



Department of Public Health

MAGNITUDE OF YOUTH FRIENDLY REPRODUCTIVE HEALTH SERVICE
UTILIZATION AND ASSOCIATED FACTORS AMONG YOUTHS IN
SELECTED SECONDARY SCHOOL STUDENTS IN ADDIS ABABA, ETHIOPIA

By: -TILAHUN DESSIE (BSC)

A THESIS SUBMITTED TO THE DEPARTMENT OF PUBLIC HEALTH, ST.
PAUL'S HOSPITAL MILLENNIUM MEDICAL COLLEGE IN PARTIAL
FULFILLMENTS OF THE REQUIREMENT FOR DEGREE MASTER OF PUBLIC
HEALTH. IN EPIDEMIOLOGY

Oct.2022, ADDIS ABABA, ETHIOPIA



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Abstract

Background:-WHO has estimated that 70 % of the premature deaths among adults are largely due to behaviors initiated during adolescence, 17 % of young women and 14 % of young men aged between 20 and 24 years were sexually active by the age of 15 years and abortion complications occurs, 67.2 % of those seeking treatment for incomplete abortion were aged under 24 years and 26 % of the HIV positive population in Ethiopia are aged between 10 and 24 years. Therefore, this study aimed to give an insight on magnitude and factors associated with adolescent and youth friendly reproductive health service utilization among secondary schools' students in Addis Ababa.

Methods: - School-based- cross sectional quantitative study design was used from February1-30, 2021. Data were collected from a random sample of 658 respondents, using a pretested structured questionnaire. Data was cleaned, coded and entire into Epi-data version 7 and then exported to SPSS version 24 for data analysis. Odds ratios, along with 95 % confidence level, were estimated to measure the strength of association between the study variables using multivariable logistic regression. Level of statistical significance was declared at $p\text{-value} \leq 0.05$

Result: -One hundred nineteen (19.1%) of participants had already utilized adolescent and youth friendly reproductive health service at least once at the time of the survey. Participants who discussed SRH issues with parents [AOR=2.361 95% CI; 1.271, 4.385], Health professionals as source of information for respondents on AYFRHSU [AOR=5.166 95% CI; 2.158, 12.365], Service provider's knowledge on AYFRH [AOR= 3.243 95% CI; 1.339,7.855], Service fee [AOR=5.008 95% CI; 1.570, 15.975]), Separated AYFRH service hours [AOR=4.286 95% CI; 2.253, 8.153], Friendliness ofAYFRH service providers [AOR=2.743 95% CI;1.175, 6.404],condom provision service as one of the type AYFRHS [AOR= 2.206 95% CI; 1.143-4.255], and Mother's occupation of being governmental employee [AOR= 2.34 95% CI; 1.026-5.337] have shown statistically significant association with the AYFRHSU.

Conclusion: - Adolescent and youth friendly reproductive health services in public school students in study area were found to be very low (19.1%). According to this study, discussion with parents and peers on SRH issues, separated AYFRH service hours, friendliness of service providers, knowledge of service provider on SRH issues, parental occupation, mass media, health professionals, friends/peers, and schools as source of information, condom provision service as components of AYFRHS had significant influence on utilization of AYFRHS. Therefore, stakeholders' needs to give attention to the above-mentioned factors significantly associated with AYFRH services utilization while formulating strategies and policies to improve adolescent and youth friendly reproductive health service utilization.

Key words: - Adolescent, Youth, adolescent and youth friendly reproductive health service utilization, associated factors, Addis Ababa, Ethiopia.

List of tables

<i>Table1:- Sample size calculation for 2nd objective</i>	<i>15</i>
<i>Table 2:- Socio-demographic characteristics of respondents in Addis Ababa, Ethiopia. February 2021.--</i>	<i>22</i>
<i>Table 3:- Adolescent and youth friendly reproductive health knowledge of respondents in Addis, Ethiopia. February 2021.</i>	<i>24</i>
<i>Table 4:- Types of utilized AYFRHS and mentioned challenges during AYFRHSU among respondents in Addis Ababa, Ethiopia, February 2021.....</i>	<i>27</i>
<i>Table 5. Bivariate and multivariate analysis of factors affecting adolescent and youth friendly reproductive health services utilization among secondary schools' students Addis Ababa, Ethiopia, February 2021.</i>	<i>31</i>

List of figures

<i>Figure 1. Conceptual framework of the study developed by the principal investigator based on different literatures, Addis Ababa, Ethiopia.2021[45].</i>	<i>12</i>
<i>Figure 2. Schematic representation of the sampling procedure in the study Addis Ababa, Ethiopia. February2021.</i>	<i>16</i>

List of Acronyms and Abbreviations

ADIS- Acquired Immune Deficiency Syndrome

ANC- Antenatal Care

ARH- Adolescent Reproductive Health

ASRH- Adolescent Sexual Reproductive Health

AYFRH- Adolescent and Youth-Friendly Reproductive Health

AYFRHS- Adolescent and Youth-Friendly Reproductive Health Service

AYFRHSU- Adolescent and Youth-Friendly Reproductive Health Service Utilization

DHS- Demographic Health Survey

FMOH- Federal Ministry of Health

HIV- Human Immune deficiency Virus

HTD- Hypertensive Disorder

IEC- Information Education Communication

LMICS- Low Middle- Income Countries

PNC- Post- Natal Care

RH- Reproductive Health

SRH- Sexual Reproductive Health

STIs- Sexually Transmitted Infection

VCT- Voluntary Counseling and Test

WHO- World Health Organization

Table of Contents

Acknowledgment.....	ii
Abstract	iii
List of tables	iv
List of figures	v
List of Acronyms and Abbreviations.....	vi
1. INTRODUCTION	1
1.1 Background of the study.....	1
1.2 Statement of the problem.....	3
1.3 Objectives	5
1.3.1 The general objective of the study.....	5
1.3.2 The specific objectives of the study	5
1.4 Significance	6
2. Literature	7
2.1 Adolescent and youth friendly reproductive health service utilization.....	7
2.2 Factors affecting utilization AYFRHS.....	8
2.2.1 Socio -demographic and Socio-cultural factor to utilizationAYFRHS	8
2.3.2 Knowledge factors that affect YFRHS utilization	9
2.3.3 Health system factors to utilization YFRHS	10
2.4 Reason for not to utilize AYFRHS.....	Error! Bookmark not defined.
2.5 Conceptual framework of study	12
3. Method and materials	13
3.1 Study area and period.....	13
3.2 Study design.....	13
3.3 Sampling techniques	13
3.3.1 Target population	13
3.3.2 Study population	13
3.3.3 Sample population.....	13
3.3.4 Study unit.....	13

3.4 Eligibility criteria	13
3.4.1 Inclusion criteria	13
3.4.2 Exclusion criteria	13
3.5 Sample size determination.....	14
3.6 Sampling method	15
3.7 Study Variables.....	17
3.7.1 Dependent Variables	17
3. 7.2 Independent variables.....	17
3.8 Data collection process.....	17
3.8.1 Source of data.....	17
3.8.2 Data collection procedures.....	17
3.8.3 Data collection tools	18
3.8.4 Data processing and analysis.....	18
3.8.5 Data quality assurance	18
3.9 Operational definitions	19
3.10 Ethical consideration	20
3.11 Result Dissemination Plan	21
4. Result	22
4.1. Socio -demographic characteristics of participants	22
4.2 Adolescent and youth knowledge towards AYFRH.....	23
4.3 Utilization of AYFRHS among adolescent and youth.....	27
4.4. Factors associated with utilization of AYFRHS in Addis Ababa	29
5. Discussion	33
6. Strength and limitation of the study	38
6.1 Limitation.....	38
6.2 Strength	38
7. Conclusion.....	39
8. Recommendation.....	40
9. Reference	41

Appendix: I Informed consent	47
Appendix: II Structured Questionnaires	48
1. English version questionnaires	48
Appendix: II AMHARIC VERSION QUESTIONNAIRE.....	54
1.1 መግቢያ.....	54
1.2 የስምምነት-ቅጽ.....	55
Declaration: signed by both student and advisors.....	62

1. INTRODUCTION

1.1 Background of the study

According to world health organization, youth are defined as persons between 15 and 24 years of age who accounts about 17.0% of the world population, 20.0% of Sub-Saharan Africa and 17.9% of Ethiopian population^[1,2]. And also, 90% of them live in low and middle-income countries (LMICS) and many experiencing poverty and underemployment ^[3,4].

Youth health and development in a social context including families, media, schools, and neighborhoods where they live, learn, and grow also have a great impact on their health and wellbeing. And also, Social and cultural norms, particularly regarding gender, as well as ethnicity, sexual orientation, or disability, determine social patterns of behavior and can both limit and enable everyday choices, needs and expectations^[5].

Youth are confronted with decisions that can have important implications for their future risks of morbidity and mortality, due to at risk of unprotected sexual activity, Sexually Transmitted Infection, HIV/AIDS, unsafe abortion, unintended pregnancy, unmet need of family planning and excessive consumption of alcohol or tobacco use, lack of physical activity, unprotected sex and/or exposure to violence which jeopardize not only their current health, but also their health as adults, and even the health of their future children, rarely designed health services and health workers only occasionally receive specialist training in issues pertinent to adolescent sexual health ^[5,6,7,8,9,10].

Youth friendly services are services that are accessible, equitable, comprehensive, efficient, acceptable and appropriate for the youth. They are in the right place at the right price (free where necessary) and delivered in the right style to be acceptable to young people and are effective, safe and affordable. They include counseling, family planning, voluntary counseling and testing and treatment of STIs as defined by world health organization ^[11].

Despite these initiatives, the YFS utilization among the youth is still low and faces a lot of challenges related to the sensitive nature of adolescents' sex and sexuality and their perception of model health care delivery. And also young people's lack of access to health services included cost, inconvenient time or location of youth related services lack of knowledge about the available services confidentiality and perceived or real fear about reactions of health care providers. Thus, access to and utilization of AYFRHS has become a primary concern of Sexual and Reproductive Health (SRH) rights in the country^[6,14].

As part of the global approach, Ethiopia has been striving to improve adolescents and youth health through ratifying national youth policy in 2004. Following the national youth policy, the country has been developed and implemented two national adolescents and youth reproductive health strategies: the pre-2015 strategy (2007 to 2015) and the post 2015 strategy (2016 to 2020). This approach is being implemented through integrating sexual and reproductive health services into the basic health services mostly at primary health care settings as well as sometimes at secondary and tertiary level healthcare settings^[13]. Moreover, peer educators provide community- and school-based SRH information by providing more emphasis on reduction of early sexual initiation, unsafe sex, and its complications, and promotion of SRH-service utilization^[14].

1.2 Statement of the problem

Currently youth all over the world have limited access to sexual and reproductive health services yet they are at increased risk for reproductive health problems. This limited access to services could lead to unintended pregnancy, delivery related complications, high abortion rate and high STIs and HIV/AIDS incidence^[17,6].

WHO has estimated that 70 % of the premature deaths among adults are largely due to behaviors initiated during adolescence, 17 % of young women and 14 % of young men aged between 20 and 24 years were sexually active by the age of 15 years and abortion complications occur, 67.2 % of those seeking treatment for incomplete abortion were aged less than 24 years. And also, (26 %) of the HIV positive population in Ethiopia are aged between 10 and 24 years^[6].

Globally, 45 percent of all new HIV infections worldwide are occurring among young people aged 15 to 24 years. Over 500,000 young people are infected with STIs per day; approximately 80 million women have unwanted pregnancies every year, HIV/AIDS prevalence data shows that 15- to 24-year-old people have the highest rates of new HIV infection, the magnitude of unsafe abortions in young women aged 15–24 reached 45 percent, and the level of comprehensive knowledge of AIDS is being 48% for young women aged 15–24 and 43% for young men aged 15–24. Because many adolescents and youths are less informed, less experienced, and less comfortable accessing health services for RH than do adults^[15].

In Sub- Saharan African's women with obstetric fistulae accounts 35-40% of women first developed as young girls and 20% of all maternal death, most of which were occurs during such complication as HTD, pre-eclamsia and unsafe abortion due to lack of access to essential and timely antenatal care, financial constraint, insufficient information about risk pregnancy, the benefit of antenatal care, stigma in the community and disrespectful treatment by health professional ^[17].

Also in Ethiopia, Mortality and morbidity among adolescents and youth related to RH are associated with a range of health and health-related behavioral problems such as risky sexual practices, child marriage, early child bearing, unintended pregnancy, unsafe abortion and its complications and STIs including HIV can also access to and utilization of quality health services^[18]. Young people are at high risk for reproductive health (RH) problems than anyone else. Behavioral, biological, cultural and social factors are some of the reasons behind. Other than the above factors availability, accessibility and affordability of the services were also the most mentioned reasons for not using RH services among adolescents and youths^[19,20].

Young people are experiencing lack of awareness and knowledge on reproductive health issues and services according to the situational analysis done among youth in Ethiopia, reproductive health services utilization gaps are also seen among young people those are marginalized, underserved and hard to-reach including young people with disabilities^[21].

