



**ADDIS ABABA UNIVERSITY
COLLEGE OF DEVELOPMENT STUDIES
CENTER FOR POPULATION STUDIES**

**Utilization of Reproductive Health Services and Associated
Demographic and Socio-economic Factors Among Adolescents (15-19
Years) in Selected Health Facilities in Addis Ababa, Ethiopia**

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The Center for Population Studies**

**Presented in Partial Fulfillment of the Requirements for the Degree of Master
of Science in Population Studies (Reproductive Health and Family Planning)**

**Addis Ababa University
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Approval by the examination board

This is to certify that the thesis prepared by Meseret Tarekegn entitled: Utilization of Reproductive Health Services and Associated Demographic and Socio-economic Factors among Adolescents (15-19 Years) in Selected Health Facilities in Addis Ababa, Ethiopia and submitted in partial fulfilment of the requirements for the Degree of Master of Science in Population Studies (Reproductive Health and Family Planning) complies with the regulations of the University and meets the accepted standards with respect to Originality and quality.

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List of abbreviations/acronyms

AIDS: Acquired Immunodeficiency Syndrome

AOR: Adjusted Odds Ratio

CI: Confidence Interval

EDHS: Ethiopian Demographic and Health Survey

FP: Family Planning

HF: Health Facilities

HIV: Human Immunodeficiency Virus

ICPD: International Conference on Population and Development

IRB: Institutional Review Board

MSc: Master's Degree in Science

NGO: Non-Governmental Organization

OR: Odds Ratio

RH: Reproductive Health

STD: Sexually Transmitted Disease

STI: Sexually Transmitted Infection

VCT: Voluntary Counseling and Testing

WHO: World Health Organization

Abstract

Background: Utilization of reproductive health (RH) services is an important component in preventing reproductive age adolescents from reproductive health problems. Reproductive health is the pool of methods, techniques and services that contribute to reproductive health and well-being by preventing and solving sexual health problems especially for adolescents from 15-19 years old.

Objective: This study was aimed at investigating the utilization of RH services in selected health facilities and associated demographic and socio-economic factors among adolescents aged 15-19 in Addis Ababa.

Methodology: An institutional based cross-sectional study was used to assess the utilization of RH services and the associated demographic and socio-economic factors by administering a pre-tested semi-structured questionnaire from April 1 - May 30, 2021. A snowball sampling technique was used to select a total of 340 adolescents living in Addis Ababa from 5 purposefully selected health facilities. Data were entered and analyzed using SPSS version 23 software package. Logistic regression was done to identify possible factors associated with RH service utilization. P value less than 0.05 was considered as a level of significance.

Results: Out of 306 participants 162 (53%) were males and 144 (47%) were females and 96.3% of the study participants were single. More than 93% were currently enrolled to school. From the total 25% of the study participants have had sex in their life. One hundred three (33.8%) of study participants utilized at least one of the RH services from the five RHs. The adolescents' discussion of sexual and reproductive health issues with their sexual partners (AOR= 2.368, 95% CI: 1.168 - 4.802) and with their peers (AOR= 2.360, 95% CI: 1.155 - 4.820) showed positive association with the utilization of reproductive health services. Adolescents who did not live with both their parents showed a higher odds (AOR= 2.570, 95% CI= 1.155 - 4.820) in the utilization of reproductive health services as compared to those who had lived with parents.

Conclusion and recommendations: The overall utilization of RH services among adolescents was low (33.8%). Discussion with sexual partners and peers were among the predictors for the use of RH services. Therefore, interventions such as advancing adolescents' knowledge, strengthening of youth centers and school reproductive health clubs are important steps to improve adolescent RH service utilization.

Key words: Utilization, Reproductive health, Adolescents, demographic, socio-economic

1. Introduction

1.1. Background

World Health Organization (WHO) defines adolescents as persons with the age group of 10-19 years (Erosen, 2004). Adolescence is the period of transition from childhood to adulthood which is characterized by spurts of physical, mental, emotional and social development (WHO, 1986) with experimentation and engagement of a wide range of behaviors (Schwarz, 2010). Adolescents' number is estimated to be 1.25 billion globally (WHO, 2008) of which, 513 million are 15-19 years old (Kirby, 1994) and 85% of them in developing countries (Belachew, 2003). Adolescence is characterized by significant physiological, psychological and social changes that put them for high risk sexual and reproductive health problems. This has partially been because adolescents were considered to be relatively healthy, without a heavy "burden of disease" (WHO 2008, 2009, 2010). They are most vulnerable to a range of reproductive health problems, such as too-early pregnancy and childbearing; unsafe abortion and sexually transmitted infections (STIs) including HIV (Ingwersen, 2001).

Reproductive Health (RH) services includes access to information and functions on prevention, counselling, diagnosis, treatment and care; requires that all people can safely access services without travelling for a long time or far distance. Services must be affordable and based on the principle of equity. It also requires that services are of adequate quality and that providers do not discriminate on the basis of sexuality, gender, ethnicity and age (Donna et al., 2015). Reproductive health care is defined as the collection of methods, techniques and services that contribute to reproductive health and well-being by preventing and solving sexual health problems (Roudi-Fahimi and Ashford, 2008).

The concern about adolescent sexual and reproductive health has grown due to unprecedented increasing rates of sexual activity, early pregnancies and sexually transmitted infections including human immune deficiency virus among adolescents (Shivaram et al., 2011; Hughes and McCauley 2008). Studies from some countries in Africa suggest that there are many factors to adolescents' involvement in reproductive health programs and makes the service utilization low. Lack of information from formal sources was cited as one of the main problems. For example, adolescents in rural Nigeria and Kenya (Barker and Rich, 2012) suggest that discussing sexual issues with parents was a taboo. This could also be a reason in Ethiopia too. Other reasons for

low RH service utilization include, service inaccessibility, cultural influence, lack of knowledge about the service provided (where, what, when), feelings of discomfort, fear of being seen by parents or others including peers and significant others while they are in health care delivery points and embarrassment while seeking reproductive health care services (FHI, 2008).

In Ethiopia also, the 2016 Ethiopian Demographic and Health Survey (EDHS) figured out that contraceptive use among adolescents was lower when compared with other age groups (CSA, 2011). This figure suggests there is a gap in addressing adolescents' sexual and RH issues which in turn affect their health and productivity negatively.

1.2. Statement of the problem

As per the WHO report about one half of all HIV infections worldwide occur among people aged 25 years and under. And up to 100 million youths become infected with a curable sexually transmitted disease (STD). Sub-Saharan Africa remains the most affected region in the world. Rates of premarital sexual activity were highest in Sub-Saharan Africa, where more than half of girls aged 15-19 have sexual experience. According to reports, the utilization of family planning services in the existing health care system by young people was also very low. As a result, there is a high rate of unwanted pregnancies which often result in abortions and their complications (FHI, 1997; WHO, 2010; USPC, 2012).

Globally, several strategies have been adopted to promote the adolescent's reproductive health (Kate, 2004). Here in Ethiopia also, the Federal Ministry of Health (FMOH) launched several strategies to promote adolescents and youth reproductive health including National Reproductive Health Strategy: National Adolescent and Youth Reproductive Health Strategy; Standards on Youth Friendly Reproductive Health Services and also Tools for Planning, Implementation and Monitoring at different levels of the health system were prepared. Youth friendly health services are established attached to existing health facilities to provide RH services to adolescents and youths. Despite this, Ethiopia didn't achieve a remarkable success regarding to adolescent and youth reproductive health.

The above-mentioned adolescents' problems can be justified by RH service utilization. It is known that, the more readily the services are utilized, the less the problems will be challenging. But studies

conducted in Gojam Zone; Gonder, Mekelle, Jima towns as well as Medawelabu University (Govindasamy et al., 2002; Abajobir and Seme, 2012; Senafikish et al., 2012; Ayalew et al., 2004; Dida et al., 2014) showed that the RH services utilization among adolescent populations were quite low. This low service utilization, whatever the reason could be, taken as the major factor and makes the adolescents' problem more complicated. There is a high rate of unwanted pregnancies which frequently result in abortions and their complications. The majority (67.2%) of those seeking treatment for an incomplete abortion were under 24 years of age (CSA, 2012; Teshome et al., 2021).

Despite higher share of the world population being in the 15–29 age groups, the reproductive health needs of adolescents have neither been investigated nor addressed sufficiently (FHI, 1997, 2008; Teshome et al., 2021). Even though certain factors like religion, culture, educational level and others were raised as a reason for low service utilization which in turn affect the adolescents' reproductive health in some areas of the country, more other factors need to be investigated specially at areas where no prior studies have been conducted on the issue. Therefore, the justification of this research is to investigate the level of utilization of reproductive health services and associated demographic and socio-economic factors among adolescents in Addis Ababa, in order to provide evidence-based data and recommendations for possible future interventions.

Globally, several strategies have been indorsed to promote the adolescent's reproductive health. For instance, Universal Access to Sexual and Reproductive Health Services for Adolescents was added as a target to the revised Millennium Development Goals framework in 2005 (UNECA, 2008). Prior to this, the 1994 International Conference on Population and Development (ICPD) in Cairo, young-friendly reproductive health services have been documented as an appropriate and effective strategy to address sexual and reproductive health needs of adolescents (UNFPA, 2008). Nevertheless, the needs of the young people remain poorly understood in many parts of the world (ACDEP, 2011).

The Ethiopian Federal Ministry of Health (FMOH) has several documents on strategies to promote adolescents reproductive health including National Reproductive Health Strategy 2006-2015: National Adolescent and Youth Reproductive Health Strategy 2007-2015; Standards on Youth Friendly Reproductive Health Services and Tools for planning, Implementation and Monitoring at different levels of the health system were prepared. Youth friendly health services are established

attached to existing health facilities to provide Reproductive Health services to adolescents and youths. Despite this, Ethiopia didn't archive a remarkable success regarding to adolescent reproductive health (FHI, 2008).

Factors were raised-up as a reason for low utilization of service which in turn affect the adolescents' reproductive health in some areas of the country, more other factors need to be investigated specially at areas where no or fewer number of previous studies have been conducted on the subject. Therefore, the rationale behind this research was to explore the utilization level of reproductive health services and associated socio-economic and demographic factors among adolescents living in Addis Ababa, to provide possible recommendations.

1.3. Significance of the study

There are few reports in Ethiopia on the utilization of RH services and related issues by adolescents and its associated economic and socio-demographic factors at any level. But Ethiopia is multiethnic country and there are substantial differences among economic and socio-demographic difference which needs more studies in the area and the results are important.

So, this study is expected to give understanding into utilization of Reproductive Health services and economic and socio-demographic factors affecting among adolescents of age 15-19 who are living in Addis Ababa from selected Health Facilities because interventions are primarily focused on issues that affects it. This study also generates relevant information that could help to design appropriate Reproductive Health programs for this section of population in the future. Because interventions which targeted adolescents should consider their setting's and special needs, local contexts and diverse needs to be effective. The findings of this study will also serve as a reference for other researchers who want to conduct further investigations. Results of this study will be delivered to the Addis Ababa City Administration health bureau; it can also be served as a reference to find out gaps towards achieving their goals to serve the needs of adolescents.

2. Literature Review

2.1. Introduction

Utilization of reproductive health service includes access to information and services on prevention, diagnosis, counseling, treatment and care, and requires that all people can safely reach services without travelling for a long time or distance and make use of it for their life. Services and treatments must be affordable and based on the principle of equity. Reproductive Health also requires that services are of adequate quality and that providers do not discriminate based on sexuality, gender, ethnicity, and age (Karl, 2005; Donna et al., 2015).

Reports showed that, even with a lot of supposed barriers against the utilization of Reproductive Health services 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 (UNFPA, 2011; WHO, 2009).

In this study, reports from globally, regionally, and nationally reviewed regarding to the level of Adolescents' reproductive health service utilization. The scope of this study is limited to the following components of sexual and reproductive health services. They are sexual and reproductive health Information and education, modern contraceptive, HIV counseling and testing, diagnosis, and treatment of STI and. Factors associated with the utilization of Reproductive Health services will be discussed.

