woredas regular feedback on performance of planned activities.
- ✚ Planning, organizing, and facilitating skill building trainings pertaining EPI and surveillance, PHEM and CDC other programs to health workers and program coordinators at woreda health offices and health facilities.

- ✚ On weekly basis from surveillance and monthly basis from MNCH data, I analyzed and interpreted nutritional data and offered update to key partners
- ✚ Prepared health accomplishments sessions for senior leadership, partners forum

3. Health Extension Program Expert, West Hararghe Zone, Oromia, Ethiopia, June. 2013 to November 2015, Supervisor, Mr. Emiru Gebisa (+25112447730)

- Coordinate planning, implementing, monitoring & evaluation of Health Extension Programs including EPI and communicable disease control and prevention services provided at the community level
- Conduct supportive supervision on health and nutrition interventions to districts and health institutions together with partners working/supporting nutritional interventions.
- Coordinate planning, coordinating and monitor programs supplies including immunization supplies on regular basis.

4. Team Leader of Health Service at District Health Office, Mesela District of West Hararghe Zone, Oromia, Ethiopia, Jan. 2011 To May. 2013, Supervisor, Mr. Suffyan Abraham (+251906131990)

- I used to Plan, coordinate and execute department activities. Ensure quality health care in all health institution in the district.
- Organize and train all health-related short-term trainings in the district.
- Provide technical support to 25 Districts' Health facilities staffs in the district.
- Supervise and coordinate national Immunization, EOS and CHD campaigns and coordinate health projects that were run by different partners in the district.

TRAINING AND PROFESSIONAL DEVELOPMENT:

PROFESSIONAL DEVELOPMENT

➤ **Environmental Health (BSc), Haramaya University, Ethiopia, September 2007- 2010**

TRAINING

- TOT on PHEM and COVID-19 Surveillance Basic Training Organized by Ethiopian Public Health Institute, National Public Health Training Center in collaboration with OHIO State University (Certified), From October 20-24, 2021
- Training on Vulnerability Risk Assessment and Mapping Training (VRAM) Organized by Ethiopian Public Health Institute and Oromia Regional Health Bureau (Certified), Adama-Ethiopia, From 30 Jan -02 Feb 2017
- TOT training on IRT (C-MNCH, TBL/ HIV, EPI, Nutrition) organized by WHA in collaboration with IFHP, Save the Children and HEL TB, Ethiopia, (3 weeks), 2014

- Data collector in Oromia End-Line Household Survey Organized by USAID/ESHE with Oromia Regional Health Bureau (Certified), from 30 April - 5 June 2012
- Master Training of Trainers and Mentorship Training (M-TOT) on Health Management Information System Jointly Organized by USAID/Integrated Family Health Program (IFHP), HMIS Scale-up Project and Oromia Regional Health Bureau (Certified), Adama-Ethiopia, 19-23 March 2011
- Basic computer skills training (Ms Word, Excel, PowerPoint), from 01Jan–01Jul/2006,
- Family Life Member of Ethiopian Red-Cross Society (certified) 2015.
- TOT Training on Supportive Supervision Organized By ORHB, West Harerge Zone Health Office in Collaboration With USAID/ESHE, Hirna –Ethiopia (Certified)