To address these barriers, in 2005 Pathfinder International and the Ethiopian Federal Ministry of Health (FMOH) partnered to introduce and scale up youth-friendly services (YFS) in the Ethiopian public health system. YFS an evidence-based approach to reducing barriers to service uptake among young people lay the foundation for Ethiopia's health system to meet the SRH needs and rights of the country's largely underserved adolescent and youth population^[22].

1.3 Objectives

1.3.1 The general objective of the study

To assess magnitude of youth-friendly reproductive health service utilization and associated factors among youths in selected secondary schools' students in Addis Ababa, Ethiopia. 2022

1.3.2 The specific objectives of the study

1. To determine magnitude of youth-friendly reproductive health service utilization among youths in selected secondary schools' students in Addis Ababa, Ethiopia. 2022
2. To identify factors associated with utilization of youth friendly reproductive health service among youths in selected secondary schools' students Addis Ababa, Ethiopia. 2022

1.4 Significance

1. The study on utilization of youth friendly reproductive health services is the key for the improvement in the quality of life of the adolescents and youths. The finding acquired from this study would be scaled up the understanding of pattern of demand and uptake of reproductive health services among secondary school students in Addis Ababa.
2. Health care planners might use information generated from the study to improve service delivery dimension and quality among secondary school students in Addis Ababa.
3. It will contribute in the evaluation of the progress on implementation of adolescent and youth reproductive health strategies made by health facilities and schools.
4. The findings of this study will also serve as a reference for giving intervention to the health care providers and others for conducting further researches.
5. In addition to, it will have special importance for health care providers to serve as base line information for filling gaps of the actual practices on adolescents and youth friendly reproductive health services.

2. Literature

2.1 Adolescent and youth friendly reproductive health service utilization

A community-based study conducted in Mandalay City, Myanmar, revealed that 67% participants had ever utilized at least one type of RH service. The most utilized service was family planning 70%^[24]. The survey conducted in India showed that reproductive health service utilization Only 31% of young married women without children used contraceptives to delay first birth and 30% unmarried young women seek abortion services ^[25]. On the contrary to this, study conducted in Malawi, majority of the respondents (62%) was visiting the YFRHS and the services mostly provided were HIV testing, general counseling and contraceptives ^[11].

A finding from an institutional based study conducted in Nigeria revealed that (51%) of the study participants had ever used reproductive health services while 29.7% gained in the last six month preceding the survey. The main sources of information was schools(29.7%), followed by radio (24.5%) and health professionals (21.4%). The services rendered in the facilities as reported by respondents health education (60.7%), family planning (60.2%), antenatal (57.1%) and VCT services. Private hospitals (43.1%) followed by government health facilities were the sites where most participants gained access to SRH services. However, a few (3.3%) patronized traditional health practitioners ^[26].

Community-based studies from Ethiopia revealed that 41.1% of the participants use youth friendly reproductive health services, of which, family planning, STIs and abortion care were accounts 17.6%, 5%, and 3.1% respectively^[27]. Findings from the community based study conducted in Albuko Woreda, South Wollo Zone, Amhara region showed that 34.1% of the respondents utilized youth friendly service and the services used by the majority of participants include receiving information about sexual issues, family planning counseling, and recreational services 75.8%, 73% and 68% respectively ^[28].

A community-based study conducted in Machakel, district, East Gojam Zone, Amhara Region only 21.5% of the study participants used reproductive health service. The services were used by the majority of the participants are STIs treatment and family planning which were 23.1% and 30% respectively ^[29]. And also, institutional- based study in Mecha district Northwest Ethiopia showed that (18.4%) of study participant used health service and (97.3%) of respondents had awareness on SRH issues, (76.5%) of health professionals were the main source of information for the study participants^[30].

Another study conducted with the same Zone in Awabale district also showed that only 41.2% of the study participants had utilized sexual and reproductive health services. The mostly delivered services were IEC, contraceptives& condoms, VCT, STIs & abortion and post abortion care(51.1%,25.4%,10.4%, and 2.6%) respectively [31].

A community-based study conducted in Badwachew woreda 29.4% [32], Hadiya zone, South Region 38.5% of the respondents had utilized the reproductive health service. Among the most common family planning services delivered pills, injectable and condoms were 64.8%, 47.7% and 40.6% respectively[33].

A finding from the community-based study in Harar on a sample of 845 study participants showed that 64% of the participants had utilized youth friendly service utilization. The services which were utilized by the majority of the participants were STIs, counseling, and condom were consisted of, 57.4%, 44.7% & 53.1% respectively. And a similar study done in Addis Ababa showed that 42% had utilized one of youth friendly services[6,23].

According to the study done in Bahir-Dar and Woreta town 32%, 26.4% of youths had utilized youth friendly service utilization respectively[34,35]. Another study also done in Goba town and showed that is 71.4% and 67.3% of the services were accounted family planning and VCT services respectively [8].

2.2 Factors affecting utilization AYFRHS

2.2.1 Socio -demographic and Socio-cultural factor to utilization AYFRHS

The community based studies in Awabel district, Goba town and Gondar showed that parental communication and co-residence with parents were significantly associated with the use of VCT and family planning services and reproductive health service utilization respectively. According to the finding from the community based study in Machakel district, east Gojjam zone, Amhara region, sex, age, being in school and educational status were significantly associated with reproductive service utilization [31,8,36].

An institutional based study conducted at Goba town having gain a pocket money, grade level, co-residence and parental discussion were significantly associated with utilization of youth friendly sexual and reproductive health service. A study in Bahir Dar and Jimma showed that age 20-24 is significantly associated with reproductive health service utilization. However, a study conducted in Jimma demographic and socio-economic variables such as education level and schooling did not show statistically significant association with ever or current use of RH services [8,34,27].

2.3.2 Knowledge factors that affect AYFRHS utilization

According to an institutional based study conducted from Nigeria awareness of RH services and discussion of SRH issues with parents were associated with utilization of SRH services [26]. A study in Machakel district, East Gojjam zone, Amhara region more than two-third (67%) of the adolescents had awareness about reproductive health. Age, living arrangement and economic status were associated with reproductive awareness. Another study in Gojjam revealed that 72% of the participants had heard about VCT services. RH services utilization was associated with IEC, adolescent-parent discussion of SRH issues and RH knowledge. And also, the likelihood of services uptake was about 4 times higher where there was adolescent-parent communication regarding RH issues [29].

A study in Jimma showed that significant association was observed between utilization and knowledge about reproductive health services and source of information. In addition to this, 82.2% of youth reported that they knew where YFS are delivered [27].

A community based study in Goba town awareness of family planning and VCT services were 9 and 3 time more likely to ever use RH services. Therefore, Adolescents who had interaction with family and peers and had access to pamphlets and posters as source of information for RH services were more likely to be ever used. Therefore, 92.2% and 93.7% of the respondents had heard about family planning and VCT services respectively [8,6].

According to the study conducted in Harar using friends and schools as a source of information about reproductive health service were significantly associated with youth friendly service. A study in Mekelle showed that 69.1% of the respondents utilized youth friendly services whereas 47.1% reported that they did not know where to go as a main reason for not using YFS. 89.4% of the respondents had information about YFS of which 35.5% heard from media. In addition to this, 86.1% of the respondents heard about sexual and reproductive health information and 94 % of the participants had information about VCT And also similar study conducted in Addis Ababa in 2016 showed that 91% of study participants had knew STIs [48,37].

2.3.3 Health system factors to utilization AYFRHS

The study conducted in South Africa and a study in Burkina Faso, Ghana, Malawi, Uganda the health system factors which affected reproductive health service utilization were including weak referral system, long distance of the health facility and lack of financial resource^[38,39].

According to the study conducted in Bahir-Dar results revealed that 13.6% of the participants did not access health services nearby and 15.5% could not afford for payment. A study conducted on health provider in Ethiopia indicated being married, lower educational level, being a health extension worker and participants that do not use family planning were significantly associated with provision of sexual and reproductive health services to adolescents ^[34,40].

The findings of the study from Dejen district in Amhara Region, Ethiopia on a sample of 690 young participants studied about utilization and satisfaction of YFRHS, (45.4%) used health services at the last one year; among these, (60.7%) were satisfied. Physical proximity, drug availability, availability treatment in separate room, checked all adolescents problem, treated with respect and opportunity to explain feeling were predictors of satisfaction^[41].

A study conducted to evaluate youth friendly services (YFS) in Shanghai obtained that there was good infrastructure, equipment, staff and good environment at the city, district, and school level, few amount of youths used YFRHS because of the existence of insufficient publicity and inconvenient time ^[42].

According to a community based study conducted in Matawara district, Tanzania many health facilities do not have skilled service providers on sexual reproductive health rights. Furthermore, Girls start sexual intercourse between 9 and 12 years the services sought to included; education, family planning and voluntary counseling and testing for HIV. Because of the existence of lack of privacy, confidentiality, and the service were inaccessibility^[44,11]. A project conducted in Malawi states that the factors discourage the utilization of youth friendly service were Long distances to the health facility, Lack of knowledge about the service and where they are delivered, fear of being seen by parents, Lack of youth participation in the design and implementation of the activities.

A study in Burkina Faso, Ghana, Malawi and Uganda the major challenges for utilization of reproductive health service were a substantial proportion of sexually-active adolescents do not know of any source to obtain contraception or get STIs treatment, and financial cost remain common barriers to getting services [39].

An institutional based study conducted in Bahir Dar revealed that the barriers in utilizing reproductive health services, for 32% of the students were due to inconvenience hours and 28.5% were due to fear of being seen by parents or people whom they know, these one of the most mentioned reasons as barriers of service [34,31]. According to the community based study done in Awabale district, East Gojjam Zone Amhara Region, the main reason for not using reproductive health 36.2% were cost of service and commodities.

2.5 Conceptual framework of study

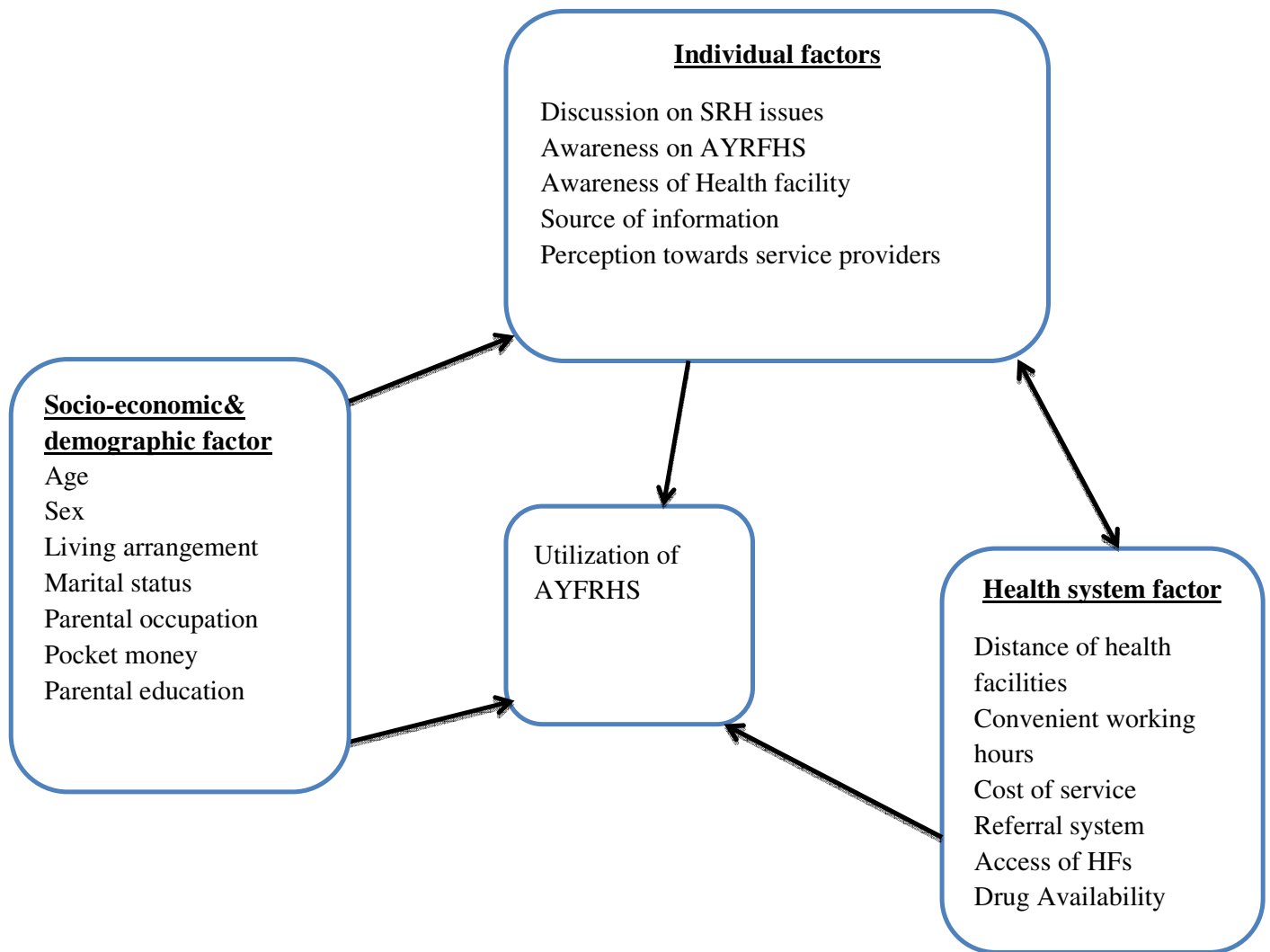


Figure1:- Conceptual framework of the study developed by the principal investigator based on different literatures, Addis Ababa, Ethiopia. 2021 ^[45].