2.2. Utilization of reproductive health services

The utilization of reproductive health services by Adolescents' is not only varying from one part of the world to the other, but also it varies within a single country. It is also noted that utilization of Reproductive Health in many countries is low and lags what is expected to be even after long times of extensive investments in the area (Malarcher, 2010). For example, a finding done by young women in the USA between 2002 and 2008, reported that reproductive health service usage was 59%, including contraceptive (48%), and counseling services (37%). According to the report, the lifetime family planning service usage was declined by 15% from 2002 to 2008 and recent reproductive health service use by 8%, including gynecological exam (8%) and contraceptive (6%) services. Between 2006 and 2008, USA women were less likely to use reproductive health

and contraceptive services than in 2002. The report added trends across the year among sexually experienced women which were found similar but smaller in magnitude, 5% decline in both reproductive health and contraceptive service use (Hall et al., 2008). Another finding in USA showed that family planning and reproductive health service utilization was increased by 9% from 1995 to 2002, including rising use of services for contraceptive provision and counseling and STI testing, especially among the youngest women (Potter et al., 2009; Mosher and Jones, 2010).

2.2.1. Reproductive Health Information and education

The utilization of information, Education regarding to reproductive health issues among adolescents is a critical component to be seen in the Reproductive Health services. Research conducted in USA to examine associations between receipt of communication about Reproductive Health issues and use of services among adolescent population with 2,326 adolescents aged 15–19 in 2002 and 2006–2008 showed that the majority of adolescents had received parental (75%) and formal (92%) sexual and reproductive health communication; among those 43% reported recent service use (Hall et al., 2012).

In Ethiopia, findings from Jima town 28.8% of adolescents were users of Information Education and Communication about Reproductive Health issues (Ayalew et al., 2004). Another report showed that, 38.3% adolescents had ever heard about Reproductive Health services and reported health professionals 80.4% as the main sources of information followed by radio 15.5%, television 3.1% and print media like posters or leaflets) 1% (Abajobir and Seme, 2012; Teshome et al., 2021).

2.2.2. Modern contraceptive

Reports from different countries in the world including Ethiopia, showed that the use of modern contraceptive for reproductive health services by adolescent women aged 15–19, variation was observed specially married women. According to Woog and his associates (2014) the overall, proportions ranged from 0% in Armenia to 52% in Mongolia. Modern contraceptive use was low among adolescents in all regions of Africa. In more than two-thirds of the countries in Africa, contraceptive use was lower than 20%. The proportions were highest by far in Swaziland (43%), Namibia (39%) and Zimbabwe (35%). In Ethiopia Gebre and Edossa reported in 2020 the modern contraceptive utilization among reproductive-age women is 20%.

Worldwide, the prevalence of unmet need among married or in-union women is as high as 10%, whereas, it is doubled in the Africa region. Ethiopia is still among countries with low contraceptive utilization rates even though considerable improvements have been made in the last decades. Modern contraceptive methods enable couples to enjoy sex without fear of the risk of pregnancy at any desired time (Hugh 2011; UNFPA, 2011). Modern contraceptive methods account for more than 90% of the contraceptive use worldwide. Globally in 2017, 58% of married or in-union women of reproductive age were using a modern method which accounts for 92% of all contraceptive users (Govindasamy et al., 2002; Phyu et al., 2011; Gebre and Edossa, 2020; Teshome et al., 2021).

In Ethiopia, the 2016 Ethiopia Demographic and Health Survey showed that only 5 percent of all female adolescents between age 15-19 report current use of any modern contraceptive method (CSA, 2012; Ayalew et al., 2004). Community-based cross-sectional studies were also conducted in Gondor town, Gojam, Jima town and Goba town (Abajobir and Seme, 2012; Senafikish et al., 2012; Ayalew et al., 2004; Birhan et al., 2014). Though, sexual and reproductive health service components assessed were varies in number, adolescents who live in Gonder town had high rate service utilization (75.8%) followed by Goba town, Jima town and rural areas of Gojam zone (70.2%, 41.1% and 21.5% respectively). Regarding to Family planning service utilization, figures were different among the listed areas with 79.5% in Gonder, 71.4% in Goba town, 27.7% in Gojam and 16.3% in Jima town (Senafikish et al., 2012; Birhan et al., 2014; Abajobir and Seme, 2012; Ayalew et al., 2004).

Additionally, studies in Mekelle town which involved female and male high school students aged 14–19 years and Madawalabu University were reported (Dida et al., 2014; Selamawit et al., 2009). Utilization of reproductive health service was quite different among different settings. Among the total study participants from high school students only 22% of the study participants had visited Reproductive Health services delivery points in the past 12 months. And, 81% of University students in Madawelabu ever utilized reproductive health services. This difference between studies could be due to; the time bound for the result in first study makes the figure small whereas ‘ever use’ in the later study makes the figure large and undetermined age range in the second study can be the reason for the variation. In addition to this, university students are believed to have good knowledge, relatively free or self-directed than high school students, who are dependent on their parents or relatives. Concerning to modern contraceptive usage 16.0% of high school students obtain condom with the past 12 months prior to the study (Selamawit et al., 2009) whereas 28% of

university students have ever used modern contraceptives (Dida et al., 2014).

2.2.3. HIV Voluntary counseling and testing (VCT)

HIV Voluntary counseling and testing (VCT), reports indicated that the low service utilization among adolescent women in Africa. VCT was lowest in Western Africa, where 2.0–11.0% of adolescents had been tested and fall between the range 15% - 33% across the continent Africa. In Latin American and the Caribbean countries of Costa Rica, Bolivia, Haiti, Colombia, Honduras and Mexico, no more than 10% of adolescent women had had an HIV test in 2014. In the Asian countries no more than 4% of adolescent women had had an HIV test in 2014. Only in Kazakhstan (15%), Mongolia (6%) and Kyrgyzstan (6%) were amounts showed higher. (Woog et al., 2014). In Ethiopia, based on reports, voluntary counseling and testing of HIV service utilization among adolescents seems similar across different places. For example, 74.1% of Madawelabu University students (Dida et al., 2014), 72.2% adolescents in Gonder town (Senafikish et al., 2012), 67.3% in Goba town (Selamawit et al., 2009) were obtained VCT service.

2.2.4. STI Diagnosis and treatment

From 2002-2008 in the United States the use of alcohol and other substances and Reproductive Health service utilization among young women ages 15-24 years showed STI testing and treatment services usage were not more than 17% (Kelli et al., 2013).

In Africa, adolescent women are living with STI and who went to a health center was lowest in Kenya and Niger (13% each) and the highest level was in Egypt (68%) and 15% in Ethiopia. The magnitudes of adolescent women in Latin America and the Caribbean who needed treatment for an STI or STI symptoms were generally higher than that in Africa and Asia, ranging from 52% in Bolivia to 84% in Peru (Woog et al., 2014). The above study that mention Ethiopia's figure on STI treatment seeking habit have similarity with the finding that was conducted in Mekelle town (diagnosis and treatment of STI = 15%) (Birhan et al., 2014).

2.3. Factors Associated with the Utilization of reproductive health services

2.3.1. Socio-economic and demographic factors

Reports indicated that demographic and socio-economic factors: like, age, female adolescent, being a current student, educational status, parental communication, religious affairs, maternal education and exposed to mass media including TV, radio, and newspaper on the utilization of Reproductive Health services.

According to Abajobir and Seme (2012) factors affecting the utilization of Reproductive Health services; education status is frequently cited as a factor for the use of Reproductive Health services. Adolescents in secondary education were used Reproductive Health services 2 times more likely than elementary school students. This variable also described in another study, youth with secondary education and above were about 9 times more likely to utilize Reproductive Health services as compared to those with no formal education (Senafikish et al., 2012).

A report by Ayalew and his associates in 2004 from Jima in Ethiopia showed that age group of 18 - 19 years were 1.4 times more likely to ever use Reproductive Health services than those in the age groups of 15 - 17 years old. Being female adolescent is mentioned as of the socio-demographic factor associated with Reproductive Health services utilization (Senafikish et al., 2012; Selamawit et al., 2009). Female adolescents were about 2.6 times more likely to utilize VCT service than the males (Senafikish et al., 2012) but instead, a study from Mekelle showed that the utilization of Reproductive Health services was lower among female students (Selamawit et al., 2009). Being a current student (in-school) were also associated with increased utilization of Reproductive Health (Phyu et al., 2011). In addition to this, a study from Gonder, VCT was about 2 times higher for in-school adolescents than out of school ones (Senafikish et al., 2012).

Adolescents' parental communication on sexual and reproductive health issues were positively associated with the usage of service. Studies in Ethiopia associate parental communication with service usage among adolescents. For example, a study from Gojam showed that the probability of services uptake was about 4 times higher where there was adolescent-parent communication regarding Reproductive Health topics (Abajobir and Seme, 2012). Another study in Gondar showed that, Adolescents who had had parental discussion on VCT services were 10 times more likely to

use the service (Senafikish et al., 2012). Being a religious person or religious rules 28 (17.6%) were the major reasons for not utilizing contraceptives among sexually active study participants of Madawelabu university students (Dida et al., 2014). Maternal education was also associated with increased family planning services among adolescents in study conducted in Gondar (Senafikish et al., 2012).

The individual identities such as having history of sexual intercourse, knowledge of reproductive health, discussion with health workers, discussion with peer group, discussion with sexual partner, perception of risk towards HIV, history of STI syndrome, substance use, feeling of being young to start modern contraceptive and feeling of afraid are factors which determines the utilization of Reproductive Health.

A study from Mandalay City in Myanmar, having a history of sexual exposure were increase adolescents' Reproductive Health service utilization by 3 times (Phyu et al., 2011). Studies in Gonder town and Madawelabu University also revealed that Adolescents who had romantic sexual relationships were about 6.5 times more likely to utilize family planning services than those who had not had romantic sexual relationships and sexually active study participants utilized reproductive health service 6 time more than sexually inactive students respectively (Senafikish et al., 2012); Dida et al., 2014).

According to Phyu and his friends in 2011, Knowledge of Reproductive Health is the main factor for utilizing Reproductive Health services. Adolescents having knowledge of Reproductive Health service increased the likelihood of utilizing RH services, and also Adolescents who have knowledge of family planning and VCT services were 9 and 3 time more likely to ever use Reproductive Health services and respectively (Ayalew et al., 2014).

Adolescents' utilization of Reproductive Health services is associated with mass media on Reproductive Health in Mandalay (Phyu et al., 2011). A study from Jima town, Ethiopia showed that adolescents in the households with functional radio and access to Newspapers were likely to ever use Reproductive Health services. It also revealed that adolescents who had access to pamphlets and posters as source of information for Reproductive Health services were more likely to be ever user (Ayalew et al., 2004).

A finding from Madawelabu University showed that, students who ever made conversation on VCT with the health workers made them 2 fold to take VCT (Dida et al., 2014) whereas in Goba town, those adolescents who had conversed with health workers were 4 times more likely to utilize VCT service than their counterparts, and who had discussed with colleagues were 2 times more likely to utilize VCT service. The same study revealed that the odds of family planning (FP) service utilization among those adolescents who have discussed with their sexual partner were 3 times higher than their counterparts (Birhan et al., 2014).

The high remarking a risk towards HIV was also found to be one of the pushing factors for the utilization of VCT. Adolescents who had a perception of risk towards HIV were about 30 times more likely to utilize VCT services than those who had no perception of risk at all (Senafikish et al., 2012) and having history of STI syndrome had a 2 times increased likelihood of using VCT service (Dida et al., 2014).

Reproductive Health service delivery points which aimed to deliver service to adolescents should be available and accessible. These places should be good-looking and appealing for young people, including input and support from the community and beautifications selected by those attending, services for young people should be free of charge, health professionals should have additional qualities on top of appropriate training and the service need to be promoted to the community in order to fill the gap (Braeken and Rondinelli, 2012). Another study conducted in Mandalay City; Myanmar showed that among all study participants majority of them had a high level of geographical accessibility (79.0%). It was also associate service availability and accessibility with service utilization as; having a high level of accessibility to Reproductive Health services were twice increased the likelihood of utilizing those services (Phyu et al., 2011).

2.4. Conceptual framework

The conceptual framework is adopted from a similar model developed for family planning under the Evaluation Project that illustrates the pathways by which reproductive health programs achieve their objectives. The original framework, created for FP programs, can readily be adaptable to other areas of Reproductive Health services. Modifications are done to address the areas of interest without disrupting pathways of the original framework.