3. Method and materials

3.1 Study area and period

The study was conducted in Addis Ababa from February 1-30/2021. Addis Ababa is the capital city of Ethiopia. The city comprises 11 sub-cities and 117 Woredas'. According to the Addis Ababa Educational bureau report, there are 87 public secondary schools, 65 private secondary schools, 25 international secondary schools were providing educational service to the total population. According to the projection by the Central Statistical Agency (CSA), the total population of Addis Ababa is estimated to be 4,794, 000, of these 1,385,706 adolescents and youths of age 15-24 in 2021^[46].

3.2 Study design

A school- based cross-sectional study design was conducted

3.3 Sampling techniques

3.3.1 Target population

All secondary schools youths attending their regular public schools in Addis Ababa

3.3.2 Study population

All public regular secondary schools youths who were selected and attending their school's during the study period at in Addis Ababa

3.3.3 Sample population

All public regular secondary schools youths who were took part on this study in Addis Ababa

3.3.4 Study unit

All youths

3.4 Eligibility criteria

3.4.1 Inclusion criteria

All public regular secondary schools youths who were attending their class during the data collection period were included in the study

3.4.2 Exclusion criteria

Students who were a member of youth center, HIV/ADIS Clubs and had an exposure for mini-media in the schools were excluded from this study.

3.5 Sample size determination

Sample size for Specific Objective One (magnitude of adolescent and youth friendly reproductive health service utilization)

The sample size was calculated by using the single population proportion formula and considering the following assumptions; 38.5% of adolescents and youth friendly reproductive health service utilization in Hadiya zone, Ethiopia, 2016^[32]. 95% confidence interval (CI), 5% margin of error, 1.5 design effect and 10% none response rate.

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

Were,

n = required sample size,

$Z_{\alpha/2}$ = critical value for normal distribution at 95% CI = 1.96

P = 38.5%

d = margin of error/degree of precision) = 0.05

$$n = \frac{(1.96)^2 (0.385) (1-0.385)}{(0.05)^2} = \underline{\underline{364}}$$

By considering 1.5 design effect of and 10% non-response rate which 36.4

$$= (400 \times 1.5)$$

$$= \underline{\underline{600}}$$

Sample size for Specific Objective Two (associated factors)

The sample size for the 2nd objective was calculated by double population proportion formula using Epi-info for windows version 7.0 based on the following assumptions:

Confidence interval = 95%

Power of test = 80%

Ratio (Exposed: unexposed) = 1:1

By considering getting pocket money for daily expense, RH service facility near to their home and Grade levelas factor from previous study ^[35]

Table 1:-Sample size calculation for 2nd objective

No_	Variable	Calculated sample	calculated Sample +10%	Remark
1	pocket money for daily expense	598	657.8 = 658	
2	RH service facility near to their home	322	354	
3	Grade level	172	189	

Using Epi-info for windows version 7.0, the total sample size estimated is **598**

Adding 10% non-response rate which is **59.8**

The estimated sample size is **658**

Since all sample computed for the second objectives were greater than the sample size calculated for the first objective. Therefore, the final sample for this study was **658**

3.6 Sampling method

In this study multi- stage sampling technique was employed and the primary stage sampling unit (PSSU), 3 sub-cities were selected using lottery method and then the secondary stage sampling unit (SSSU), six secondary schools were selected by using lottery method. In the third stage sampling unit by using simple random sampling two sections were selected from each grade (9-12) from the total of 24 grades and 112 sections. Finally students from each section was been selected by proportional allocation based on the number of students using systematic random sampling method. By using Students list from selected section were used as sampling frame and to find the first interval.

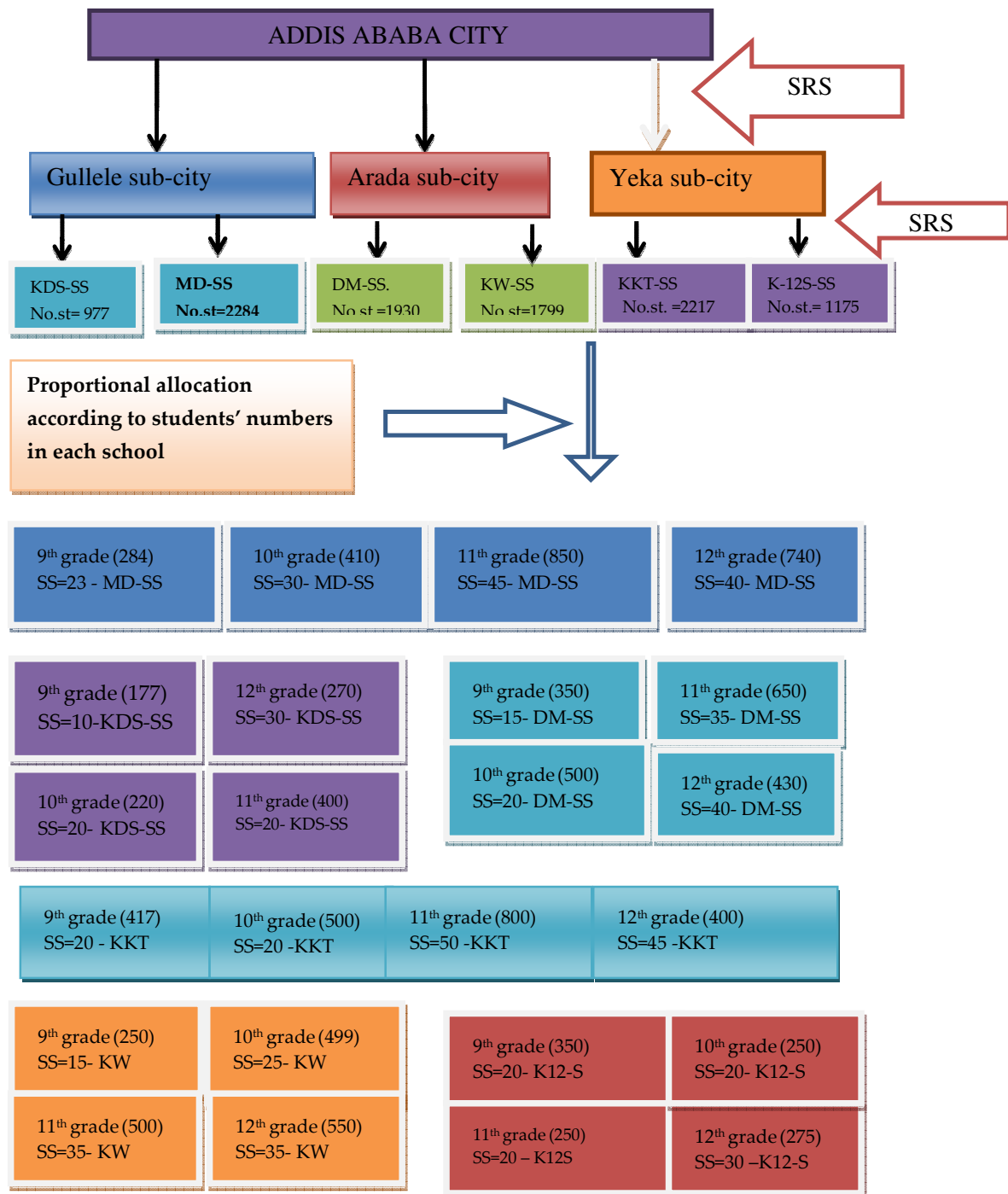


Figure 2:- Schematic representation of the sampling procedure in the study Addis Ababa, Ethiopia. February 2021.

Footnote: - KDS- Kechene-Deberselam, MD- Medehanialem, DM-Dagimawi Menelik, KW- Kalemwork, KKT- Kokebtsiba, K12S- Kefetegna -12 school and SRS- Simple random sampling

3.7 Study Variables

3.7.1 Dependent Variables

Utilization of AYFRH services

3.7.2 Independent variables

The socio-demographic factors: Age, Sex, , Father's education, Mother's education, and parental occupational status, educational level of adolescents and youths, Living arrangement, Parental educational status, Pocket money and Marital status.

The individual factors: Awareness about the AYFRH services, awareness of adolescent and youth friendly reproductive health facility, Source of information, perceived risk for HIV/STI, or pregnancy, ever discussing reproductive health issues (with, parent, health worker, partner/ peers and teacher), use of AYFRHS, perception to health facilities and service providers.

Factors related to AYFRH Services delivery/Health system factors: Health worker attitude, distance of health facility, inconvenient opening hours/ health facility working hour, privacy and confidentiality, availability of adolescent and youth friendly reproductive health service, Payment for adolescent and youth friendly reproductive health services.

3.8 Data collection process

3.8.1 Source of data

The primary data was collected using self-administered, structured questionnaire with the help of trained health professionals and research investigator. The closed-ended questions were used to collect information from the respondent. It includes the personal information, health facility related, type and utilization of adolescent and youth reproductive health service and service delivery factors related questions.

3.8.2 Data collection procedures

Quantitative data was collected using self-administered, pretested and structured questionnaire which was adopted from different literatures. The questionnaire was contained the adolescent and youth's socio-demographic characteristics, awareness about and perception toward AYRRH service providers, factors associated with AYFRHS utilization and parental discussion. It was initially prepared in English and translated into Amharic, the local language, and finally retranslated back to in English. Two BSC level health professionals were recruited and trained as a data collectors and supervisors, respectively. The data collection training was given for one day

concerning about the aim of the study, contents of the questionnaire, definition of terms in the questionnaire, issues of confidentiality and privacy.

3.8.3 Data collection tools

Self-administered questionnaires were used to collect the data from personal and the questionnaire was adapted by combining John Cleland's illustrative questionnaire for interview survey with young people's [49]. And several literatures reviewed to achieve research objective.

3.8.4 Data processing and analysis

Collected data was entered in to Epiinfo7 version software and then exported to SPSS version 24 for data analysis. Descriptive statistics was computed and summarized after checking the distribution of the data. Continuous variables were expressed as mean +_SD. Categorical variable were expressed as numbers (percentages). Cross-tabulation with frequencies and percentages of each variable was performed to explore the relationship between the dependent and independent variables. Bivariate logistic regression was used to select associated independent variables for multiple logistic regressions. Multivariable logistic regression model was fitted to predict the utilization of AYFRHS and their determinants. First, bivariate analysis was done to identify candidate variables for multivariable logistic regression and those variables with a P-value ≤ 0.25 was included in the multivariate analysis to identify their association with the dependent variables. Significant association was declared for variables with a P-value ≤ 0.05 during multivariable logistic regression at 95% CI.

3.8.5 Data quality assurance

To assure the quality of data, training was given for the data collectors and supervisors that including briefing on general objective of the study, and detail discussion on the contents of the questionnaires. The overall activities of data collection was supervised and coordinated by principal investigator. The collected data were reviewed and checked for completeness and consistency on- site in the schools by the supervisors and investigator before data entered by the research team. Pre-test was conducted out-side the study area with the same respondent characteristics of 5% from the whole sample size and modification to wording and content of questions were made based on the results from the pre-test.

3.9 Operational definitions

Youth: Age between 15-24 years

Adolescents and Youth-friendly reproductive health services: It will be measured by the available component of services within AYFRHS health facility in the selected sub-cities (family planning and condom use, VCT, STIS diagnosis and treatment, pregnancy test, antenatal care, post-natal care, abortion care, post abortion care, PNC)

Adolescents and Youth friendly reproductive service utilization:-it was measured through the dichotomous response (Yes/No) by asking whether a participant had utilized one or more of SRH service components (VCT, family planning and condom use, STIS treatment and diagnosis, pregnancy test, antenatal care, post-natal care, abortion, post abortion care, information, education, and counseling) within the last 12 months. The positive response was further validated with question on the type of SRH service utilized. A positive (“1 for Yes”) response to any one of these service was regarded as service utilization and a negative (“0 for No”) response to any one of these was regarded as not service utilization.

Pocket money: A small amount of money given to child by their parents or other, typically on a regular basis.

Secondary school students: Those students who are attending in grades 9 -12 in this study.

Adolescent and youth preferences: Preference of adolescent and youth in relation to health care facility and workers and time for using AYFRH services.

Knowledge of RH: - It was measured by asking participants whether they were aware of SRH service components or not. Then SRH knowledge was assessed through 52-item scale on knowledge of SRH service components and the sum of score ranging from less or equal to 25 questions were categorized as not knowledgeable while those with a result greater 25 questions were labeled as knowledgeable.

Discussion on SRH issues: - Study participants who ever discussed/have a talk on at least one of RH related topics (Condom, VCT for HIV, STIS/HIV/AIDS, unwanted pregnancy, Contraception, abortion) with health care provider/ peer/parents or sexual partner.

3.10 Ethical consideration

Ethical clearance was obtained from Saint Paul's Hospital Millennium Medical College and Official permission was granted from the Addis Ababa public health research and emergency directorate, Selected Sub-city Education Office, Schools' directors. Moreover, an informed-consent and assent were obtained from each study subject depending on the participant's capability to consent.

3.11 Result Dissemination Plan

Result will be communicated to Saint Paul's hospital millennium medical college, school of public health and other governmental and non-governmental organization. Effort will be made to publish the study findings in peer-reviewed journals.

4. Result

4.1 Socio -demographic characteristics of participants

Six hundred twenty-five- eight (n= 658) adolescents and youths participated in this study, out of which six hundred twenty-three (n=623) participants had given a complete response resulting in 95% response rate. Three hundred fifty- eight (57.5%) were females and two hundred sixty- five (42.5%) were males. Five hundred forty- nine (88.1%) of the respondents were between 15 and 19 with a mean age of 17.6 (+/-1.4years). Five hundred seventeen (83%) singles. Regarding the educational status of their parents' four hundred fifteen (66.6%) of their mothers and four hundred sixty-seven (75%) of their fathers have attended primary level education respectively. Occupation of respondents' mothers and fathers were two hundred ninety- nine (48%) was housewife and two hundred seventy-two (43.7%) and private business owner respectively (Shown Table 2).

Table 2:- Socio-demographic characteristics of respondents in Addis Ababa, Ethiopia. February 2021.

Variables	Category	Frequency(n= 623)	Percent
Age in group	15-19	549	88.1
	20-24	74	11.9
Gender	male	265	42.5
	female	358	57.5
Marital status	Single	517	83.0
	Married	10	1.6
	Have a boy friend	35	5.6
	Have a girl friend	61	9.8
Educational status of respondents	9-10	148	23.8
	11-12	475	76.2
Living arrangement of respondents	Mother and Father	400	64.2
	Mother	107	17.2
	Relative	86	13.8
	Father	21	3.4
	Alone	9	1.4
Own pocket money	yes	188	30.2
	no	435	69.8
Source of pocket money	My friend	4	2.1%
	My parents	130	68.4%
	My relative	13	6.8%
	Myself	43	22.6%
Mother's educational status	Illiterate	142	22.8
	Read and write	20	3.2
	Primary level	237	38.0
	Secondary level	178	28.6

	Higher level	46	7.4
Father's educational status	Secondary level	278	44.6
	Primary level	189	30.3
	Illiterate	81	13.0
	Higher level	64	10.3
	Read and write	11	1.8
Mother's occupation	Governmental employee	119	19.1
	NGO employee	67	10.8
	Private business owner	138	22.2
	Housewife	299	48.0
Father's occupation	Daily laborious	80	12.8
	NGO employee	105	16.9
	Governmental employee	166	26.6
	Private business owner	272	43.7

4.2 Adolescent and youth knowledge towards AYFRH

Respondents' reproductive health knowledge was derived from a summary score of respondents based on the correct answers they provided for 52 adolescent and youth friendly reproductive health related questions posed; mean AYFRH knowledge score of respondents was 284 with (SD= 94.3) was used to classify the respondents knowledgeable and non-knowledgeable. Accordingly, 284(45.6 %) had knowledge score equal or above the mean score while 339(54.4%) had knowledge score less than the mean score regarding their adolescent and youth friendly reproductive health.

Among the study participants, 446 (71.6%) had information about adolescent and youth-friendly reproductive health services provided. Most important sources of information were mass media 272 (43.7%) and friend/peers 120(19.3%) show on (Table 3). And the most important component of adolescent and youth-friendly reproductive health services reported regarding the services rendered in health facility were 424(68%) mentioned family planning service and 281(45%) VCT (Table 3.) Also, the most known contraceptive method reported by respondents were Implants 440 (76.9%) followed by Pills 379(66.3%) and 546 (87.6%) having heard of STIs and 369 (59.2%) HIV was the commonly mentioned STIS and 399 (64%) burning during urination were sign and symptoms of STIs reported by respondents respectively.

And the most frequently mentioned mode of STIs transmission by respondents were 525 (84.3%) unprotected sex (Table 3).Majority of respondents 559 (89.7%) identified the facility providing the service as governmental health centers followed by 318 (51%) who identified it as hospitals.

293 (47%) of adolescents and youths had awareness on presence of AYFRHS in their living area. Regarding distance of health facilities from house of respondents 331 (53.1%) answered that it was far (takes 60 min or by taxis) and 290 (46.5%) replied that it was near (takes 30 min or less walking)

Table 3:- Adolescent and youth friendly reproductive health knowledge of respondents in Addis, Ethiopia. February 2021.

Variables	Response	Frequency (n=623)	Percent
Condom use prevent unwanted pregnancy	yes	578	92.8
	no	45	7.2
Unprotected sexual intercourse causes STDs	yes	598	96.0
	no	25	4.0
Agree that unprotected sexual intercourse cause RTIs	yes	584	93.7
	no	39	6.3
Teenage pregnancy cause maternal and infant death	yes	547	87.8
	no	76	12.2
You know about any F/P methods	yes	564	90.5
	no	59	9.5
List types of F/P methods	Condom	325	56.8
	Implant	440	76.9
	Injectable	311	54.4
	IUCD	331	57.9
	Pills	379	66.3
Ever heard about STIs	yes	546	87.6
	no	77	12.4
Know list of STIs	Syphilis	356	64.4
	Gonorrhea	354	64
	Chancroid	261	47.2
	HIV	369	66.7
know Signs and symptoms of STIs	Genital ulcers	294	54.4
	Itching	213	39.4
	Genital discharge	190	35.2
	Burning during urination	398	73.7
Know ways of STIs and HIV transmission	Contact with infectious blood	175	28.8
	Mother to child	128	21
	Unprotected sex	525	86.5
	Using sharp material with infected person	123	20.2
Ways of protecting yourself from STIs & HIV	Using condom	398	66.8
	Being faithful	295	49.5
	Abstinence	434	72.8
	Avoiding sharing of	249	42.8

	needles		
	Avoiding mother to child transmission	190	32
	Limiting sexual partner	62	10.4
Knowledge score	Knowledgeable	284	45.6
	Not knowledgeable	339	54.4
Ever heard about AYFRHS	yes	446	71.6
	No	177	28.4
	Parents	79	12.7
Source of information about AYFRHS	Friends/peers	120	19.3
	Mass media	272	43.7
	Posters/pamphlets	40	6.4
	Partner/husband/wife	3	0.5
	Health professionals	56	9
	Schools	87	14
Know about types of AYFRHS	F/P service	404	64.8
	Pregnancy testing and care	213	34.2
	VCT for HIV	271	56.5
	STIs screening and treatment	114	18.3
	Condom provision service	162	26
	IEC service	121	19.4
	Cx.Ca. immunization	150	24.1
	Abortion service	63	10.1
	Post abortion care	30	4.8
Ever discussed about SRH issues with parents	yes	208	33.4
	no	415	66.6
With whom you discus most	Both parents	497	79.8
	Mother only	103	16.5
	Father only	23	3.7
Ever discussed about SRH issues with peers	yes	290	46.5
	no	333	53.5
Know right to use RH service by Youths	yes	537	86.2
	no	86	13.8
Ever utilized AYFRHS	yes	119	19.1
	no	504	80.9
Where to get AYFRHS	Health center	559	56.9
	Hospital	318	32.4
	Drug shops	98	10
	Traditional healers	7	0.7
AYFRHS in your living area	yes	293	47.0

	no	330	53.0
Distance of HF's per minute	30	290	46.5
	60	333	53.5
You paid for service	yes	24	3.9
	no	599	96.1
Convenient location of AYFRHS delivery point	yes	169	27.1
	no	454	72.9
Inviting surrounding of AYFRH service delivery point for Youths	yes	130	20.9
	no	493	79.1
Separate hours of AYFRHS for Youths	yes	133	21.3
	no	490	78.7
Convenient opening hours of HF's	yes	134	21.5
	no	489	78.5
Confidentiality of information	yes	179	28.7
	no	444	71.3
Consultation time	Too short	75	12.0
	Too long	44	7.1
	About right	116	18.6
	Don't know/remember	388	62.3
Received information and service as preferred	yes	168	27.0
	no	455	73.0
Service provider tell place of next visit	yes	112	18.0
	no	511	82.0
Convenient working hours of HF's	yes	175	28.1
	no	448	71.9
Private examination room	yes	135	21.7
	no	488	78.3
Physical examination done during your visit	yes	107	17.2
	no	516	82.8
Private examination room	yes	135	21.7
	no	488	78.3
Appointment for next visit	yes	127	20.4
	no	496	79.6
Whom you talk/see in the HF's during your last visit	Doctor	66	10.6
	Nurse	56	9.0
	Midwife	8	1.3
	Peer educator/counselor	36	5.8
	Don't know/remember	457	73.4

4.3 Utilization of AYFRHS among adolescent and youth

Out of 623 adolescent and youth respondents, 119(19.1%) participants were ever utilized one of adolescent and youth-friendly reproductive health services prior to the survey. One hundred nineteen (19.4%) of the respondents receive condom provision service and 108(17.3%) IEC on AYFRH issues (Table 4). And also the study revealed that majority of respondents 207(33.2%) was satisfied with the service provider and hospitalities. However, the most reported reasons for the missed opportunity to utilize the AYFRH service in health facilities were embarrassment, location of health facility, and inconvenient opening hours of health facilities, poor quality of service, lack of privacy at health facility, attitude of service providers and service provider judgmental approach.

Table4:- Types of utilized AYFRHS and mentioned challenges during AYFRHSUamong respondents in Addis Ababa, Ethiopia, February 2021.

Variables	Category	Frequency(n= 623)	Percent
AYFRH service provider's approaches during service delivery			
Knowledgeable	yes	197	31.6
	no	426	68.4
Respectful	yes	189	30.3
	no	433	69.5
A good communication	yes	160	25.7
	no	463	74.3
Care about privacy and confidential	yes	195	31.3
	no	428	68.7
A good listener	yes	163	26.2
	no	460	73.8
Friendly	yes	156	25.0
	no	467	75.0
Able to help you	yes	182	29.2
	no	441	70.8
Utilized adolescent and youth friendly reproductive health services components mentioned by respondents			
Condom provision service	yes	121	19.4
	no	502	80.6
STIs diagnosis and treatment service	yes	79	12.7
	no	544	87.3
IEC service on	yes	108	17.3

AYRH issues	no	515	82.7
Pregnancy testing and caring service	yes	69	11.1
	no	554	88.9
VCT service for HIV	yes	102	16.4
	no	521	83.6
F/P services	yes	49	7.9
	no	574	92.1
Cx. Ca. screening and management	yes	66	10.6
	no	557	89.4
Abortion service	yes	31	5.0
	no	592	95.0
Post abortion care service	yes	26	4.2
	no	597	95.8
Mentioned reason not utilizing AYFRHS in HF's			
Inconvenient opening hours of HF's	yes	65	10.4
	no	558	89.6
Inadequate medical equipment	yes	52	8.3
	no	571	91.7
Poor quality of services	yes	60	9.6
	no	563	90.4
Location of health facilities	yes	69	11.1
	no	554	88.9
Lack of privacy in the health care facilities	yes	54	8.7
	no	569	91.3
Embarrassment associated with Youths service	yes	83	13.3
	no	540	86.7
Service provider judgmental approach	yes	36	5.8
	no	587	94.2
Too young	yes	324	52
	no	299	48

4.4. Factors associated with utilization of AYFRHS in Addis Ababa

On the bivariate analysis age, marital status, living arrangement, mother's education and occupation, father's occupation, discussion with parents and peers on SRH issues, media, health professional, schools and friend/peers as source of information, awareness of condom provision, post abortion care, pregnancy testing and family planning service as component of service, awareness of AYFRHS and STIs, know right to use AYFRHS, closeness of AYFRHS HF, friendliness AYFRH service providers, service provider's knowledge on SRH issues, separated AYFRH service hours and service fee had significant association with utilization while respondents' gender, grade level, own pocket money, father's education and posters/pamphlets did not show statistically significant association with utilization.

Respondents' age between 15-19 years was four times more likely to use AYFRH service than age between 20-24 years (COR=4.205 95% CI: 1.863-9.494) and their marital status being single respondents were twice more likely to use AYFRH service than their counterparts (COR= 2.157 95% CI; 0.823-5.728). Respondents having health facilities near to their home, separate AYFRH service hours and with free AYFRH service fee were less likely to use the service than those who did not (COR= 0.649 95% CI; 0.357-1.181, COR= 0.312 95% CI; 0.138-.705 and COR= 0.282 95% CI; 0.079-1.010) respectively.

Adolescents and youths who have discussion with their peers were more likely to utilize than the counterparts (COR= 2.352 95% CI; 1.162-4.758) also those respondents who discussed with their parents were less likely to use the service than those who did not (COR= 0.374 95% CI; 0.186-0.752). Respondents' mother with higher level of education and being governmental workers were less likely to use AYFRH service than the counterparts (COR= 0.442 95% CI; 0.127-1.532) and (COR= 0.416 95% CI: 0.174-0.998) respectively. And also those respondents' father being NGO workers were four times more likely to utilize than those who did not (COR= 4.351 95% CI; 1.127-16.798). Respondents living alone were more likely to use a service than those living with their parents (COR=3.308 95% CI; 0.501- 17.64).

Respondents who answered health professionals as source of information about YFRHS were less likely to use the service than those who did not (COR=0.213 95% CI; 0.082-0.548), mass media as source of information about AYFRHS were less likely to use the service than those who did not (COR= 0.455 95% CI; 0.215-0.964), friends/peers as source of information about AYFRHS were less likely to use the service than those who did not COR= 0.389 95% CI; 0.172-0.880). And also, schools as source of information about AYFRHS were less likely to use the service than those who did not (COR=0.43 95% CI; 0.188-0.985) respectively.

Adolescents and youths who have heard about AYFRHS were more likely to utilize a service than those who have not heard (COR=2.007 95% CI: 0.732-5.503) while those who have heard about STIs were less likely to utilize the service than those who did not heard (COR= 0.395 95% CI; 0.11-1.417). Respondents who know that they have the right to use AYFRH services were three times more likely to use YFRHS than those who didn't. (COR=2.935 95% CI; 1.121, 7.681). Respondents who mentioned post abortion care as one of the service provided in AYFRHS were more likely to use the service than those who did not (COR=3.96 95% CI: 0.789-, 19.88), family planning as one of the service provided in AYFRHS were more likely to use the service than those who did not (COR= 1.7 95% CI; 0.872-3.189).

While those who identified condom provision as one of the service provided were less likely to use than those who did not (COR=0.586 95% CI: 0.277- 1.240). Respondent who believed that service provider as knowledgeable on AYFRH issues were less likely to use the service than those who did not (COR=0.483 95% CI: 0.149-1.568). And also those who identified friendliness of service provider were less likely to use the service than those who did not (COR= 0.34 95% CI; 0.111-1.041).

On multivariate analysis respondent's age, parental occupation, discussion with parents on SRH issues, discussion with peers on SRH issues, health professionals, mass media, friends/peers and schools as source of information about AYFRHS, separated AYFRH service hours, service fee, knowledge of service provider on AYFRHS, friendliness of AYFRH service providers, awareness of services provided in AYFRHS namely;- condom provision service where found to have statistically significant association with utilization.

Younger respondents (15-19 years) were 79% less likely to use AYFRH services than older ones (AOR=0.256 95% CI; 0.119-0.549). Service utilization was five times for respondents who mentioned health professionals as source of information for AYFRH service than those who did not (AOR=5.166 95% CI; 2.158-12.365).The odds of AYFRHS utilization was two times higher for adolescents who mentioned condom provision service as one of the services provided (AOR=2.206 95% CI; 1.143-4.255)

Table5. Bivariate and multivariate analysis of factors affecting adolescent and youth friendly reproductive health services utilization among secondary schools' students Addis Ababa, Ethiopia, February 2021.

<u>Variables</u>	<u>Utilization of AYFRHS</u>			
	<u>Yes</u>	<u>No</u>	<u>COR (95% CI)</u>	<u>AOR (95% CI)</u>
			<u>With p-value</u>	<u>With p-value</u>
Age				
15-19	91(76.47%)	458(90.87%)	4.205(1.863-9.494)*	0.256 (0.119-0.549)**
20-24	28(23.53%)	46 (9.13%)	1.00	1.00
Mother's occupation				
Government employee	32 (26.9%)	87 (73.1%)	0.416 (0.174-0.998)*	2.34 (1.026-5.337)**
NGO employee	58 (19.4%)	241(80.6%)	1.00	1.00
Private business owner	21(15.22%)	117(84.78%)	1.00	1.00
House wife	8 (11.94%)	59(88.06%)	1.00	1.00
Father's occupation				
Private business owner	56(20.6%)	216(80.4%)	1.00	1.00
Governmental employee	34(20.48%)	132(80.22%)	4.351 (1.127-16.798)*	0.247(0.072-0.851)**
NGO employee	14 (13.33%)	91(86.67%)	1.00	1.00
Daily laborious	15 (18.75%)	65(80.25%)	1.00	1.00
Ever discussed about SRH issues with parents				
Yes	57 (27.4%)	151 (72.4%)	0.374(0.186-0.752)*	2.361(1.271-4.385)**
No	62 (14.94%)	353 (85.1%)	1.00	1.00
Ever discussed about SRH issues with peers				
Yes	65(48.87%)	68 (51.13%)	2.352 (1.162-4.758)*	0.504 (0.263-0.966)**
No	54 (11.02%)	436 (88.98%)	1.00	1.00
Health professionals as source of information				
Yes	23 (41.1%)	33 (58.9%)	0.213 (0.086-0.548)*	5.166 (2.158-12.365)**
No	96 (16.9%)	471 (83.1%)	1.00	1.00
Mass media as source of information				
Yes	52 (18.12%)	220 (80.88%)	0.455 (0.215-0.964)*	2.143 (1.071-4.286)**
No	67 (19.1%)	284 (80.9%)	1.00	1.00
Friends/Peers as source of information				
Yes	35 (28.9%)	86 (71.1%)	0.389 (0.172-0.880)*	2.866 (1.354-6.067)**
No	84 (16.73%)	418 (83.27%)	1.00	1.00

Schools as source of information				
Yes	27 (31%)	60 (69%)	0.43 (0.188-0.985)*	2.374 (1.086-5.189)**
No	92 (17.16%)	444 (82.84%)	1.00	1.00
Paid for service				
Yes	13 (54.2%)	11 (45.8)	0.282 (0.079-1.010)*	5.008 (1.570-15.975)**
No	106 (17.7%)	493 (82.3%)	1.00	1.00
Friendliness AYFRH service providers				
Yes	77 (49.36%)	79 (50.64)	0.34 (0.111-1.041)*	2.743 (1.175-6.404)**
No	42 (9%)	425 (91%)	1.00	1.00
Service provider's knowledge on AYFRH				
Yes	89 (45.2)	108 (54.8%)	0.483 (0.149-1.568)*	3.243 (1.339-7.855)**
No	30 (7.04%)	396 (92.96%)	1.00	1.00
know condom provision service				
Yes	47 (29.2%)	114 (70.8%)	0.856 (0.277-1.240)*	2.206 (1.143-4.255)**
No	72 (15.6%)	390 (84.4%)	1.00	1.00
Separated AYFRH service hours				
Yes	65(48.87%)	68(51.12%)	0.312(0.138-0.705)*	4.286(2.253-8153)**
No	54(11.02%)	436(88.98%)	1.00	1.00

Foot note

***-significant at $p < 0.25$**

**** - significant at $p < 0.05$**

5. Discussion

The study was conducted to determine the magnitude and factors associated with the utilization of adolescent and youth friendly reproductive health services among the public-secondary school students in Addis Ababa, Ethiopia. Therefore, utilization of adolescent and youth friendly reproductive health service was found to be (19.1%), elicited by asking the past one year use of AYFRH services before the date of data collection. Age, parental occupation, discussion with parents on SRH issues, discussion with peers on SRH issues, health professionals, mass media, friends/peers and schools as source of information about AYFRHS, separated AYFRH service hours, Payment/Service fee, knowledge of service provider on AYFRHS, friendliness of AYFRH service providers and condom provision service as one of service component were significantly associated AYFRH service utilization.

In this study, (19.1%) of the students were utilized adolescent and youth friendly reproductive health service within the last one year. This finding is in line with the study done in Machakel District East Gojjam Zone 21.5% [29], and also, higher from a similar study conducted in Mecha District Northwest, Ethiopia 18.4% [30], but it was lower as compared to a community-based study conducted in Addis Ababa 42% [37], in Jimma 41% [27], in Harar 64% [6], in Awabale District 41% [32], in Hadiya Zone South Region 38.5% [33], in Albuko Woreda South Wollo Zone 34.1% [28], in Bahir-Dar 32% [34], in Mekelle town 69.1% [48], in Badwachew Woreda Hadiya Zone South Region 29.4% [34], in Mandalay City, Myanmar 67% [24], in Malawi 62% [39], in Nigeria 38.2% [50] and in India 31% [25]. The findings of this study, is more comparable with the study done in Bahir-Dar and Hadiya Zone in South Region and Mecha district Northwest, Ethiopia, because both studies were conducted in a more comparable settings than others.

And also, the discrepancies in utilization between the studies conducted in other area and current study might be due to differences in a lack of youth clinics or units/inadequate service which are expected to have specially trained service providers that provide AYFRHS and/ or difference in individual /personal characteristics socio-cultural variation of the study participants and the studies were conducted on out of school students that might have sexual exposure and might be married.

The commonly utilized SRH service component in this study was condom provision service (19.4%) which is similar to the findings of studies done in Badwachew woreda 40.6% [33], in Harar 53.1% [6], in Awabel district 25.4% [31] and in Woldia town 52% [14], and followed by IEC service on SRH issues 17.3% and VCT service 16.4% were also commonly used service in this study findings. This finding somewhat goes in line with other study done in Harar 44.7% [6], in Goba

town 67.3%^[8], in Awabel district 10.4% ^[31], for VCT service and in Albuko woreda South Wollo Zone 75.8% ^[28], Awabel district 51.1% ^[31], in Nigeria 60.7% ^[52] for IEC service on SRH issues. This disparity may be explained by the study setting, availability of adolescent and youth center and supplies in which the studies were conducted.

The study revealed that, the odds of adolescent and youth friendly reproductive health services utilization among the participants who had discussion on SRH issues with their parents were 2.4 times higher than who did not discussed [AOR=2.361 95% CI; 1.271-4.385]. And also, the odds of adolescent and youth friendly reproductive health services utilization among the participants who had discussion on SRH issues with peers than those who did not discussed [AOR= 0.504 95% CI; 0.263-0.966]. This finding is in conformity with the study conducted in Debre Tabor town ^[51], in Addis Ababa ^[37], in Awabel^[31], in Goba town ^[8] , in Gonder ^[36], and in Nigeria^[51]. This might be due to prior information on AYFRH service increase their utilization, which would in turn motivate them to use the service. It might be also due to the possibility that adolescent and youth who use services are also more likely to discuss services.

In this study finding, using friends/peers, health care providers, and schools as source of information for AYFRHS were positively associated with the utilization of AYFRHS. Which was comparable with the finding from elsewhere in the country in Harar ^[6]. And also other study done in Machakel district, East Gojjam Zone Amhara region ^[29], supports this study finding by taking health professionals as a source of information and other study done in Addis Ababa ^[39], by taking mass media as a source of information which is similar to this study finding. Different sources of information for AYFRHS had an impact on its utilization among the participants, by enhance the general expectation that knowledge is of more important before practice.

And also, study found that the friendliness of AYFRH service providers were significantly associated adolescent and youth friendly reproductive health service utilization by respondents as compared to the counterparts [AOR= 3.243 95% 95% CI; 1.339-7.855]. Which is in line with the study conducted in Harar ^[6]. Because the behavior of health care providers may create comfort and avoid fears/ shamefulness to respondents, they face the barrier for the utilization of the service, which leaves respondents' interest to seek health care services. This study finding revealed that age of respondent s were significantly associated with utilization of AYFRHS as study showed in Machakel district, East Gojjam zone Amhara region ^[29].

According to this study finding, the odds utilizing adolescent and youth friendly reproductive health service among respondents who were encourage by service provider knowledge on SRH issues were higher than who were not encouraged [AOR= 3.243 95% CI; 1.339-7.855]. This finding was supported by other study done in Ethiopia [40].

In this study, the respondents who were in the age group 15-19 were about 79.6% of less likely utilized AYFRHS than those age range from 20-24 years [AOR= 0.256 95% CI; 0.119-0.549], which was similar to studies done in Western part of Ethiopia 64%^[52]. While in the contrary, whose age group 20-24 years were about 2.34 times more likely utilized AYFRHS in a similar study in Bahir Dar^[35] and in Jimma^[27]. And also, the participants' knowledge on condom provision service as one of the type AYFRH services were 2.2 times more likely to ever use the AYFRHS [AOR= 2.206 95% CI; 1.143-4.255]. This finding in line with the study done in Jimma ^[27].

In this study, payment for service /service fee was found to be association with the utilization of adolescent and youth friendly reproductive health service. This findings is in agreement with the study conducted in Bahir-Dar ^[34], and in Burkina Faso, Ghana, Malawi and Uganda ^[39]. Utilization of adolescent and youth friendly reproductive health service was significantly associated and higher among the respondents who had employed parents than those the counterparts. This finding was supported by other studies done in Awabel District, Northwest Ethiopia^[31], in Nepal ^[53]. The respondents' of these families might not have financial constraints for adolescents and youths friendly reproductive health service utilization.

The respondents' adolescent and youth friendly reproductive health service utilization was significantly associated and higher among those who had separated AYFRH service hours than those who did not have separated AYFRH service hours. Which was in line with the studies conducted in Bahir-Dar^[34], in youth-friendly service in Ethiopia ^[54]. This could be due to the privacy, confidentiality and avoiding fears of being seen by parents, adult individuals in general and also, to encourage a-conducive environment for adolescents and youths to utilize the service safely.