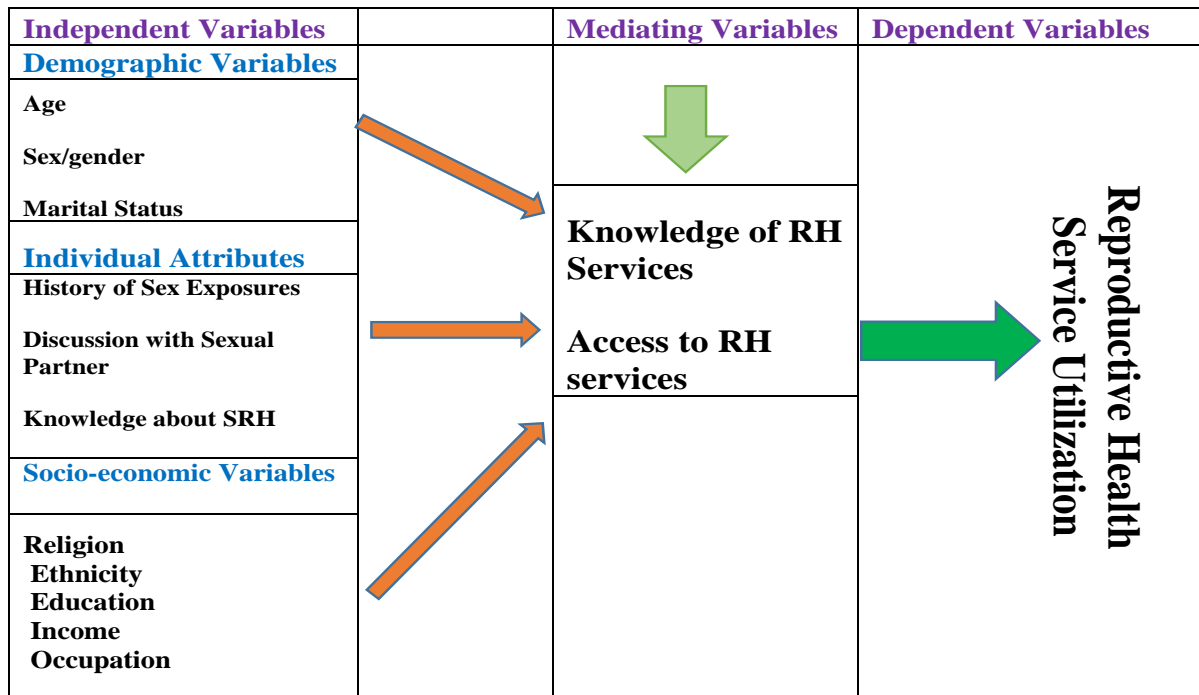


Figure 1: Conceptual framework of the study on Reproductive Health service utilization and associated factors among adolescents of age 15-19 in Addis Ababa: This conceptual framework showing the determinants of Adolescents Reproductive Health utilization and Demographic and Socio-economic Factors. Note: Arrows indicate hypothesized relationships.

3. Objective

3.1. General objective

The general objective of this research is to assess the utilization of reproductive health services and associated demographic and socio-economic factors among adolescents of age 15-19 from selected health facilities in Addis Ababa, Ethiopia.

3.2. Specific objectives

The specific objectives of this research are:

- To determine the extent of RH service utilization among adolescents of age 15-19 in selected health facilities in Addis Ababa
- To assess the demographic factors associated with RH service utilization in selected health facilities in Addis Ababa.
- To examine the socio-economic factors associated with RH service utilization in selected health facilities in Addis Ababa.

4. Methodology

4.1. Study area and period

DKT is a non-governmental organization (NGO) that operates like a business to address sexual and reproductive health (SRH) challenges in Ethiopia. DKT SRH products in Ethiopia are delivered through the public sector, but DKT prefers the private sector as the channel. Most of the beneficiaries from DKT supported private clinics are adolescents. So that is why this study prefers to focus on it in addition to Marie stops clinics, which have equal preference (<https://dktethiopia.org/what-we-do/>).

Marie Stopes Ethiopia started operating since 1990, delivering services to the women and men specially adolescents of Ethiopia. Marie Stopes Ethiopia is one of the major sexual and reproductive health services providers in Ethiopia (<https://www.mariestopes.org.et/about/about-marie-stopes-ethiopia/>).

The study was conducted from April 1- May 30, 2021 in Addis Ababa, Ethiopia. The study was conducted in five selected health facilities namely: two Marie Stopes clinics (HC1 &HC2), Two DKT supported private clinics (HC3 &HC4) and One Private Clinic (Alemayehu Bitew) (HC5) in Addis Ababa, the capital city of Ethiopia. The metro area population of Addis Ababa in 2020 is more than 5,006,000, a 4.42% increase from 2020 (<https://www.macrotrends.net>).

4.2. Study design

An institutional based cross-sectional study design that generates quantitative data was implemented.

4.3. Population and sampling

4.3.1. Study population

The target population was all adolescents of age 15-19 who are coming to these five Health Facilities for any of the Reproductive Health services.

4.3.2. Study subjects

Adolescents of age 15-19 who were getting reproductive health services and willing to fill-out the questionnaire in the selected health facilities.

4.4. Eligibility criteria

4.4.1. Inclusion criteria

Those adolescents age 15-19 years who were getting reproductive health services in the selected health facilities and who have resided in Addis Ababa for at least 6 months before the data collection time were included in the study.

4.4.2. Exclusion criteria

Adolescents who were unconsented were excluded.

4.5. Sample size and Sampling procedure

4.5.1. Sample size determination

The actual sample size was determined considering the following assumptions: level of confidence was taken to be 95% with 0.05 α value (which yields $Z_{\alpha/2} = 1.96$ on the standard normal distribution curve), a 5% margin of error ($d = 0.05$) and a proportion of 72.2% voluntary counseling and testing (VCT) service utilization obtained from previous study conducted in Gondar town among adolescents age 15-19 (Feleke et al., 2013). Based on this assumption, the actual sample size for the study was computed using one sample population proportion formula as indicated below.

Based on this assumption, the actual sample size for the study will be computed using one sample population proportion formula as indicated below (Daniel, 1999).

$$n = \frac{(Z_{\alpha/2})^2 P(1-P)}{d^2}$$

d²

Where, n = Sample size

z = the value of the standard normal curve score corresponding to the given confidence interval
= 1.96

p = Prevalence rate of Reproductive Health service utilization = 0.72

d = the permissible margin of error (the required precision) = 5%

$$\frac{(1.96)^2 (0.72) (1-0.72)}{(0.05)^2} = 309$$

Additional 10% allowance for absenteeism and refusal to participate in the study (nonresponse rate) will be considered. The actual sample size is therefore: 309 + 31 = 340

4.5.2. Sampling procedure

From Addis Ababa, a total of 5 clinics were selected based on convenience. The selection considered budget, time, proximity, representation, and others but without compromising standard of the research.

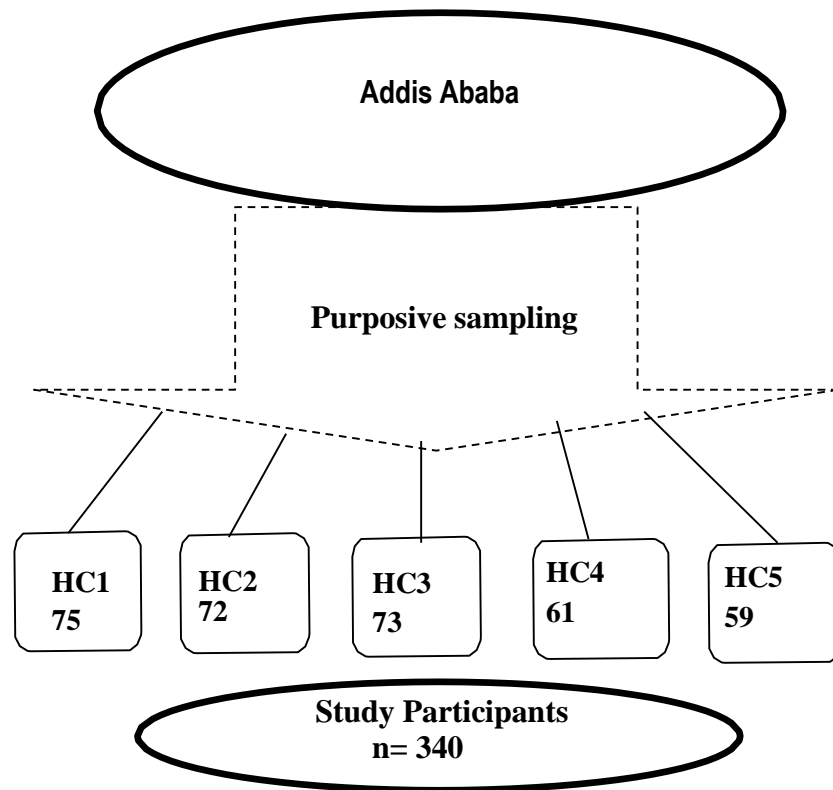


Figure 2: Schematic diagram of sampling procedure for the study on RH service utilization and associated factors among adolescents age 15-19 in Addis Ababa, Ethiopia, May, 2021.

4.6. Study variables

4.6.1. Independent variables

Demographic and socio-economic variables used in this study are: age, sex, religion, marital status, education status, parental communication on Reproductive Health issues, perceived monthly income of the family, and living arrangement of parents.

Individual attributes used in this study are the following: knowledge about reproductive health services, history of sex exposure, discussion on Reproductive Health issues with sexual partner, peer or health workers, perception of risk towards HIV/AIDS, media Exposure on Reproductive Health issues, substance use and service delivery environment: physical availability and accessibility.

4.6.2. Dependent variables: Utilization of reproductive health services

4.7. Data collection tools and procedure

A pre-tested, semi-structured questionnaire was used. The questionnaire was developed by combining the John Cleland's Illustrative questionnaire for interview-survey with young people (www.who.int/topics/questionnaire.p&client) and several literatures reviewed to achieve the research objective. The main points included in the questionnaire were: socioeconomic characteristics, adolescents' individual attribute regarding to sexuality and reproductive health, service accessibility (geographical accessibility) and four main aspects of Reproductive Health Services (sexual and Reproductive Health information and education, modern contraceptive, voluntary counseling and testing for HIV, STI diagnosis and treatment). The data was collected by 6 trained/ oriented for 1 day data collectors for 52 business days under the principal investigator's close supervision and facilitation.

4.8. Data quality assurance

The questionnaire and consent documents was first developed in English language, then translated into Amharic, local language, for data collection and finally retranslated back into English by

another translator to check consistency. Face validity of the questionnaire was assessed. Study participants selected by using snowball sampling. Items interpretability and understandability by the study participants was evaluated by pre-testing the questionnaire on 17 adolescents (5% of the total sample size (340)) coming to the HF 1& 3 and necessary correction have been taken accordingly. Six data collectors (3 females and 3 males) have been oriented to the overall project plan, how to approach and communicate with adolescents to elicit reliable data. The anticipated time duration to complete the questionnaire was not more than 30 minutes. Supervision was also done on the spot by principal investigator. The collected data was checked for its completeness and clarity by the principal investigator daily. Data cleaning and cross-checking have also been done before analysis.

4.9. Data processing and analysis

After checking for its completeness, data was entered and analyzed by SPSS version 23. Descriptive and analytical statistics including bivariate and multivariate analysis were employed. Percentage, ratios, frequency distribution, measure of central tendency and measure of dispersion have been used for describing different variables. Bivariate and multivariate analysis has been used to examine association between dependent and independent variables. All variables with $p < 0.05$ in bivariate analysis were fitted into the multivariate logistic regression model to identify factors associated with Reproductive Health service utilization. P-value less than 0.05 was considered as a level of significance.

4.10. Operational definitions (taken from WHO, 2010)

Adolescent: in this study adolescent stands for boys and girls of age 15-19.

Media exposure on Reproductive Health issues: Adolescents who exposed to mass media (including radio, television, magazine/newspaper and pamphlet) on at least two Reproductive Health issues (Condom, STI/HIV/AIDS, abstinence, unwanted pregnancy, contraception) in the past 12 months.

Knowledge about reproductive health service- Adolescents who score above the mean of reproductive health service-related questions were labeled as having high knowledge and those score below the mean were considered as having low knowledge. The questions were about the available types of services and types of service delivery points (providers) within the area, which included a total of eight types of services and seven service delivery points.

Reproductive Health service accessibility: The accessibility in this study was applied to geographical accessibility based on adolescents' own perception. Adolescents who lived within 1.6-kilometer (1 mile) radius distance from the nearest Reproductive Health service facilities from their home and less than 30-minute walking were classified as having high geographical accessibility and low otherwise.

Reproductive Health information and education service utilization: Adolescent who received information and education regarding to sexual and reproductive health issues from health worker working in any of the service providing points within the past 12 months.

Modern contraceptive service utilization: Adolescent who used any of modern birth controlling methods (contraceptives) in the past 12 months.

VCT service utilization: Adolescent who ever received HIV counseling and testing service in life.

STI Diagnosis and treatment service utilization: Adolescent who ever obtained STI diagnosis and treatment service in life.

Reproductive Health service utilization: Adolescents having sought or received at least one of the four Reproductive Health services that the study focused. I.e. Reproductive Health information and education service, modern contraceptive service, VCT service and STI diagnosis and treatment service utilization.

History of sexual exposure: Adolescents who ever experience sex in life were classified as having the history of sexual exposure and not otherwise.

Discussion on Reproductive Health issues: Adolescents who discussed at least two

Reproductive Health issues (Condom, STI/HIV/AIDS, abstinence, unwanted pregnancy, contraception) with health care provider in the last 12 months. The same was applied with peer, and sexual partner.

Perception of risk towards HIV/AIDS: Adolescent's attitude towards perceiving themselves as susceptible to HIV infection.

4.11. Ethical considerations

Official letter received from the Center for Population Studies of the College of Development Studies, Addis Ababa University was submitted to the five selected clinics. The HF's leader accepted the request and discussed with each selected HC technical lead for cooperation. The purpose of the study was explained to participants. Informed consent was obtained from participants. Confidentiality was reserved. Participants' involvement in the study was on voluntary basis and they weren't asked to write their name and their address.

5. Results

5.1. Socio-economic and demographic characteristics of the study participants

From the total 340 participants, 306 of them responded to the questionnaires yielded a response rate of 90%. Out of 306 participants 162 (53%) were males and 144 (47%) were females. The mean and median age of the study participants were 17.13 (SD \pm 1.33) and 17.0 respectively. Two hundred ninety-five (96%) of the study participants were single.

Of the total number of study participants, 111 (36%) had discussion with their family about Sexual and reproductive health issues whereas 195(64%) of them reported that they did not have any SRH issues discussed with in their family. From the total study participants only 32 (11%) monthly household income received was more than 5000 Ethiopian Birr. Conversely, the remaining 272 study participants family income was less than or equal to 5000 Ethiopian Birr. The median monthly household income received was 2,095 Ethiopian Birr. Over three-quarters, 233 (76%), of study participants co-lived with their mother and father but the remaining 73 (24%) were not living with both parents (Table 1).

Regarding the educational level of the study participants, 286 (~94%) were currently enrolled in school, whereas only 2 (1%) of the study participants had no formal education or no formal class and 209 (~69%) of the study participants gave their educational level as secondary education qualified (Grade 9-12) followed 62 (20%) of the study participants considered in primary education (Grade 1-8) and 35 (~11%) were secondary education graduates (Table 1).

Table 1: Socio-demographic characteristics of adolescents of age 15-19 in Addis Ababa, Ethiopia, May 2021.

Variables	Category	Frequency N (%)
Age	15-17	168 (55)
	18-19	138 (45)
Sex	Male	162(53)
	Female	144(47)
Marital status	Single	295 (96)
	Married	9 (3)
	Divorced	1(0.3)
	Separated	2(0.7)
Admission to school	In school	286 (94)
	Out of school	20 (7)
Educational status	No education	3 (1)
	Primary education	61 (0.4)
	Secondary education	210 (69)
	Above secondary education	32 (11)
Discussion in family on RH issues	Yes	111 (36)
	No	195 (64)
Living with both parents	Yes	233 (76)
	No	73(24)
Monthly income* of the family (ETB)	150-1400	80(26)
	1401-3550	145 (48)
	3551-5000	49 (16)
	>5001	32 (11)

‘**’ Income category was based on civil service taxation cutoff points

5.2. Adolescents' individual characteristic related with sexuality and reproductive health

Study participants were asked about the components of reproductive health service and service delivery points to assess their knowledge, which have a total score of 15. Study participants who had high knowledge (scoring above the mean = 8.6 (SD \pm 3.4)) were 168 (54.9%).

Out of the total study participants, 77 (25%) of the study participants have had sex in their life. Of the total, 110 (36%) have had boyfriend/girlfriends, and among those who had boyfriend/girlfriends, out of the total study participants who have multiple boyfriends/girlfriends, nearly half 54 (49%) had one boy/girlfriend (mean=2.06, SD \pm 1.44). Eighty-five (14%) of the study participants were reported that they have had discussion on at least two of the sexual and reproductive health issues Reproductive Health discussion points; Abstinence, condom use, STI/HIV, unwanted pregnancy, contraception with their sexual partners in the last 12 months prior to the study from the 110 study participants who had boyfriend/girlfriend. Discussion on the same issues was also reported by 85(28%) and 39(13%) of the study participants with their peers and with health workers respectively from the total study participants.

Depending on their risky behavior, the study participants reported their perception towards acquisition of HIV infection. Based on this, 264(86%) study participants perceived themselves as free from HIV infection risks. Regarding to the participants' last 12-month experience of alcohol, 'khat' or cigarette use, majority of them 267(87%) reported that they didn't consume any of them. The remaining 39(13%) were using at least one of those drugs at a different regularity. Majority, 13 (34%) of the 'drug-users' who used those drugs less frequent than monthly followed by weekly 9(24%), monthly 8 (21%), daily 7(18%) and more frequent than daily 1(4%). Considering the operational definition used in this study, 3(9%) of the study participants had use those substances (Table 2).

Table 2: Characteristic of Adolescents' related with sexuality and reproductive health, Addis Ababa, Ethiopia. May, 2021

Variables	Category	Frequency N (%)
Discussion on RH issues (with peers in the past 12 months (n=110))	Yes	85(77)
	No	25(23)
Discussion on RH* issues (with sexual partner)	Yes	85(28)
	No	221(72)
Discussion on RH* issues (with Health personnel)	Yes	39(13)
	No	267(87)
Risk on HIV (awareness)	Yes	42(14)
	No	264(86)
Experience to mass-media on RH in the past 12 months	Yes	229(75)
	No	77(25)
Material use in the past 6 months	Yes	39(13)
	No	267(87)
Sexual practice	Yes	77(25)
	No	229(75)
Knowledge of RHS	High	168(55)
	Low	138(45)

*' Reproductive Health issues: Abstinence, condom use, STI/HIV/AIDS, contraception

The study participants were asked about their exposure to mass media in the past 12 months to deliver information and education on at least two reproductive health issues: abstinence, condom use, STI/HIV, contraception and unwanted pregnancy or not. The study showed that, out of the total study participants, 229 (75%) hit the response 'Yes' for mass media exposure (Table 2).

5.3. Physical accessibility of Reproductive health service delivery points

Regarding the accessibility of reproductive health service delivery points; the study participants were asked about the easiest service delivery point, estimated distance from home and average time taken to walk including physical accessibility. Health centers (HC) one and two have accessible service delivery points 118(38.6%) and 113(36.9%) respectively followed by HC3 29(9.6%), HC4 20(6.5%), and HC5 26(8.5%). The mean distance from the study participants' home to the nearest HC service delivery point was 1km and it was reported to take an average of 7 minutes to walk. The majority of the participants said that there was Reproductive Health service

delivery center within a ~ 15-minute walk (69.4%) and within 1.6 km radius (88.4%) from their home which yields an overall high physical accessibility of 68.5% and low physical accessibility of 31.5%. There was a slight variation of accessibility between male and female study subjects. A summary of the accessibility and service utilization level for male and female study participants presented in.

5.4. Pattern of reproductive health services utilization among adolescents

Based on the response of the study participants who used any of the RH services from the total study participants were 103 (34%). HIV VCT was frequently used service 44% followed by SRH information and education delivered by professionals 23%, modern contraceptive usage 21% and finally STI services the least (12%) used by them (Fig 3).

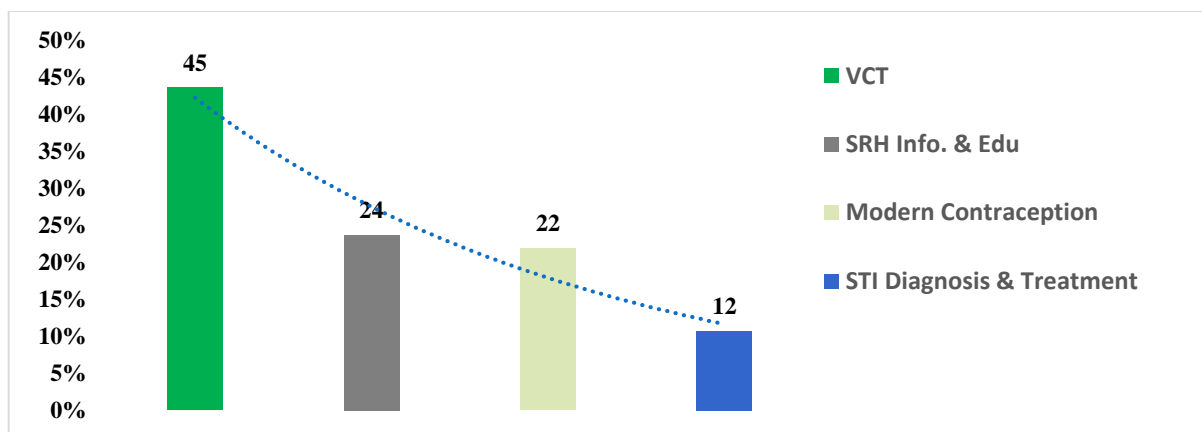


Figure 3: Reproductive health services utilized by adolescents, Addis Ababa, Ethiopia, May 2021.

Of the total number of respondents, 203 (66%) did not use the available RH services from any of the HCs. The use of these services by adolescents is down from 45% to STI services by 12%. Only the four services focused on study participants mentioned only the most important services they received from the four HCs they visited (Fig 3).

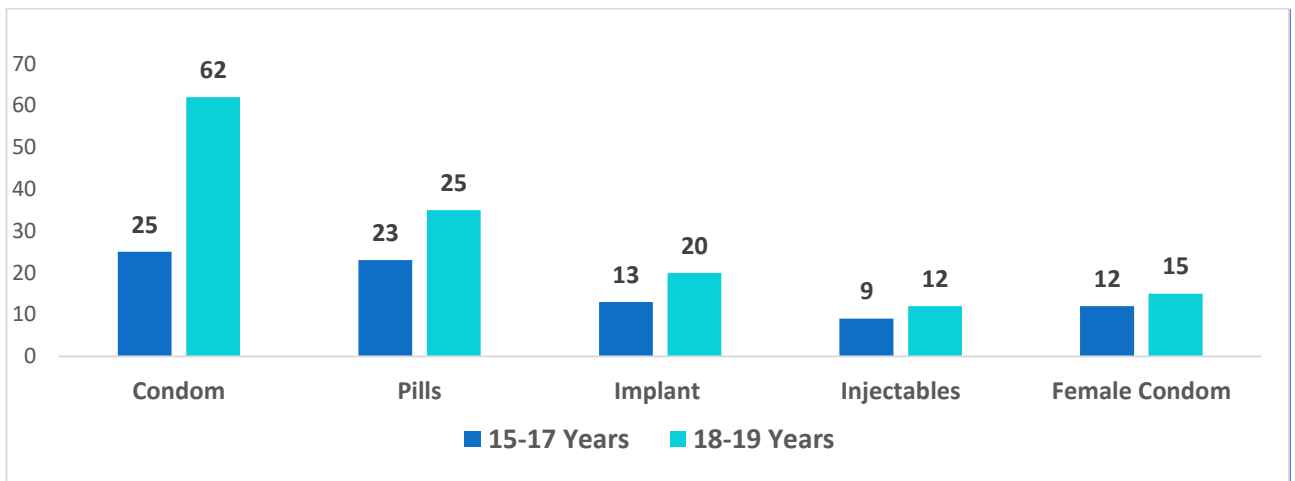


Figure 4: The comparison of modern contraception types used with the age category of adolescents, Addis Ababa, Ethiopia, May, 2021.