In this study the most common source of information SRH issues for respondents were mass media (43.7%), which was higher as compare to study showed in Mekelle twon (35.5%) ^[48]. In this study finding 59% of respondents had heard about STIs (HIV) while in the contrary, 91% in a similar study done Addis Ababa in 2016 ^[37]. Another study done in Goba twon showed that 93.7% ^[8], and 63% of participants in a study conducted Machakel District in East Gojjam zone in Amhara region had heard of STIs ^[29], this difference could be explained by the study setting and

the sample size, the data collection method and individual /personal characteristics of the study participants might have also contribution for the variation.

The study found that, 64% of respondents were know that the prevention methods of STIs including HIV/AIDS infection by using condom. But it was lower than EDHS (2016) national report (69.1%) [58]. And also, 93% of respondents were mentioned that unwanted pregnancy prevention methods, which was higher than similar studies conducted in Addis Ababa (91%)^[37], in Woreta town (52.1%) [35] this difference might be due to urban residence have better opportunity to access information or other similar study done in Addis Ababa might be improve the understanding of the participants and brought positive impact on current study result.

In this study, (71.6%) of respondents were reported to have heard about adolescent and youth friendly reproductive health service, which was higher than studies done in Machakel district East Gojjam Zone Amhara region 38.3% [29], in Woldia town 62.1% [14], and in Debre Berhan 54.9% [51], but it was lower than studies conducted in Mecha district Northwest, Ethiopia 97.3%^[30], and in Hadiya Zone South region 80% [33]. This difference might be explained by inclusion criteria of participants, availability and accessibility of service as well as information about AYFRHS.

The most delivered types of adolescent and reproductive health services mentioned by respondents in this study is family planning (68%) which was higher than from similar study in Jimma (17.6%), Machakel district in East Gojjam ,Amhara region(30%), in Nigeria (60.2%) and India (31%) [27,29,26,25],but it was lower than from Albuko Woreda, South Wollo Zone in Amhara Region (73%), Goba Town (71.4%) and Mandalay City ,Nyanmar (70%) [28,8,24,] and VCT service (45%) was lower than that of study done in Goba town (67.3%)^[8], but it was higher than from that of study done in Awabale District (10.4%) [31].

The most commonly known type of contraceptive method by respondents in the study was Pills (66.3%) which is higher than that of similar study done in Badwachew, Hadiya zone south region (64.8%) [33].The discrepancies of this study finding in utilization of the contraceptive method between the studies conducted in other study settings may be explained by the difference in individual choice of the study participants.

“Not utilizing the service”, inconvenient working hour of the health facility and embarrassment to ask for the service were the main reasons mentioned for not using AYFRHS, this is in line with researches conducted in Addis Ababa, in Harar and in Dejen district in Ethiopia [37,41].

Utilization did not show a significant change when compared to the study conducted to assess service utilization of youth friendly health service among adolescents in Addis Ababa nearly a decade ago in which service utilization was found to 42%^[23] , what if study conducted in different

study area: the result of this study might be indicate that regardless of the study result, the policies and strategies set in place to promote adolescent and youth friendly reproductive health service: there may be gap when it comes to implementation.

6. Strength and limitation of the study

6.1 Limitation

Since the Study has school- based and which has also restricted to the public regular schools' students, generalizability of the findings to the general adolescent and youth population is limited. The outcome of the study depends on the truthfulness and openness of respondents as the information source was considered personal and sensitive. Some socio-economic and demographic factors like family income were not included in the questionnaires but parent's educational and occupational status were used as indirect measure of income level.

6.2 Strength

The study assessed the level of adolescent and youth friendly reproductive health service utilization by applying primary data to provide base-line information on the service uptake and challenge that adolescent and youths are facing towards utilization in specified age groups. And also, research was done at the adolescent and youths reproductive health issue which is government concern and less achieved.

7. Conclusion

Finding of this study revealed that adolescent and youth reproductive health service utilization among secondary schools' students in the study area were low (19.1%). Condom provision service, IEC service on AYRH issues and VCT service on HIV was the main used service which was low in utilization coverage.

Based on the results of this study, discussion with parents and peers on SRH issues, separated AYFRH service hours, friendliness of service providers, knowledge of service provider on SRH issues, parental occupation, mass media, health professionals friends/peers and schools as source of information, condom provision service as components of AYFRHS, age of late adolescents and payment/ Service fee had significant influence on utilization of AYFRHS.

Mass media as a main source of information and awareness on provided adolescent and youth friendly reproductive health service in this study was found to be (43.7%) and (71.6%) respectively. Inconvenient working hour of the health facility and embarrassment to ask for the service was the main reasons that hindering factors not to utilize adolescent and youth reproductive health service.

According to this study finding, awareness on components AYFRH service, signs and symptoms of STIs were very low. And also, this study revealed that 53% of students had no AYFRH service around their living area, 53.4% students were also travelled 60 minutes or an hour distance to get AYFRHS.

In this study finding, seventy-nine (79%) and seventy-one (71%) of students had received AYFRH service with unsafe/ non-conducive service delivery environment and with-out keeping service confidentiality and privacy respectively.

Overall the finding needs attention and great effort of all concerned bodies including parents, schools' staffs , stakeholders, policy makers and health professionals to improve the adolescent and youth friendly reproductive health service utilization gaps in the school's students.

8. Recommendation

Based the study findings, the following recommendations were forwarded:

1. The ministry of health should work together with other stakeholders to create a-conducive environment where adolescent and youths could get supportive information, concerning reproductive health, community conversation to encourage parental discussions on sensitive issues like sexuality and reproduction. And also should strengthen the already available integration of urban health extension in school and adolescent and youth centers and also provide appropriate update on skills to health professionals so that they can help adolescent and youth cope with reproductive health issues
2. The Addis Ababa Health Bureau and sub-city Health office still needs to scaling up of the existing practice, and establish new comprehensive free standing or integrated adolescent and youth friendly-services with trained service provider in a convenient manner because attempting to achieve prolific outcome require considering adolescents' and youths' need which is dynamic, confidential and flexible by its nature.
3. Health facilities should provide adolescent and youth friendly reproductive health service with enough providers and classes to improve the consultation time for adolescent and youth who visit the health facility for any of AYFRH services.
4. Health workers who work in adolescent and youth friendly reproductive health service should be trained about adolescent friendly services in order to improve their attitude and approaches towards the adolescent and youth.
5. Schools should work on initiation of adolescent and youth friendly reproductive health service utilization by using youth centers in school to address those adolescents' and youth s' special need of sexual and reproductive health.

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10. Appendix: I Information sheet

I am Tilahun Dessie, a post graduate student pursuing Master studies in public health in epidemiology at Saint Paul's Hospital Millennium Medical College. I am under taking a research on magnitude of youth friendly reproductive health service utilization and associated factors among adolescent and youth in selected secondary schools in the selected sub cities, Addis Ababa. And I request you kindly to participate in this survey which is voluntary and involves no risk to you. You have the right to refuse the participation. If I ask you any question you don't want to answer. Just let me know and I will go to the next question or you can stop the interview at any time without any consequences. The information you provide is strictly confidential and will be useful in improving youth friendly reproductive health service utilization in the selected sub cities as well in Addis Ababa. The questionnaire/ interview will take about 30-40 minutes to fill. If you have any question you may contact Tilahun Dessie on 0938058674 or using the email address tilahundessie1@gmail.com.

Appendix: II Informed consent

The above information regarding my participation in the study is clear to me. I have been given a chance to ask question and my question have been answered to my satisfaction. My participation in this study is entirely voluntary. I understand that my records will be kept privately and I can leave the study at any time. I understand that I will still get the same medical care whether I decide to leave the study or not and my decision will not change the care I will receive from medical Center's.

Name of the participant -----Date-----

Signature/ thumb print-----

Investigator's statement

I, the undersigned, have explained to the volunteer in a language he/she understands procedures to be followed in the study and the benefits involved.

Name of the interviewer-----Date-----

Interviewer signature-----

Respondent agree to participate?

Yes

☐

No

☐

End of interview

Appendix: III Structured Questionnaires

1. English version questionnaires

Title of the study: Assessment of magnitude and associated factors on utilization of adolescents and youth friendly reproductive health service among adolescent and youth in secondary schools in the selected sub cities, Addis Ababa.

Date-----study site-----code of interview-----

Part- I Socio-demographic characteristics of the participants			
S.no	Question	Coding categories	Go to
101	What is your gender?	1 Male 2 Female	
102	What is your age? (in complete years)	-----	
103	What is your marital status?	1 single 2 married 3 Have a boy/ girl friend	
104	Type of school	1 Private single sex 2 private mixed sex 3 Government single sex 4 Government mixed sex	
105	What is your current class?	-----	
106	What is the type of school do you currently attend?	1 day time school 2 night time school	
107	With whom do you live?	1 Father and mother 2 Father only 3 Mother only 4 Relatives 5 Alone	
108	Are you currently having your own pocket money?	1 Yes 2 No	
109	IF yes, where do you get your pocket money?	1 my parents 2 friends 3 my relatives 4 myself	
110	What is the educational status of your mother	1 Illiterate 2 Primary 3 Secondary	
111	What is your mother's occupation?	1 government employee 2 NGO employee 3 private business owner 4 House wife	
112	What is the educational status of your father?	1 Illiterate 2 Primary	

		3 Secondary	
113	What is father's occupation?	1 government employee 2 NGO employee 3 private business owner 4 Daily labor	
Part-II Question related to discussion on SRH issues			
201	Have you ever discussed about sexual and reproductive health issues with your parents?	1 Yes 2 No	
202	If yes, with whom you discuss most?	1 both parents 2 mother 3 father	
203	Have you ever discussed sexual and reproductive issues with your peers?	1 Yes 2 No	
Part-III Knowledge questions about adolescent and youth friendly reproductive health service			
301	Have you ever heard about adolescent and youth friendly reproductive health service?	1 Yes 2 No	If No, skip to Q#302go to Q#303
302	If yes, for Q# 301 what is your source of information about adolescent and youth friendly reproductive health service?	1 My parents 2 Friends/peers 3 Mass media 4 Posters/pamphlets 5 Partner/ husband/ wife 6 Health professionals 7 School	
303	What type of adolescent and youth friendly reproductive health service do you know? (can mark more than one response)	1 family planning service 2 pregnancy testing and care 3 voluntary counseling and testing for HIV 4 STIs screening and treatment 5 Condom provision service 6 Information education and communication 7 Cervical cancer screening and management 8 Abortion service 9 Post abortion care	
304	Do you think that teenage pregnancy can lead maternal and infant death?	1 Yes 2 No	
305	Do you know use of condom can prevent unwanted pregnancy?	1 Yes 2 No	
306	Do you believe that unprotected sexual intercourse can cause sexually transmitted disease?	1 Yes 2 No	
307	Do you agree that unprotected sexual intercourse can cause reproductive tract infections?	1 Yes 2 No	

308	Do you know of any ways you can protect yourself from STIs including HIV/AIDS?	1 Yes 2 No	
309	If yes, what are the ways of protecting yourself?(Circle all apply.)	1 using condom 2 Being faithful 3 Abstinence 4 Avoiding sharing of needles 5 Avoiding mother- to-child transmission 6 Limiting sexual partner	
310	Do you know where you get adolescent and youth friendly reproductive health service?	1 Health Centers 2 Hospitals 3 Drug shops 4 traditional Healers	
311	Do you know the right to use SRH service by adolescent and youth	1 Yes 2 No	
312	Do you know any family planning methods?	1 Yes 2 No	If No, skip to Q#312 Go to Q#314
313	Which of the following family planning methods do you know? (Circle all apply.)	1 condom 2 implant 3 inject able 4 IUCD 5 Pills	
314	Have you ever heard about STIs?	1 Yes 2 No	If No, skip to Q#315 go to Q# 316
315	Which of the following lists do you know (Circle all apply.)	1 syphilis 2 Gonorrhea 3 Chancroid 4 HIV	
316	What sign and symptoms of STIs do you know? (Circle all apply.)	1 Genital ulcer 2 Itching 3 Genital discharge 4 Burning during urination	
317	As far as you know, what are the ways to get STIs?	1 contact with infectious blood 2 mother-to-child 3 unprotected sex 4 using sharp material with infected person	
<i>Part-IV Health System Related Questions</i>			
401	Is there adolescent and youth friendly reproductive health service in your living area?	1 Yes 2 No	If No, skip to Q# 501, go to Q#503

402	How far is the Health Institutions from your home?	----- (specify in minute)	
403	Have you asked to pay for service you used?	1 Yes 2 No	
404	How much have you charged for the service you used?	_____ ETB	
405	Is the working hour of the Health Centre convenient for you?	1 Yes 2 No	
406	Did the service provider take you to a private examination room?	1 Yes 2 No	
407	Did the health service provider physically examine you during your visit?	1 Yes 2 No	
408	Did any service provider tell you when should return for another visit?	1 Yes 2 No	
409	Did any service provider tell you where should return for another visit?	1 Yes 2 No	
410	Did you receive the information and service that you wanted today?	1 Yes 2 No	
411	How was your consultation with the health providers?	1 Too short 2 Too long 3 About right	
412	Do you believe that the information you shared about yourself with the provider will be kept confidential?	1 Yes 2 No	
413	Are the hours this Health facilities is open convenient for you?	1 Yes 2 No	
414	AYRH services are provided at convenient and separate hours for adolescent and youth?	1 Yes 2 No	
415	Décor and surrounding are inviting to adolescent and youth clients?	1 Yes 2 No	
416	Facilities have convenient location for adolescent and youth reproductive health services?	1 yes 2 No	If No, go to Q#517

417	How was the adolescent and youth reproductive health service is given in the facilities	1 with the integration of other clients service 2 separate room for adolescent and youth service 98 Don't know/don't remember	
418	Who did you talk/see at the Health Centre in the last (probe by asking "what type of service provider?" and (circle all that apply)	1 Doctor 2 Nurse 3 Midwives 4 peer educator/counselor 98 Don't know/don't remember	
419	Was service provider:-		
	Knowledgeable	1 Yes 2 No	
	Friendly	1 Yes 2 No	
	Interested in you	1 Yes 2 No	
	Respectful	1 Yes 2 No	
	A good communicator	1 Yes 2 No	
	Care about your ; privacy /confidential	1 Yes 2 No	
	A good listener	1 Yes 2 No	
	Able to help you	1 Yes 2 No	
	PART-V Question related to utilization of adolescent and youth reproductive health services		
501	Have you ever utilized at least one of adolescent and youth reproductive health service in the health facilities	1 Yes 2 No	
502	Have you ever utilized one of adolescent and youth reproductive health service in the last one year?	1 Yes 2 No	If No, for Q#702, go to Q#704
503	IF yes, for Q#702 which adolescent and youth reproductive health services did you utilize in the last one year?		
	Information, education and communication services on AYRH issues	1 Yes 2 No	
	VCT service for HIV	1 Yes 2 No	
	Family planning services	1 Yes 2 No	
	Condom provision services	1 Yes 2 No	
	STIs diagnosis and treatment services	1 Yes 2 No	
	Pregnancy testing and caring services	1 Yes 2 No	
	Abortion service	1 Yes 2 No	
	Post abortion care	1 Yes 2 No	
	Cervical cancer screening Services	1 Yes 2 No	

504	Reason not to utilize adolescent reproductive health services (can mark more than one response)	1 Negative attitude of service providers 2 Inconvenient opening hours of Health Centre 3 Inadequate medical equipment 4 poor quality of services 5 location of Health Centre 6 lack of privacy in the health care facilities 7 Embarrassment associated adolescent and youth service use 8 service provider judgmental approach	
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Appendix: V AMHARIC VERSION QUESTIONNAIRE

1.1 መግቢያ

ጥላሁን ደሴ እባላለሁ በቅዱስ ጳውሎስ ሆሊፒታል ሚሊኒየም ሜዲካል ኮሌጅ የማህበረሰብ ጤና አጠባበቅ ትምህረት ክፍል ውስጥ ተማሪ ነኝ የዚህ ጥናት ዓላማ በአዲስ አበባ ውስጥ ሰለሚገኙ የወጣቶች እና አፍላ ወጣቶች ስነ-ተዋልዶ ጤና አገልግሎት ላይ የወጣቶች እና አፍላ ወጣቶች የስነ-ተዋልዶ ጤና አገልግሎት የአጠቃቀም ደረጃ እና በወጣቶች እና አፍላ ወጣቶች የስነ-ተዋልዶ ጤና አገልግሎት ዙሪያ ባሉ ተያዥ ጉዳዮች ለማጥናት መረጃ ለመሰብሰብ ነው። በመሆኑም የአንቺ/ተ ተሳትፎ በዘፈቀደ የተመረጠ ሲሆን በሙሉ በበጎ ፈቃደኝነት ላይ የተመሰረተ ነው። የምትሰጡ/ጠዉ መረጃ በፍፁም በሚሰጠራዊነት የሚያዝ ሲሆን ኢትዮጵያ ውስጥ ያለውን የወጣቶች እና የአፍላ ወጣቶች ስነ-ተዋልዶ ጤና አገልግሎት ለማሻሻል ሰለሚረዳ ተሳትፎሽ/ህን በትህትና እጠይቃለሁ። በጥናቱ ያለመሳተፍ ሙሉ መብት አለሽ/ህ መመለስ የመትፈልገውን/ገደቡን ጥያቄ ከጠየኩሽ/ህ አስታውቂኝ/ቀኝ እና ወደ ቀጣይ ጥያቄ እንሸጋገራለን ወይም በፈለግሽ/ከዉ ሰዓት ቃለምልልስን ማቆም ትችላለሽ/ህ። ይህንን አስታደርጊ/ግ ግን አሁንም ሆነ ወደፊት ከየትኛውም የጤና ተቋሙ በምታገኘው/ኝዉ አገልግሎት ላይ ተጽእኖ ይኖረዋልብለሽ/ህ አትስጧ/ጋ። ማንኛውም ጥያቄአለሽ/ህ በስልክ ቁጥር 0938058674 ወይም በ email tilahundessie1@gmail.com ጥላሁን ደሴብለሽ/ህ ማገኝት ተችታለሽ/ህ ይሄን መጠይቅ ለመሙላት ከ 30-40 ደቂቃ ይወስዳል።

1.2 የስምምነት ቅጽ

የኔንበዚ፣ጥናት መሳተፍ በተመለከተ ከላይ የቀረበልኝ መረጃ ግልጽ ሆኖ ልኛል፣ ጥያቄ እንደጠይቅ አጋጣሚ የተሰጠኝ ከመሆኑም በላይ ጥያቄዎቼ በተገቢው መንገድ መልስ እገኝተዋል።

የኔንበዚ፣ጥናት መሳተፍ ሙሉ በሙሉ በፈቃደኝነት ላይ የተመሰረተ ነው።

እኔ የምሰጠው መረጃ በሚስጥር እንደሚያዝበፈለኩት ሰዓት ቃለምልልሱን ማቆም እንደሚቻል ገብቶኛል።

በጥናቱ ለመሳተፍ ፈቃደኛ ብሆንም ባለሆንም ከጤናተቋሙ በማገኘው የጤና አገልግሎት ላይ ምንም ለውጥ እንደማያመጣ ተገንዝቢያለሁ።

የታሳታፊ ስም -----

ቀን -----

ፊርማ -----

የጠያቂ ቃል

እኔ ከዚህ በታች ስሜ የተጠቀሰው ለፈቃደኛ ታላቁ ዋ/ው በምትረዳው/በሚረዳው ቋንቋ በጥናቱ ውስጥ ያሉትን ስርዐቶች እና ድንቦች እንደሁም ጥቅምቶቼን አሰረድቻለሁ።

የጠያቂ ስም -----

ቀን -----

ፊርማ -----

ለመሳተፍ ትስማሚያለሽ/ህ?

አዎ ☐

አልስማማም ☐
↓

መጨረሻ

ቀን----- ጥናቱበታ ----- ከድ-----

	ክፍል-አንድግህበራዊ፣ አከናዊ፣ ሥራና የትምህርት መረጃ		
ተ.ቁ	ጥያቄ	ምርጫ	ይለፉ
101	ፆታ	1 ወንድ 2 ሴት	
102	ዕድሜሽ/ህበሙሉዓመት	_____	
103	የጋብቻ ሁኔታ ?	1 ያላገባች 2 ያገባች 3 የወንድ /የሴት ጓደኛ ያላት/ያለው	
104	አሁን የስተኛ ክፍል ተማሪ ነሽ/ህ?	_____	
105	የሚማሩበት ት/ቤት ሁኔታ	1 የግል ተመሳሳይ ፆታ 2 የግል ድብልቅ ፆታ 3 የመ/ት ተመሳሳይ ፆታ 4 የመ/ት ድብልቅ ፆታ	
106	አሁን የሚማሩት የትምህርት ሁኔታ?	1 የቀን 2 የማታ	
107	ከማን ጋር ነው የምትኖሪው/ረው?	1 ከአባት እና ከእናት 2 ከአባት ጋር ብቻ 3 ከእናት ጋር ብቻ 4 ከዘመድ ጋር 5 ለብቻዬ	
108	የኪስ ገንዘብ አለሽ/ህ?	1 አዎ 2 የለም	
109	ለጥያቄ ቁጥር፣ 110 "አዎ" ከሆነ የገንዘብ ምንጩ ከየት ነው?	1 ከወላጆቻቸው 2 ከጓደኛዬ 3 ከዘመድ 4 በራሴ	
110	የእናትሽ/ህ የትምህርት ሁኔታ ምን ድነው?	1 ያልተማረች 2 የመጀመሪያ ደረጃን ያጠናቀቀች 3 ሁለተኛ ደረጃን ያጠናቀቀች	
111	የእናትሽ/ህ የስራ ሁኔታ ምን ድነው?	1 የመንግስት ሰራተኛ 2 የግል ተቋም ሰራተኛ 3 የግል ስራ ያላት 4 የቤት እመቤት	
112	የአባትሽ/ህ የትምህርት ሁኔታ ምን ድነው?	1 ያልተማረ 2 የመጀመሪያ ደረጃን ያጠናቀቀ 3 የሁለተኛ ደረጃን ያጠናቀቀ	
113	የአባትሽ/ህ የስራ ሁኔታ ምን ድነው ?	1 የመንግስት ሰራተኛ 2 የግል ተቋም ሰራተኛ 3 የግል ስራ ያለው 4 የጉልበት ሰራተኛ	
ክፍል-ሁለት አጠቃላይ በወጣቶች እና በአፍላውጣቶች ፆታዊ እና ስነ-ተዋልዶ ጤና ዙሪያ የሚደረጉ ወይይቶችን የሚጻሰስ መረጃን በተመለከተ			
201	ከቤተሰቦችሽ/ህ ጋር ስለ ፆታዊ እና ስነ-	1 አዎ 2 የለም	

	ተዋልዶጤናዙሪያተወያይተሽ/ህታዉቂያለሽ/ህ?		
202	ለጥያቄቀጥር 201 መልሱ "አዎ" ከሆነ, በብዛትከማንጋር?	1 ከሁለቱምወላጆች 2 ከእናቱ 3 ከአባቱ	
203	ከአቻዎችሽ/ህጋርሰለገታዊእናስነ-ተዋልዶጤናዙሪያዉይይትኦርገሽ/ህታዉቂያለሽ/ህ?	1 አዎ 2 የለም	
ክፍል-ሦስትአጠቃላይየወጣቶችእናየአፍላወጣቶችየስነ-ተዋልዶጤናአገልግሎትአጠቃቀምዙሪያላቸዉንእውቀትደረጃየሚዳስስ			
301	ስለወጣቶችእናአፍላወጣቶችየስነ-ተዋልዶጤናአገልግሎትዙሪያሰምተሽ/ህታዉቂያለሽ/ታዉቃለህ	1 አዎ 2 የለም 	ወደጥያቄ # 303
302	ለጥያቄቀጥር 301 መልሱ "አዎ" ከሆነ, የመረጃምንጮማንነዉ?	1 ወላጆዎ 2 ንደኛዎ 3 ሚዲያ 4 በራሪወረቀት/ፖስተር 5 የትዳርአጋር 6 የጤናባለሙያ 7 ትምህርትቤት	
303	ምንምንገይነትየወጣቶችእናየአፍላወጣቶችስነተዋልዶጤናአገልግሎቶችንታዉቂያለሽ/ታዉቃለህ? (ከአንድበላይማክበብይቻላል)	1 የቤተሰብምጣኔ 2 የእርግዝናምርመራአገልግሎት 3 በፍቃደኝነትላይየተመሰረተየኤቻ.አይስምክርእናምርመራአገልግሎት 4 የአቫላዘርበሽታልየታእናህክምናአገልግሎት 5 የኮንዶምስርጭትአ/ሎት 6 መረጃናትምህረትእናየተግባቦትአ/ሎት 7 የማህፀንበርቅድመካንሰርልየታ/ምርመራአ/ሎት 8 ዕንስየማቋርጥአገልግሎት 9 ዕንስከተቋረጠበታላየሚሰጥየእንክብካቤአገልግሎት	
304	የለጋእድሜእርግዝናለእናትምለህፃኑምሞትምክንያትሊሆንይችላልትያለሽ/ትላለህ?	1 አዎ 2 የለም	
305	ያልተፈለገእርግዝናንለመከላከልኮንዶምመጠቀምመፍቴይሆናልትያለሽ/ትላለህ ?	1 አዎ 2 የለም	
306	በግብረሰጋግንኙነትወቅትጥንቃቄአለማድረግበግብረሰጋግኙነትወቅትተላላፈለሆኑበሽታዎችያጋልጣልብለሽ/ብለህታስቢያለሽ/ታስባለህ?	1 አዎ 2 የለም	
307	ጥንቃቄየጎደለዉየግብረሰጋግንኙነትለመራቢያአካልበሽታየመመረዝምክንያትይሆናልብለሽ/ህታስቢያለሽ/ታስባለህ?	1 አዎ 2 የለም	
308	እራሽ/ህበግብረሰጋግንኙነትወቅትተላላፈለሆኑበሽታዎችእናከኤቻ.አይቪ.መጠበቅእንደሚቻልታዉቂያለሽ/ታዉቃለህ?	1 አዎ 2 የለም	