Of the total study participants, 216(71%) were responded to the use of any of the modern contraceptives and 134 (62%) were from 18-19 years of age and 82 (38%) was 15-17 years of age. The 18-19 years of age male study participants are frequently used condom for sex contact (62%) and girls are used 15 percent; most of them 25% were used pills. When we see condom use by 15-17 years of age boys are used one-fold more than girls with the same age. All except male condoms, are used by females for contraceptive methods. The modern contraceptive method frequently used by the study participants was the male condom (60%) followed by pills (25%) by girls. Of the total number of respondents, 90 (29%) did not use the contraceptive services from any of the HCs (Fig 4).

5.5. Association of socio-economic and demographic characteristics and RH services utilization

Reproductive Health service utilization factors like: Age, Marital status, educational status, habit of communication on Reproductive Health issues with in the family, co-residence with both parents, monthly family income, history of sexual intercourse, discussion Reproductive Health matters with sexual partner, discussion Reproductive Health matters with pears, discussion Reproductive Health matters with Health workers, perception of risk towards HIV/AIDS, exposure to mass-media, substance use and service accessibility.

The study showed that there is a statistically significant association between utilization of reproductive health service and most of the independent variables. For example, married adolescents were more likely to use services than their single counterparts (COR=7.950, 95%CI: 2.605 - 24.260). Being an older age (18-19) were confined with increase the chance of service usage than being in lower age category (15-17) (COR=1.971, 95% CI: 1.417-2.741). Adolescents living with their parents were less likely to use RH services than those who were not (COR=1.970, 95%CI: 1.361- 2.853). Study participants who had knowledge about the components of reproductive health services and service delivery points were more likely to utilize those services than the one who know less (COR= 7.934, 95%CI: 5.337 - 11.794).

Regarding sex history in life, it was positively associated with service usage (COR=7.934, 95%CI: 5.337 - 11.794). But interestingly, geographical accessibility was inversely associated with service usage; the more the study participants nearer to the service delivery points the less they use the service (COR=0.644, 95%CI: 0.456 - 0.909). Adolescents living nearby health facilities were not used to get RH services, and their preference is far from their village Health facilities where they are unknown by anybody. Risk perception of oneself towards HIV/AIDS acquisition and substance use were also positively linked with service utilization (COR=0.485, 95%CI: 0.199-1.524 and COR=3.282. 95%CI: 1.862-5.785 respectively). Table 3 shows the bivariate analysis of associated factors with utilization of Reproductive Health service.

Table 3: Association of socio-economic and demographic characteristics and reproductive health services utilization in Addis Ababa, Ethiopia, May 2021 (n =306).

Variables		Service utilization category		Crude OR (95% CI)	p-value
		Yes	No		
Sex	Male	68	94		
	Female	65	79	1.136(0.820-1.575)	0.467
Age	15-17	44	124	1	
	18-19	33	105	1.971(1.417-2.741)	<0.005
Marital status	Single	95	200		
	Married	7	2	7.950(2.605-24.260)	<0.007
	Divorced	1	.		
	Separated	1	.	4.240(0.382-47.035)	
Current enrollment at school	In-school	94	192		
	Out- Of school	10	10	1.859(0.991-3.487)	0.053
Educational status	No formal education	1	1	1.356(0.224-8.205)	0.740
	Primary	19	43	0.853(0.559-1.302)	0.462
	Secondary education (9-12)	70	140		
	Above secondary	13	19	1.808(1.080-3.029)	0.026
Discussion within family on RH issues	Yes	50	61	2.158(1.542-3.018)	<0.005
	No	53	142	1	
Co-residence with both	Yes	70	163	1.970(1.361-2.853)	
	No	34	39	1	<0.005
Ever had sex	Yes	53	24	7.934(5.337-11.794)	<0.005
	No	50	179	1	
Monthly family Income in ETB	150-650	9	8	2.099(1.005-4.384)	0.047
	651-1400	27	36	1.467(0.917-2.347)	0.12
	1401-2350	26	53	1	
	2351-3550	16	50	0.617(0.372-1.023)	
	3551-5000	15	34	0.881(0.521-1.491)	
	>5000	11	21	0.991(0.547-1.796)	
Knowledge on RH services	High	46	122	1.240(0.892-1.723)	
	Low	43	95	1	
Discussion with sex companions (n=110)	Yes	66	19	2.318(1.173-4.581)	0.018
	No	14	11	1	
Discussion with peers	Yes	44	41	2.999(2.099-4.284)	<0.005
	No	59	162	1	
Discussion with health personnel's	Yes	22	17	0.076(0.917-1.936)	<0.005
	No	52	30	1	
Risk Awareness of HIV	Yes	25	17	0.485(0.199-1.524)	
	No	12	30	1	
Experience to mass-media	Yes	87	142	2.162(1.430-3.267)	<0.0005
	No	17	60	1	
Substance use	Yes	23	16	3.282(1.862-5.785)	<0.005
	No	84	183	1	

Based on the Multivariate logistic regression, adolescents who discussed sexual and reproductive health issues with their sexual partners and peers were 2 times to use at least one of the four services that the researcher focused on than their counterparts (AOR= 2.360, 95% CI: 1.155-4.820 and AOR= 2.368, 95% CI: 1.168-4.802 respectively). Adolescents who weren't co-resided with both their parents were about 2 times more likely to utilize RH service than those who were living together (AOR= 2.570, 95% CI= 1.070-6.170). Positive perception of oneself towards acquisition of HIV spurred the adolescents to use RH services twice than those who didn't perceive themselves as risky (AOR= 2.231, 95% CI: 1.001 – 4.975) (Table 4).

Table 4: Factors associated with utilization of Reproductive Health service among adolescents in Addis Ababa, Ethiopia, May 2021.

Variables	Service utilization		Adjusted OR (95% CI)	p-value
	Yes	No		
Discussion with peers	44	41	2.360(1.155-4.820)	0.018
	59	162	1	
Co-residence with both parents	70	163	1	
	33	40	2.570(1.070-6.170)	0.035
Discussion with sexual partners (n=110)	66	19	2.368(1.168-4.802)	0.017
	15	10	1	
Perception of risk towards HIV	25	17	2.231(1.001-4.975)	0.048
	78	186	1	

6. Discussion

This study tried to assess the extent of RH service utilization among adolescents of age 15-19 in selected health facilities in Addis Ababa and the possible associated factors, including socio-economic and demographic, adolescents' individual characteristics including sex history and knowledge about Reproductive Health services, accessibility of service delivery points. Adolescents who visit health centers for RH service like family planning and HIV preventive services are one of the indicators of the immediate and long-term Reproductive Health needs of young people (WHO, 2009, 2010). Taking this in to consideration, this institutional-based cross sectional study which assessed the utilization of reproductive health services and associated economic and socio-demographic factors among adolescents have got important figures which can be served as an input for the concerned bodies in the area.

Selected demographic and individual related characteristics of the study participants in this study was compared with other studies. Study participants' mean age of 17.12 (SD+1.32) in this study has shown considerable similarity with 16.95 (SD+ 1.4) in Gonder and 17.38 (SD+ 1.40) in Goba towns (Senafikish et al., 2012; Bihan et al., 2014). But it differs from finding in rural area Gojam which was 14.6 (SD+ 4.1) and this was due to the age category the study was focused at (which was 10-19 years old) (Abajobir and Seme, 2012). According to the study participants living arrangement, 76.1% of the study participants in this study were living with both their parents at the data collection time which was larger figure than 60.7%, 61.7% and 66.7% in rural area Gojam, Gonder town and Goba town respectively (Abajobir and Seme, 2012; Senafikish et al., 2012; Birhan et al., 2014). Twenty-five percent of the study participants in this study respond that they had sexual intercourse compared with 52.8% in Mandalay, Myanmar; 52.6 in Goba town and 63% in USA (Phyu et al., 2011; Birhan et al., 2014; Kelli et al., 2013).

In this study the overall service utilization was 33.8% which was much smaller than study in Mandalay city, Myanmar (67%) and the finding in Gonder town (79.6%) (Phyu et al., 2011; Senafikish et al., 2012). This variation maybe due to; economical, socio demographical variation (e.g. the study was in the age group of 15-24) and including maternal care in the service package may inflate the figure in Mandalay city. In contrast, study in Gonder specifically focused on those adolescents who had sexual exposure which potentially increase the likelihood of service usage.

Adolescents' service utilization in this study slightly closer to study in Jima town (41.2%) (Ayalew et al., 2004). The measurement of utilization of Reproductive Health services varies widely. Some studies used just one aspect of Reproductive Health services (Abajobir and Seme, 2012; Senafikish et al., 2012; Dida et al., 2014) while others used multiple aspects (Phyu et al., 2011). But very few studies reported all the four essential aspects of Reproductive Health services as in this study did. The high service availability and accessibility might help the adolescent to utilize modern contraceptive more readily. Adolescents in Addis Ababa utilizes Reproductive Health services than rural areas of Ethiopia. The reason could be adolescents in Gojam zone might not access service delivery points nearby as the areas was rural. In addition to this, because the study in rural areas of Gojam zone was conducted between the age group 10-19, it might reduce the percentage of service usage as adolescents of age closer to ten years old might not use contraceptive as adolescents with age of closer to 19. Twenty-three percent of the participants in this study were utilize information and education related with sexual and reproductive health from health care workers and this finding concordance with 28.9% of the same service usage in Jima town. Modern contraception utilization, the record in this study (21.9%) agreed with many countries in Africa that reported as in more than two-thirds of the countries in Africa, contraceptive usage among adolescents of age 15-19 was slightly lower than 20% (CSA, 2006; Woog et al., 2014).

Family planning service usage in rural areas of Gojam and in Jima town were also 27.8% and 16.2% respectively (Abajobir and Seme, 2012; Ayalew et al., 2004). This variation could possibly justify by distribution of service delivery centers, socio-demographic characteristics of the study participants and knowledge difference across the study areas. For example, In Jima Town, it was reported that 95.1% of the adolescents could access information and communication service with the easy accessibility.

With regards to HIV voluntary counseling and testing, reports from Gonder and Goba towns (72.3% and 67.4% respectively) show remarkable variation with this study which labeled VCT service utilization at 43.6%. This variation could be due to; adolescents' perception of risk towards HIV which was lesser in this study and nation widely noticeable deducted emphasis for HIV related prevention activities.

Communication of sexual and reproductive health issues within the family (especially if the family members have good knowledge on reproductive health problems and reproductive health services) allows the adolescent to enhance their knowledge, build their confidence and in turn scale up their tendency to use those services in demand. Unfortunately, 63.6% of the study participants in this study reported that there was no habit of communication on sexual and reproductive health matters within their family. Nearly similar record was obtained from research conducted in Gojam area (68.0%) and Goba town (54.2%) (Abajobir and Seme, 2012; Birhan et al., 2014).

Reproductive health service accessibility considers multiple measuring needs. Physical accessibility is among the important parameter to assess service accessibility. Though, there are different ways to measure, distance from home and walking time based on the adolescents' own perceptions have been used in this study which were possess some sort of similar with the studies conducted in Myanmar (Phyu et al., 2011), and it is effective where using Geographic Information System (GIS) is practically difficult (WHO, 2010). In this study, the researcher found that geographical accessibility was 68.5% compared to 79.3% in Mandalay city, Myanmar and 95% in Jima town (Phyu et al., 2011; Ayalew et al., 2004). The study participants in Mandalay city were asked about their own perception of service affordability and then service accessibility was computed by considering both geographical accessibility (average distance from home and time taken for walk) and service affordability. On the contrary, here in our setup, services were fee free in governmental health institutions while the privates' demand charges. Due to this reason the researcher intentionally omitted to incorporate the study participants' perception on service affordability. So, the distribution of service delivery points in the study areas (it also implicate the countries' economic status) and socio-economic difference of the study participant across the two areas might considered as a cause for the discrepancy. Even though the method and the scale of measurement was different in Jima town, service utilization was similarly low in both areas.

The knowledge level of adolescents has a crucial role for access and utilize Reproductive Health services. The success of adolescent reproductive health program is depending on advocating and increasing awareness for RH. The type of service provider can tell the provision of what kinds of services enables adolescents to use. In this study, about 55% of the adolescents had high knowledge on Reproductive Health services and providers compared to 67% from Gojam finding. This could be due to the difference in knowledge assessing tool. The mean score of knowledge assessing

questions in this study (mean = 8.7 (SD+3.5)) exceed two times more than a study that used the same knowledge assessing tool in Mandalay city, Myanmar (mean = 3.4 (SD + 1.7)) (Phyu et al., 2011).

In this study, adolescents' family factors played an important role in the utilization of Reproductive Health services. For example, adolescents who weren't co-lived with both their parents were higher their odds to use RH services than those who live together. This finding is against the study in Gonder town where adolescents living with both parents use VCT service more likely than their counterparts. This could be due to relatively high parental monitoring in our setting. In addition to this, even though majority of the study participants in this study were living with both their parents, the families' habit of communication on sexual and reproductive issues were quite low (36.3%).

Adolescents' high-risk perception towards HIV/AIDS render them to seek and utilize Reproductive Health service more likely than those who didn't perceive. This finding is shared by studies in Madawalabu University and Gonder town (Dida et al., 2014; Senafikesh et al., 2012). Different research findings revealed that discussion on sexual and reproductive health matters with sexual partner and peers increase the chance of service utilization (Abajobir and Seme, 2012; Senafikesh et al., 2012; Ayalew et al., 2004; Birhan et al., 2014). Same wise in this study, adolescents who had discussed Reproductive Health issues with their sexual partners and peers were found two times more likely to use Reproductive Health services than those who didn't discuss.

Socio-economic and demographic characteristics including, marital status, religion, ethnicity, education, families' educational background, family size, family income and means of communication, sex, age, being in-school and educational status had an association with RH services utilization. Moreover, adolescents from rich families had knowledge than poor families on RH and issues. The higher knowledge among the rich might be due to more exposure for such issues through mass media (Govindasamy et al., 2002; Kotecha et al., 2012) though this study did not show any significant association with the availability of means of communication and RH knowledge and services utilization. This finding is consistent with other studies from sub-Saharan African countries (Kotecha et al., 2012; Govindasamy et al., 2002). Education is significant social variable affecting RH service utilization. This finding is supported by studies in northwest Ethiopia and Kenya where higher educational status is positively associated with RH services utilization (Fantahun and Degu, 2003; Alemayehu and Fantahun, 2006). This is due to more disclosure for

SRH information and secondary behavioral change. However, being from rich family did not show any association with RH services utilization among the adolescents. It complements the findings of other studies in Ethiopia, Kenya and Bangladesh where income had no significant impact on RH services utilization (Ayalew et al., 2009) and contradicts the findings from sub-Saharan African countries on the magnitude of socioeconomic inequalities in RH services utilization showing that contraceptive use was significantly less common among adolescents in the poorest quintile than in the richest (Rani and Lule, 2004). One of the demographic factors, sex, did not show association neither with RH knowledge nor services utilization as opposed to many studies showing male gender has more knowledge and the female counterpart having more tendencies to using RH services ((Kotecha et al., 2012 ; Rani and Lule, 2004) .

7. Strengths and limitations of the study

The strengths of this study, on utilization of reproductive health services and associated socio-economic and demographic factors among adolescents, will make this study valuable in the area that could play its own role for Ethiopia and Addis Ababa in particular RH service scale-up.

This research has four major limitations.

- Since the study was institutional based and which was also confined to the Private and NGO Health Facilities, generalization of the findings to the general adolescent population is limited.
- As the study design was institutional based cross-sectional, so the direction of causal relationships is not determined.
- The sample size is small to represent the number of adolescents in Addis Ababa.
- In addition, the study examines personal and sensitive issues including their sex history, social-desirability through a quantitative study design with self-administered questionnaire, which may have subjectivity and so bias may not be eliminated.
- Finally, there is a need for the City Government Health Bureau to revise its strategic plan and service provision from the health facilities

8. Conclusion

Based on the results, we concluded that, utilization of reproductive health services among adolescents in Addis Ababa was low though majority of the adolescents had fair knowledge on reproductive health services. Socio-economic and demographic factors influence the utilization of RH services in the HFs. In this study time, HIV voluntary counseling and testing was the most frequently utilized service that the adolescents used and on the contrary STI diagnosis and treatment was the least. Having information and education about reproductive health services increases their utilization among adolescents as is discussion among peers and between sexual partners. The accessibility and of health centers is also increased the utilization of reproductive health services by adolescents.

9. Recommendations

Apart from the socio-economic and demographic factors, the biological and psychological dynamism of adolescents, making the floor open for them to discuss and learn from each other and from others out of the group freely on sexual and reproductive health matters is highly important and also should be expected from family. Adolescents are the primary sufferers from reproductive health related problems, and hence they should try to challenge certain barriers against reproductive health service utilizations. Most adolescents from 15-19 are at school, schools can be an excellent means to improve the adolescents' knowledge, attitude, and practice towards utilization of reproductive health services. More rigorous prospective studies should be conducted to single out the most pertinent factors behind this low utilization of reproductive health service and associated factors by considering larger sample size and wider study area taking these study findings as a base.

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Annex

Annex I: Consent form in English language

Consent form

Questionnaire code _____

My name is Meseret Tarekegn. I am attending my MSc in Family Planning and Reproductive Health (Population Studies) at Addis Ababa University. I brought these questions to you in order to find out conditions regarding to reproductive health service utilization and associated factors among adolescents of age 15-19 in Addis Ababa. The questionnaire will take about 20-30 minutes to fill. The purpose of this study is to get more information on factors contributing to reproductive health service utilization of adolescents that can be used to design appropriate intervention so as to address reproductive health service need of adolescents. Therefore, your honest and genuine participation by responding to the questions prepared is highly appreciated and helpful to attain the objective of the study. Your name will not be written on this form and no individual response will be reported to anybody. Hence, your answers are completely confidential. You do not have to answer any question that you don't want to answer and you may refuse to answer all of the questions.

Would you willing to answer?

Yes then put your signature below and proceed to the next page

By signing this document, I am giving consent to fill the research questionnaire. I understand that I will be part of the research study that is looking into the reproductive health service utilization and its association factors in Addis Ababa. I also informed that the participation would be entirely voluntary and that am free to withdraw from the study.

Participant's signature: _____

Date: _____

Data collector's signature: _____

Date: _____

No please stop here.

Thank You!

Annex II Consent form in Amharic language

የፍቃደኝነት መረጋገጫ ቅጽ

የመጠይቁ መለያ ቁጥር፤ _____

እኔ _____ እባላለሁ። በአዲስ አበባ ዩኒቨርሲቲ የሚከተሉት ዲግሪ ተማሪ ስሆን በአሁኑ ወቅት በዚህ ከተማ ውስጥ እድሜያቸው ከ15-19 ዓመት በሆኑ ወጣቶች የስነ-ተዋልዶ ጤና አጠቃቀም ዙሪያ ጥናት ለማድረግ መረጃ እያሰጠሁት ነው። ለዚህም ያግዘኝ ዘንድ በጉዳዩ ዙሪያ የሚያተኩሩ የተወሰኑ ጥያቄዎች ከስር አካተቻለሁ። መጠይቁን ሞልቶ ለማጠናቀቅ ከ 20 እስከ 30 ደቂቃ ሊወስድ ይችላል።

የጥናቱ ዓላማ፤ በአዲስ አበባ ከተማ ውስጥ የሚኖሩና እድሜያቸው ከ15-19 ዓመት የሆኑ ወጣቶችን የስነ-ተዋልዶ ጤና አጠቃቀም ደረጃ እንዲሁም ከስነ-ተዋልዶ ጤና አጠቃቀም ጋር ተያያዥነት ያላቸው ሁኔታዎች ስለ መለየት ይሆናል።

የጥናቱ ሚስጥራዊነት፤ በጥናቱ ላይ ሊካተቱ የቻሉት ምክንያት የተሳታዎች እመራረጥ ሂደት በእድል ላይ መሰረት ያደረገ በመሆኑ ብቻ ነው። እርሶ የሚሰጡት ማንኛውም መረጃ ሚስጥራዊነት የተጠበቀ ስለሆነ በመጠይቁ ላይ ማንነትዎ የሚገልፅ ስምም ይሁን አድራሻዎን እንዲገልፁ አይጠየቁም። ከዚህም በተጨማሪ የእርሶን ምላሾች ቤተሰብዎም ሆነ መረጃ ሰብሳቢዎ እንዲያዩት አይደረግም።

የጥናቱ ጥቅምና ጉዳት፤ በዚህ ጥናት ላይ በመሳተፍዎ ሆነ መጠይቁን በመመለስዎ የተዘጋጀ ክፍያ የለም። ነገር ግን የአዲስ አበባ ወጣቶችን የስነ-ተዋልዶ ጤና አጠቃቀም በተመለከተ ያለንን ግንዛቤ ለማሳደግና የወጣቶችን የስነ-ተዋልዶ ጤና አጠቃቀምን ለማሳደግ የሚሰሩ ስራዎች በመረጃ ላይ ተመስርተው እንዲሰሩ ግብአት ይሆናል። እናም የእርሶ ተሳትፎ ሰዓትዎን ከመሻማት ባለፈ ምንም ዓይነት ጉዳት አያደርስበትም።

የተሳታፊ መብት፤ የእርሶ በዚህ ጥናት ላይ መሳተፍ በፍላጎትዎ ላይ የተመሰረተ ነው። መጠይቁን ያለመሙላት እና የጥናቱ አካል ያለመሆን መብትዎ የተጠበቀ ነው።

መጠይቁን ለመሙላት ፍቃደኛ ነዎት?

አዎ አባክዎን መስማማትዎን በፊርማ አረጋግጠው ወደ ቀጣዩ ገፅ ይለፉ

ስምዎንን ማስታወቅ፤ ከዚህ በላይ የተጻፈው መረጃ ተነቦልኝ ወይም እንብቤው በአዲስ አበባ ከተማ ውስጥ የሚኖሩ እድሜያቸው ከ15-19 ዓመት የሆኑ ወጣቶችን የስነ-ተዋልዶ ጤና አጠቃቀም ደረጃ ለማወቅ በሚደረገው ጥናት ውስጥ ተሳታፊ መሆኔን በመረዳት የተዘጋጀውን መጠይቅ ለመሙላት ተስማምቻለሁ። በመጨረሻም የጥናቱ ተሳታፊ መሆኔን የምገልፀው ጥናቱ ማቋረጥ እንደምችል ተነግሮኝ ነው።

የተሳታፊ ፊርማ _____ ቀን _____

የመጠይቁ ሰብሳቢ ፊርማ _____ ቀን _____

አይደለሁም

አመሰግናለሁ!

Annex III. Questionnaire in English language

GENERAL INSTRUCTIONS: The questionnaire has four parts, including questions regarding to socio-demographic and socio-economic characteristics, individual's trends related with sexual and reproductive health, service accessibility and reproductive health service utilization pattern. Please read the instructions and questions carefully before proceeding to answering them.

Part I: Questions assessing the Socio-demographic and socio-economic characteristics of study participants

Instructions: Please circle the number in front of the option you choose. If you are asked to write a response or if your answer is not listed among alternatives, please do in the blank space provided. If there is an arrow in front of your choice, skip to the indicated question.