309	ለጥያቄቁጥር 308 መልሱ" አዎ" ከሆነምንምን መንገዶች ሊጠብቁሽ/ህይወት ላሉ? (ከአንድ በላይ መክበብ ይቻላል)	1 ኮንዶም መጠቀም 2 ታማኝ መሆን 3 መወሰን 4 ስለ ታማኝነት ጥናት ያሰጠው መጠቀም 5 ከእናት ወደ ልጅ እንደ ተላለፍ በማድረግ 6 የግብረ ሰጋ ግንኙነቶችን ከአንድ አጋር በላይ አለማድረግ	
310	የወጣቶች እና የአፍላውጣቶች የስነ-ተዋልዶ ጤና አገልግሎቶችን የት ማግኘት እንድሚቻል ታወቁ ይሆናሉ/ታወቁ ይሆናሉ? (ከአንድ በላይ መልስ መስጠት ይቻላል)	1 ጤና ጣቢያ 2 ሆስፒታል 3 መድሐኒት መሸጫ 4 በባህል ህክምና	
311	ወጣቶች እና አፍላውጣቶች የስነ-ተዋልዶ ጤና አገልግሎቶችን የመጠቀም መብት እንዳላቸው ታወቁ ይሆናሉ/ታወቁ ይሆናሉ?	1 አዎ 2 የለም	
312	የቤተሰብ ምጣኔ ዘዴዎችን ታወቁ ይሆናሉ/ታወቁ ይሆናሉ?	1 አዎ 2 የለም 	ወደ ጥያቄ #314
313	ከተዘረዘሩት የቤተሰብ ምጣኔ ዘዴዎች የትኞቹን ታወቁ ይሆናሉ/ታወቁ ይሆናሉ? (ከአንድ በላይ መልስ መስጠት ይቻላል)	1 ኮንዶም 2 በክንድ ወስጥ የሚቀበር 3 በመርፌ ክንድ ላይ የሚሰጥ 4 በማህፀን ወስጥ የሚቀበር ሎፕ 5 በኪነን መልክ የሚወሰድ እክብል	
314	ለአገልግሎት በሽታ ሰምተሽ/ህ ታወቁ ይሆናሉ/ታወቁ ይሆናሉ?	1 አዎ 2 የለም 	ወደ ጥያቄ #316
315	ከተዘረዘሩት የአገልግሎት በሽታዎች የትኞቹን ታወቁ ይሆናሉ/ታወቁ ይሆናሉ? (ከአንድ በላይ መልስ መስጠት ይቻላል)	1 ቂጢኝ 2 ጨብጥ 3 ከርክር 4 ኤች.አይቪ.	
316	ከተዘረዘሩት የአገልግሎት በሽታዎች ምልክቶች ወስጥ የትኞቹን ታወቁ ይሆናሉ/ታወቁ ይሆናሉ? (ከአንድ በላይ መልስ መስጠት ይቻላል)	1 ብልት ላይ የሚወጣ ቁስል 2 ብልት ማሳከክ 3 ከብልት የሚወጣ ፈሳሽ 4 ሽንት ሲሸነጥ ምርጫ	
317	የአገልግሎት በሽታዎች የመተላለፊያ መንገዶች የትኞቹን ታወቁ ይሆናሉ/ታወቁ ይሆናሉ?	1 በደምን ክኪ 2 ከእናት ወደ ልጅ 3 ጥንቃቄ በጎደለው ግብረ ሰጋ ግንኙነት 4 ስለ ታማኝነት ጥናት ያሰጠው መጠቀም	
ክፍል-አራት የጤና ሰራተኞች የሚመለከተው ቃለመጠይቅ			
401	የወጣቶች እና የአፍላውጣቶች የስነ-ተዋልዶ ጤና አገልግሎት ባከባቢ ሽ/ክ ይሰጣል?	1 አዎ 2 የለም 	ወደ ጥያቄ #503

402	ጤናጣቢያወክቤት/ህምንያህልኛርቀትአለዉ ?	_____(በደቂቃ)	
403	የስነ-ተዋልዶጤናየአገልግሎትክፍያተጠየቅሽ/ህ?	1 አዎ 2 የለም	
404	ለተጠቀምሽዉ/ከዉለስነ-ተዋልዶጤናየአገልግሎትምንያህልገንዘብከፈልሽ/ህ?	_____ETB	
405	ለአንች/ተየጤናጣቢያወያስራሰዓትለአገልግሎትሽ/ህ ተስማሚነዉ?	1 አዎ 2 የለም	
406	አገልግሎትሰጭዉባለሞያአገልግሎቱንየሰጠሽ/ህበግል ክፍልነዉ?	1 አዎ 2 የለም	
407	በጤናጣቢያወበጉብኝትሽ/ህወቅትየጤናባለሞያዋ/ዉ ሙሉየአካልምርመራአደረጉልሽ/ህ?	1 አዎ 2 የለም	
408	በጤናጣቢያወበጉብኝትሽ/ህወቅትየጤናባለሞያዋ/ዉ ለቀጣይጉብኝትሽ/ህመቼመመለስእንዳለብሽ/ህነገሩሽ/ህ?	1 አዎ 2 የለም	
409	በጤናጣቢያወበጉብኝትሽ/ህወቅትየጤናባለሞያዋ/ዉ ለቀጣይጉብኝትሽ/ህየትመመለስእንዳለብሽ/ህነገሩሽ/ህ ?	1 አዎ 2 የለም	
410	ዛሬየገኘሽዉ/የገኘህዉመረጃእናአገልግሎትእንደፈለሽ ዉ/ከዉነዉ?	1 አዎ 2 የለም	
411	ከጤናባለሞያዉያደረግሽዉ/ከወያምክክርግዜእንዴትነበር?	1 በጣምአጭር 2 በጣምረጅም 3 በቂ 98 አላቅም	
412	ከባለሞያዉጋርያደረግሽዉ/ከዉየመረጃልዉዉጥሚስ ጥራዊነቱይጠበቃልብለሽ/ክታምኛለሽ/ታምናለክ?	1 አዎ 2 የለም	
413	ጤናተቋሙለአገልግሎትክፍትየሆነበትሰዓትተስማምቶሻል/ካል	1 አዎ 2 የለም	
414	ለወጣቶችእናለአፍላወጣቶችየሰነ-ተዋልዶጤናአገልግሎትየሚሰጠዉለወጣቶቹእናለአፍላወጣቶቹልዩእናአሳማኝሰዓትነዉትያለሽ/ትላለክ?	1 አዎ 2 የለም	
415	የወጣቶቹእናየአፍላወጣቶቹየመገልገያስፍራማሰጌጫ እናዘራያዉጋባዘኝነዉትያለሽ/ትላለክ?	1 አዎ 2 የለም	
416	ተቋሙለወጣቶችእናለአፍላወጣቶችየሰነ-ተዋልዶጤናአገልግሎትመስጫአስተማማኝነታአለዉ ትያለሽ/ትላለክ?	1 አዎ 2 የለም 	ወደጥያቄ #517
417	ተቋሙየስነ-ተዋልዶጤናአገልግሎቱንለወጣቶችእናለአፍላወጣቶችየሚሰጠዉእንዴትይመስልሻል/ሃል?	1ከሌሎችተገልጋዮችጋርበእንድነት 2ለወጣቶችእናለአፍላወጣቶችተብሎበተለየክፍል 98 አላቅም/ አላስታወስም	
418	አንች/ተበመጨረሻከማንጋርበጤናጣቢያዉወስጥአገልግሎቱንስታገኚ/ኝተነጋገረሽ/ርክ	1 ከዶክተር 2 ከነርስ 3 ከሚድዋይፍ 4 አቻ-ላቻአስተማሪ/አማካሪ	

		98 አላቅም/ አላስታወስም	
419	አገልግሎት ሰጭው:-		
	እውቀት አለው	1 አዎ 2 የለም	
	እንደጓደኛነው	1 አዎ 2 የለም	
	አንችን/ ተንሰማገልገልፍላችን አለው	1 አዎ 2 የለም	
	አክብሮት አለው	1 አዎ 2 የለም	
	ጥሩ ተግባቢነት	1 አዎ 2 የለም	
	የአንችን/ተንሰማገልገልፍላችን የሚስጥር መባቂነት	1 አዎ 2 የለም	
	ጥሩ ያዳምጣል	1 አዎ 2 የለም	
	አንችን/ተንሰረዳይችላል	1 አዎ 2 የለም	
	ክፍል-አምስት የወጣቶች እና የአፍላውጣቶች የስነ-ተዋልዶጤ ከአገልግሎት አጠቃቀም የሚመለከተው ቃለመጠይቅ		
501	የወጣቶች እና የአፍላውጣቶች የስነ-ተዋልዶጤ ከአገልግሎቶች ውስጥ ቢያንስ አንዱን በጤና ተቋም ተጠቅመሽ/ህታውቂ ያለሽ/ታውቃለህ	1 አዎ 2 የለም	
502	በባለፈው ሦስት ወር ውስጥ የወጣቶች እና የአፍላውጣቶች የስነ-ተዋልዶጤ ከአገልግሎቶች ውስጥ ቢያንስ አንዱን ተጠቅመሽ/ህል ?	1 አዎ 2 የለም 	ወደጥያቄ #704
503	ለጥያቄ ቁጥር 702 መልሱ "አዎ" ከሆነ የትኛውን የወጣቶች እና የአፍላውጣቶች የስነ-ተዋልዶጤ ከአገልግሎት በባለፈው ሦስት ወር ተጠቀምሽ/ክ?		
	በወጣቶች እና በአፍላውጣቶች የስነ-ተዋልዶጤ ንጉሳዮች ዘርፍ መረጃ፣ ትምህርት እና ተግባቦት ላይ	1 አዎ 2 የለም	
	በፈቃደኝነት ላይ የተመሰረተ የኤች.አይቪ.ም ክርናምር መራ-አገልግሎትን	1 አዎ 2 የለም	
	የቤተሰብ ምጣኔ አገልግሎትን	1 አዎ 2 የለም	
	የኮንዶምኔንስ አገልግሎትን	1 አዎ 2 የለም	
	የአባላዘርምር መራ-ና ህክምና አገልግሎትን	1 አዎ 2 የለም	
	የእርግዝናምር መራ-ና እንክብካቤ አገልግሎትን	1 አዎ 2 የለም	
	ፅንሰ የማቋረጥ አገልግሎትን	1 አዎ 2 የለም	
	ፅንሰ ከተቋረጠ በኋላ የሚሰጥ እንክብካቤ አገልግሎትን	1 አዎ 2 የለም	
	የማህፀን ጫና ቅድመ ንሰርል የታ/ምር መራ-አገልግሎትን	1 አዎ 2 የለም	
	የወጣቶች እና የአፍላውጣቶች የስነ-ተዋልዶጤ ከአገልግሎት እንዳትጠቀሙ/ም ያደረገሽ/ክ	1 መልካም ያልሆነ የአገልግሎት ሰጭዎ አመለካከት 2 ተስማሚ ያልሆነ የተቋሙ የስራ ሰዓት 3 በቂ ያልሆነ የህክምና መሳሪያ	

504	ምክንያት-ምንነበር? (በአንዱ ላይ ብቻ ምልክት ያድርጉ)	4የአገልግሎት ጥራቱ ዝቅተኛ መሆኑ 5 ጤናተቋሙ ያለው እርቀት \\6በተቋሙ የአገልግሎት መስጫ ወ.ቦታ የተገልጋይነ ግንኙነት ንማሳጣት/ፕራይቪሲ ንሰለሚጋፋ 7ከአገልግሎቱ ጋር የተያያዘ ፈራሾች 8የተገልጋይ ወሳኔ ላይ የአገልግሎት ሰ ጨዋ ጣልቃገብነት	
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ለቀና ትብብር አመሰግናለሁ!!

Declaration: signed by both student and internal examiner

Declaration

I, the undersigned declare that this thesis is my original work in partial fulfillment of the requirement for the degree of Master of Public Health in Epidemiology. I also declare that it has never been presented in this or any other university and that all resources and materials used in the thesis have been duly acknowledged.

Student Name: -----

Signature: _____

Place of submission: SPMMC department of public health

Date of submission: -----

This thesis has been submitted with my approval as a College/university internal examiner.

Internal examiner Name: -----

Signature: -----

Date: - -----

Declaration: signed by both student and advisors

Declaration

I, the undersigned declare that this thesis is my original work in partial fulfillment of the requirement for the degree of Master of Public Health in Epidemiology. I also declare that it has never been presented in this or any other university and that all resources and materials used in the thesis have been duly acknowledged.

Student Name: -----

Signature: _____

Place of submission: SPMMC department of public health

Date of submission: -----

This thesis has been submitted with my approval as a College/university advisor.

Advisor Name:

1. Primary advisor -----

Signature: -----

Date: - -----

2. Co-advisor:- -----

Signature: - -----

Date-----