Q. no.	Questions	Responses	Skip to
101	What is your gender?	1. Male 2. female	
102	How old are you?	-	
103	What is the religion you follow?	1. Orthodox Christian 2. Muslim 3. Protestant 4. Other specify	
104	What is your ethnic group?	1. Amhara 2. Oromo 3. Tigre 4. Gurage 5. Other specify_	
105	Marital status?	1. Single 2. Married 3. Divorced 4. Separated	

106	Are you currently enrolled at school?	1. Yes 2. No
107	In which group of schooling that your educational status categorized?	1. No formal education at all 2. Primary education (1-8) 3. Secondary education (9-12) 4. Above secondary education
108	In which group of schooling that your mother's educational status categorized?	1. No formal education at all 2. Primary education (1-8) 3. Secondary education (9-12) 4. Above secondary education
109	Now I have some questions about your family. Does your family have a habit of discussion on sexual and reproductive health (Reproductive Health) issues with you?	1. Yes 2. No
110	Are you usually living with your mother and father together?	1. Yes \longrightarrow Q. no_112 2. No
111	If No, with whom do you usually live?	1. With my mother only 2. With my father only 3. With relatives 4. With friends 5. Alone 6. Other specify _
112	How much income do you think your family gain per month? [specify in Birr]	_

Part II: Questions assessing personal characteristics regarding to sexual and reproductive health

Instructions: Here below are some questions regarding to your personal experience regarding to sexual and reproductive health. Please circle the number in front of the option you choose. If you are asked to write a response or if your answer is not listed among alternatives, please do in the blank space provided. If there is an arrow in front of your choice, skip to the indicated question.

Q. no.	Questions	Responses	Skip to
201	Please put '√' mark inside the 'YES' box if you knew the indicated Reproductive Health services and service delivery point (provider) and mark 'NO' otherwise.	<p style="text-align: center;"><u>Service</u></p> <p>1. Sexual health education and prevention information for young people, single adults, and couples, where confidentiality and privacy are assured. YES <input type="checkbox"/> NO <input type="checkbox"/></p> <p>2. Sexuality counseling for the client's sexual health concerns or needs, and desired sexuality, reproductive or contraceptive preferences. YES <input type="checkbox"/> NO <input type="checkbox"/></p> <p>3. Identification and referral for victims of sexual and other forms of violence. YES <input type="checkbox"/> NO <input type="checkbox"/></p> <p>4. Voluntary counseling, testing, treatment and follow-up for STIs, including HIV. YES <input type="checkbox"/> NO <input type="checkbox"/></p> <p>5. Diagnosis, screening, treatment and follow-up for reproductive cancers, and associated infertility. <input type="checkbox"/> <input type="checkbox"/></p>	

6. Antenatal, intra-natal and post-natal care for the pregnant women.

YES NO

7. Safe abortion to the full extent of the law. YES NO

8. Post-abortion care, including provision of contraceptive information, counseling and methods. YES NO

Service providers

1. Hospitals. YES NO

2. Health centers. YES NO

3. Clinics (NGO and private).

YES NO

4. Health posts. YES NO

5. Pharmacies.

YES NO

6. Youth friendly health service clubs.

YES NO

7. Health extension workers.

YES NO

202 Have you ever had a girl/boyfriend? [By girl/boy friend, I mean someone to whom you were sexually or emotionally attracted and whom you 'dated' (use local terms to specify going out together unaccompanied by other person)]

1. Yes

2. No → Q. no.

204

203	How many girl/boyfriend have you had?	_____	
204	Have you ever had sexual intercourse? [not only with girl/boyfriend]	1. Yes 2. No	Q. no. →206
205	From the below listed Reproductive Health issues, did you discuss on at least two issues with your sexual partner within the past 12 months? Reproductive Health issues: Condom, STI/HIV/AIDS, Abstinence, unwanted	1. Yes 2. No	
206	Did you discuss on at least two of the above mentioned issues with your peer within the past 12 months?	1. Yes 2. No	
207	Did you discuss on at least two of the above mentioned issues with your health workers within the past 12 months?	1. Yes 2. No	
208	Based on prior risky behaviors, Do you perceive yourself as risk for acquiring HIV/AIDS?	1. Yes 2. No	
209	Did you exposed to mass media, which aimed to deliver information and	1. Yes 2. No	Q. no. →301

education on at least two
Reproductive Health issues
listed below, within the
past 12 months?
Reproductive Health
issues: Condom,
STI/HIV/AIDS,

- 210** Which mass media did you exposed for?
1. Radio
 2. Television
 3. Magazine
 4. Newspaper
 5. Pamphlet
 6. Other specify_
-

- 211** Did you use alcohol, khat or cigarette in the past 12 months?
1. Yes
 2. No
- Q. no
→301
-

- 212** If YES, to what frequency?
1. More frequent than daily
 2. Daily
 3. Weekly
 4. Monthly
 5. Less frequent than monthly
 6. Other specified _
-


Part III: Questions assessing service accessibility

Instructions: Dear study participant, afterwards there are some questions regarding to accessibility of Reproductive Health service delivery points. Please circle the number in front of the option you choose. If you are asked to write a response or if your answer is not listed among alternatives, please do in the blank space provided.

Q. no.	Questions	Responses	Skip to
301	What is the nearby Reproductive Health service delivery point (service provider) to your home?	1. Hospitals 2. Health centers 3. Clinics (NGO and private) 4. Health posts 5. Youth friendly health service clubs 6. Health extension worker 7. Other specify_	
302	How far the above mentioned nearby Reproductive Health service delivery point from your home? [specify in km]	-	
303	How much it takes to walk from your home to the nearby Reproductive Health service delivery point? [specify _____]		

Part IV: Questions assessing Reproductive Health service utilization

Instructions: Questions below are regarding to your service usage status. Please circle the number in front of the option you choose. If you are asked to write a response or if your answer is not listed among alternatives, please do in the blank space provided. If there is an arrow in front of your choice, skip to the indicated question.

Q. no.	Questions	Responses	Skip to
401	Have you ever use any Reproductive Health service in life?	1. Yes 2. No 	You are finished here, thank you!

402	Have you received any information and education service regarding to Reproductive Health issues from health worker working in any of Reproductive Health service delivery points in the	1. Yes 2. No → Q. no 404
403	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, Intranatal and Postnatal care 7. Other specify_
404	Have you use modern contraceptive service in the last 12 months?	1. Yes 2. No → Q. no 406
405	If YES, what type of method do you use? [methods other than male condom are filled by female study participants' only]	1. Male condom 2. Pill 3. Injectable 4. Implant 5. IUCD

6. Female condom

7. Other specify _

406 Have you ever used VCT service? 1. Yes
2. No

407 Have you ever used STI diagnosis and treatment service? 1. Yes
2. No

THANK YOU!

Annex IV. Questionnaire in Amharic language

የመጠይቅ ቅጽ

አጠቃላይ መመሪያ: መጠይቁ በአራት ክፍሎች ተከፋገሏል። እነዚህም ማህበረሰባዊ ሁኔታዎችን፣ ክስነ-

ተዋልዶ ጤና ጋር የተያያዙ ግላዊ ሁኔታዎችን፣ የአገልግሎት ተደራሽነትን እና የስነ-ተዋልዶ ጤና ግልጋሎት ተጠቃሚነትን የሚመለከቱ ጥያቄዎች የተካተቱበት ነው። እባክዎን እያንዳንዱን መመሪያና ጥያቄ በሚገባ እንብብዉ መልስዎን እንዲያስቀምጡልኝ በአክብሮት እጠይቃለሁ።

ክፍል 1: ማህበራዊ ሁኔታዎችን የሚመለከቱ ጥያቄዎች

መመሪያ: ከተዘረዘሩት አማራጮች መካከል መልስዎን የያዘዉን ቁጥር ያክብቡ። የእርስዎ ምላሽ ከተዘረዘሩት መካከል ከሌለ እና መልስዎን በፀ-ሁፍ እንዲያስቀምጡ የሚያዝ ከሆነ በተጠቀሰዉ ባዶ ቦታ መልስዎን ያስቀምጡ። ከመረጡት ምላሽ ፊት ለፊት የቀሰት ምልክት ካለ ወደ ተጠቀሰዉ የጥያቄ ቁጥር ይለፉ።

የጥያቄ ቁጥር	ጥያቄ	ምላሽ	ይለፉ
101	ዖታ?	1. ወንድ 2. ሴት	
102	እድሜ?	_____	
103	ሀይማኖት?	1. ኦርቶዶክስ 2. ሙስሊም 3. ፕሮቴስታንት 4. ሌላ ካለ ይጠቀስ _____	
104	ብሄር?	1. አማራ 2. ኦሮሞ 3. ትግሬ 4. ጉራጌ 5. ሌላ ካለ ይጠቀስ _____	
105	የጋብቻ ሁኔታ?	1. ያላገባ/ች 2. ያገባ/ች 3. የፈታ/ች 4. የተለያየ ቦታ የሚኖር/የምትኖር	

106	በአሁኑ ሰዓት በትምህርት ላይ ነህ/ሽ?	1. አዎ 2. አይደለሁም	
107	ያንተ/ያንሽ የትምህርት ደረጃ በየትኛው ምድብ ዉስጥ የሚጠቃለል ነው?	1. መደበኛ ትምህርት ያልተማረ/ሽ 2. የመጀመሪያ ደረጃ ትምህርት (1-8) 3. የሁለተኛ ደረጃ ትምህርት (9-12) 4. ከሁለተኛ ደረጃ ትምህርት በላይ	
108	የእናትህ/ሽ የትምህርት ደረጃ በየትኛው ምድብ ዉስጥ የሚጠቃለል ነው?	1. መደበኛ ትምህርት ያልተማረ/ሽ 2. የመጀመሪያ ደረጃ ትምህርት (1-8) 3. የሁለተኛ ደረጃ ትምህርት (9-12) 4. ከሁለተኛ ደረጃ ትምህርት በላይ	
109	ከዚህ በታች ቤተሰብህን/ሽን የሚመለከቱ የተወሰኑ ጥያቄዎች አሉ፡ ፡ ቤተሰብህ/ሽ ወሲብና የስነ-ተዋልዶ ጤናን በተመለከቱ ጉዳዮች ላይ ካነተ/ካንቺ ጋር የመወያየት ልምድ አላቸው?	1. አዎ፣ አለ 2. አይ፣ የለም	
110	ብዙ ጊዜ ከእናትና ከእባትህ/ሽ ጋር በአንድ ላይ ነው የምትኖረው/ሪው?	1. አዎ \longrightarrow 2. አይደለም	የጥያቄ ቁጥር 112
111	መልስህ/ሽ ‘አይደለም’ ከሆነ፤ ከማን ጋር ብዙ ጊዜ የምትኖረው/ሪው?	1. ከእናቴ ጋር ብቻ 2. ከእባቴ ጋር ብቻ 3. ከዘመዶቼ ጋር 4. ከጓደኞቼ ጋር 5. ብቻዬን 6. ሌላ ካለ ይጠቀስ _____	
112	ቤተሰብህ/ሽ በወር ምን ያክል ገቢ ያገኛሉ ብለህ/ሽ ታስባለህ/ሽ? [ግምትህን በብር አሰቀምጥ/ጭ]	_____	

		<p>5. የመራቢያ አካላት ካንሰር እና ተያይዞ የሚመጣ መካንንት መመርመርና ህክምና መስጠት። አዎ <input type="checkbox"/> አይ <input type="checkbox"/></p> <p>6. ላረገዙ ሴቶች የቅድመ ወሊድ፣ ወሊድ እና ድህረ ወሊድ እገልግሎቶች መስጠት። አዎ <input type="checkbox"/> አይ <input type="checkbox"/></p> <p>7. በህግ በተፈቀደ አግባብ የፅንሽ ማቋረጥ እገልግሎት መስጠት። አዎ <input type="checkbox"/> አይ <input type="checkbox"/></p> <p>8. ከፅንሽ ማቋረጥ በኋላ የሚሰጡ እገልጋሎቶችን (የወሊድ መከላከያ ዘዴንም ይጨምራል) መስጠት። አዎ <input type="checkbox"/> አይ <input type="checkbox"/> <u>እገልግሎት አቅራቢዎች</u></p> <p>1. ሆስፒታል. አዎ <input type="checkbox"/> አይ <input type="checkbox"/></p> <p>2. ጤና ጣቢያ. አዎ <input type="checkbox"/> አይ <input type="checkbox"/></p> <p>3. ክሊኒክ (የግልና መኖሪያ ቤቶች ያልሆነ). አዎ <input type="checkbox"/> አይ <input type="checkbox"/></p> <p>4. ጤና ኪሳራ. አዎ <input type="checkbox"/> አይ <input type="checkbox"/></p> <p>5. መድሀኒት ቤቶች. አዎ <input type="checkbox"/> አይ <input type="checkbox"/></p> <p>6. የወጣቶች የአገልግሎት ለአገልግሎት <input type="checkbox"/> <input type="checkbox"/> አጠባበቅ ክበቦች. አዎ <input type="checkbox"/> አይ <input type="checkbox"/></p> <p>7. የጤና ሌታዎችን ሰጪዎች. አዎ <input type="checkbox"/> አይ <input type="checkbox"/></p>	
202	የወንድ/የሴት ጓደኛ የሮህ/ሽ ያወቃል? [የወንድ/የሴት ጓደኛ ማለት፣ በወሲባዊ ወይም ስሜታዊ ፍላጎት የሰጡት/ሽ እና አብራህ/ሮሽ የምታሳልፉ፤ ከሌላ ሰው ጋር	1. አዎ 2. አይ \longrightarrow	የጥያቄ ቁጥር 204

	ተመሳሳይ ግንኙነት የሌላት ሴት/ወንድ ማለት ነው።]		
203	እስካሁን ድረስ ስንት የወንድ/የሴት ጓደኛ አለህ/ሽ?	_____	
204	ወሲብ አድርገህ/ሽ ታወቃለህ/ታወቁያለሽ? [ከወንድ/ከሴት ጓደኛ ጋር ብቻ ማለት አይደለም]	1. አዎ 2. አይ _____	የጥያቄ ቁጥር 206
205	ከታች ከተዘረዘሩት ወሲባዊና የስነ-ተዋልዶ ጤና ጉዳዮች መካከል ቢያንስ በሁለቱ ላይ ከወሲብ ጓደኛህ/ሽ ጋር ባለፉት 12 ወራት ተወያይታችሁ ታወቃላችሁ? [ስለ፤ ኮንዶም፣ ኤች.አይ.ቪ ኤድስን ጨምሮ በልቅ የግብረ-ስጋ ግንኙነት ስለሚተላለፉ በሽታዎች፣ መታቀብ፣ ያልተፈለገ እርግዝና፣ የወሊድ መከላከያ ዘዴዎች]	1. አዎ 2. አይ፣ ተወያይተን አናወቅም	
206	በጥያቄ ቁጥር 205 ከተጠቀሱት ጉዳዮች ቢያንስ በሁለቱ ዙሪያ ከጓደኞችህ/ሽ ጋር ባለፉት 12 ወራት ተወያይታችሁ ታወቃላችሁ?]	1. አዎ 2. አይ፣ ተወያይተን አናወቅም	
207	ባለፉት 12 ወራት ከነዚህ (በጥያቄ ቁጥር 205 ከተጠቀሱት ጉዳዮች) ቢያንስ በሁለቱ ዙሪያ ከህክምና ባለሙያ ጋር ተወያይተህ/ሽ ታወቃለህ/ሽ?	1. አዎ 2. አይ፣ ተወያይተን አላወቅም	
208	እስከ አሁን ከነበሩህ/ሽ አጋላጭ ባህሪያት በመነሳት፣ ለኤች.አይ.ቪ ኤድስ ተጋላጭ እሆናለሁ ብለህ/ሽ ታስባለህ/ሽ?	1. አዎ እስባለሁ 2. አይ አላስብም	

209	<p>በለፋት 12 ወራት ውስጥ ከታች ከተዘረዘሩት ወሲባዊና የስነ-ተዋልዶ ጤና ጉዳዮች መካከል ቢያንስ በሁለቱ ላይ መሰረት ያደረገ መረጃና ትምህርት በመገናኛ ብዙሀን ሲነገር ሰምተህ/ሽ ወይም እንብበህ/ሽ ታወቃለህ/ሽ? [ስለ፤ ኮንዶም፣ ኤች.አይ.ቪ ኤድስን ጨምሮ በልቅ የግብረ-ስጋ ግንኙነት ስለሚተላለፉ በሽታዎች፣ መታቀብ፣ ያልተፈለገ እርግዝና፣ የወሊድ መከላከያ ዘዴዎች]</p>	<ol style="list-style-type: none"> 1. አዎ 2. አይ _____ → 	<p>የጥያቄ ቁጥር 211</p>
210	<p>መረጃውን ወይንም ትምህርቱን ከየትኛው የመገናኛ ብዙሀን አገኘሽ/ሽ?</p> <p>[ከአንድ በላይ አማራጮችን መምረጥ ይቻላል]</p>	<ol style="list-style-type: none"> 1. ሬዲዮ 2. ቱሌቪዥን 3. ጋዜጣ 4. መፅሕፍት 5. በራሪ ወረቀት 6. ሌላ ካለ ይጠቀስ _____ 	
211	<p>በለፋት 12 ወራት ውስጥ አልኮል፣ ጫት ወይም ሲጋራ ተጠቅመህ ታወቃለህ/ሽ?</p>	<ol style="list-style-type: none"> 1. አዎ 2. አይ ተጠቅሜ አላወቅም _____ → 	<p>የጥያቄ ቁጥር 301</p>
212	<p>ከተጠቀምክ/ሽ፣ በምን ያክል ድግግሞሽ?</p>	<ol style="list-style-type: none"> 1. በቀን ከአንድ ጊዜ በላይ 2. በየቀኑ 3. በየሳምንቱ 4. በየወሩ 5. ከወር በበለጠ ጊዜ 6. ሌላ ካለ ይጠቀስ _____ 	

ክፍል 3፡ የአገልግሎት ተደራሽነትን የሚመለከቱ ጥያቄዎች

መመሪያ፡ ከዚህ በታች ያሉት ግምትዎን መሰረት አድርገው የሚመልሷቸው የአገልግሎት ተደራሽነትን ጥያቄዎች ናቸው። ከተዘረዘሩት አማራጮች መካከል መልስዎን የያዘውን ቁጥር ያክብቡ። ጥያቄው መልስዎን በፁሁፍ እንዲያስቀምጡ የሚያዝ ከሆነ በተጠቀሰው ባዶ ቦታ ያስቀምጡ። ከመረጡት ምላሽ ፊት ለፊት የቀስት ምልክት ካለ ወደ ተጠቀሰው የጥያቄ ቁጥር ይለፉ።

የጥያቄ ቁጥር	ጥያቄ	ምላሽ	ይላቶ
301	በመኖሪያ ቤትህ እቅራቢያ የሚገኘው/በቀላሉ ልታገኘው የምትችለው የስነ-ተዋልዶ ጤና እገልግሎት ሰጪ የትኛው ነው?	<ol style="list-style-type: none"> 1. ሆስፒታል 2. ጤና ጣቢያ 3. ክሊኒክ (የግልና መንግስታዊ ያልሆነ) 4. ጤና ኬላ 5. መድሀኒት ቤቶች 6. የወጣቶች የእቻ ለእቻ የጤና አጠባበቅ ክበቦች 7. የጤና ኤክስቴንሽን ሰራተኞች 8. ሌላ ካለ ይጠቀስ_____ 	
302	ከላይ የገለጸከው/ሽኑ የስነ-ተዋልዶ እገልግሎት ሰጪ ከቤትህ/ሽ ምን ያክል ይርቃል? [በኪሎ ሜትር ይገለጻል]		
303	በእግር ለመጓዝ ምን ያክል ጊዜ ይፈጃል? [በደቂቃ ይገለጻል]	-	

ክፍል 4: የስነ-ተዋልዶ ጤና ግልጋሎት ተጠቃሚነትን የሚመለከቱ ጥያቄዎች

መመሪያ፡ ይህ የመጠይቁ የመጨረሻ ክፍል ሲሆን ጥያቄዎቹ የእርሶን የስነ-ተዋልዶ ጤና ግልጋሎት ተጠቃሚነት የሚመለከቱ ናቸው። ከተዘረዘሩት አማራጮች መካከል መልስዎን የያዘውን ቁጥር ያክብቡ። የእርስዎ ምላሽ ከተዘረዘሩት መካከል ከሌለ በተጠቀሰው ባዶ ቦታ መልስዎን ያስቀምጡ። ከመረጡት ምላሽ ፊት ለፊት የቀስት ምልክት ካለ ወደ ተጠቀሰው የጥያቄ ቁጥር ይለፉ።

የጥያቄ ቁጥር	ጥያቄ	ምላሽ	ይለፉ
401	የስነ-ተዋልዶ ጤና አገልግሎቶችን ተጠቅመህ/ሽ ታወቃለህ/ሽ?	1. አዎ፣ ተጠቅሜ አወቃለሁ 2. አይ፣ ተጠቅሜ አላወቅም →	እዚህ ጋር ይቁሙ። መጠይቁን ጨርሰዋል እመሰግናለሁ።
402	ባለፉት 12 ወራት ውስጥ በየትኛውም የአገልግሎት መስጫ ውስጥ በሚሰራ የጤና ባለሙያ ወሲብንና የስነ-ተዋልዶ ጤናን በተመለከተ የመረጃና የትምህርት አገልግሎት በማግኘት ተጠቅመህል/ሻል?	1. አዎ፣ አገልግሎቱን ተጠቅሜያለሁ 2. አይ፣ አገልግሎቱን አልተጠቀምኩም →	የጥያቄ ቁጥር 404
403	ከተጠቀምክ/ሽ በምን ላይ ያተኮረ የምክርና የመረጃ አገልግሎት ነበር? [ከአንድ በላይ አማራጮችን መምረጥ ይቻላል]	1. በወሲባዊ ጤንነት ዙሪያ 2. በወሊድ መቆጣጠሪያ ዘዴዎች ላይ 3. በአባላዘር በሽታዎችና ህክምናቸው ዙሪያ 4. በፍቃደኝነት ላይ የተመሰረተ የኤች.አይ.ቪ ኤድስ የምክርና የምርመራ አገልግሎትን በተመለከተ 5. ፅንሰ ማቋረጥን በተመለከተ 6. በቅድመ ወሊድ፣ ወሊድ እና ድህረ ወሊድን በተመለከቱ ጉዳዮች ዙሪያ 7. ሌላ ካለ ይጠቀስ_____	
404	ባለፉት 12 ወራት ውስጥ የወሊድ መቆጣጠሪያ ዘዴ ተጠቅመህ/ሽ ነበር?	1. አዎ፣ ተመቅሜ ነበር 2. አይ፣ አልተጠቀምኩም →	ጥያቄ ቁጥር 406

405	<p>ከተጠቀምክ/ሽ ምን ዓይነት የመከላከያ ዘዴ ነበር? [ከአማራጮቹ መካከል 'የወንድ ኮንዶም' ከሚለው በቀር በሌሎች የሚሞሉ ናቸው]</p>	<ol style="list-style-type: none"> 1. የወንድ ኮንዶም 2. የወሊድ መቆጣጠሪያ እንክብል 3. በመርፌ የሚሰጥ የወሊድ መቆጣጠሪያ 4. በኮንዶም ቆይታ ስር የሚቀመጥ 5. በማህጸን ውስጥ የሚቀመጥ 6. የሱት ኮንዶም 7. ሌላ ካለ ይጠቀስ_____ 	
406	<p>በፍቃድኝነት ላይ የተመሰረተ የኤች.አይ.ቪ. ኤድስ የምክርና ምርመራ እገልግሎት ተጠቅመህ/ሽ ታወቃለህ/ሽ?</p>	<ol style="list-style-type: none"> 1. አዎ፣ ተመቅሜ አወቃለሁ 2. አይ፣ ተመቅሜ አላወቅም 	
407	<p>የአባላዘር በሽታዎች የምርመራና ህክምና እገልግሎት ተጠቅመህ/ሽ ታወቃለህ/ሽ?</p>	<ol style="list-style-type: none"> 1. አዎ፣ ተመቅሜ አወቃለሁ 2. አይ፣ ተመቅሜ አላወቅም 	

ከልብ አመሰግናለሁ!

Annex V: Declaration

I, the undersigned, declare that this is my original work and has never been done in this or any other University and that all the source materials used for this thesis have been duly acknowledged.

Name: Meseret Tarekegn

Signature:

Date:

The research project has been submitted as the original work of the student with my approval as a university advisor.

Name: Dr. Terefe Degefa

Signature:

Date: