ADDIS ABABA UNIVERSITY, COLLEGE OF HEALTH SCIENCES

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REPRODUCTIVE HEALTH KNOWLEDGE AND SERVICES UTILIZATION AMONG RURAL ADOLESCENTS IN MACHAKEL WOREDA, EAST GOJAM ZONE, ANRS, NORTHWEST ETHIOPIA, 2012.

BY

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Reproductive Health Knowledge and Services Utilization among Rural Adolescents in Machakel woreda, East Gojam Zone, ANRS, Northwest Ethiopia, 2012.

A Community-based Cross-Sectional Study

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Dedication

This thesis is dedicated to rural adolescents who are in need of integrated adolescent-friendly reproductive health services.

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Acronyms

AFRHS	Adolescent-friendly Reproductive Health Services
AIDS	Acquired Immunodeficiency Syndrome
ANC	Antenatal Care
ARH	Adolescent Reproductive Health
ASRH	Adolescent Sexual and Reproductive Health
AOR	Adjusted Odds Ratio
AAU	Addis Ababa University
COR	Crude Odds Ratio
EDHS	Ethiopian Demographic and Health Survey
FGM	Female Genital Mutilation
FP	Family Planning
ICPD	International Conference on Population Development
IDI	In-Depth Interview
IEC	information, Education and Communication
IUD	Intra-Uterine Device
HEWs	Health Extension Workers
HIV	Human Immunodeficiency Virus
KAP	Knowledge, Attitude and Practice
NGO	Non-Governmental Organization
PI	Principal Investigator
RH	Reproductive Health
SRH	Sexual and Reproductive Health
RTIs	Reproductive Tract Infections
SD	Standard Deviation
SPH	School of Public Health
SPSS	Statistical Packages for Social Sciences
SRS	Simple Random Sampling
STIs	Sexual Transmitted Infections
WHO	World Health Organization

Abstract

Background: According to World Health Organization (WHO) adolescents are defined as persons between 10 and 19 years of age; nearly 20% constitute Ethiopian population and four-fifth live in rural areas. Studying their reproductive health knowledge, services utilization and associated factors is highly relevant to design age-appropriate program interventions and strategies in the local context.

Objective: To assess the reproductive health knowledge and services utilization among rural adolescents in Machakel woreda, East Gojam Zone, Amhara National Regional State, Northwest Ethiopia.

Methods: A community-based cross-sectional study was conducted to assess the reproductive health knowledge and services utilization of rural adolescents in Machakel woreda. The study employed both quantitative and qualitative methods. A systematic random sampling technique was used to select 415 adolescents from eligible households. Data were collected through structured pre-tested questionnaire and using in-depth interview guides. The data were entered into Epi Info and analyzed by using SPSS software for windows. Univariate, bivariate and multivariate analyses were done.

Result: More than two-third (67%) of the adolescents were knowledgeable about reproductive health issues. Late adolescence (AOR=3.77, 95%CI (3.1, 8.98)), residing with grandparents and/or other relatives (AOR=2.21, 95%CI (1.81, 6.04)) and being from rich families (AOR=3.37, 95%CI (1.65, 6.87)) were associated with reproductive health knowledge. However, only a fifth (21.5%) of the adolescents have ever utilized reproductive health services. Parent (s) disapproval, lack of basic information and pressure from partners were found to deter adolescents from accessing reproductive health services. Late adolescents had more tendencies to use reproductive health services (AOR=2.18, 95%CI (1.13, 8.03)). The likelihood of utilizing reproductive health services was significantly associated with knowledge for reproductive health (AOR=1.23, 95%CI (1.23-4.21)).

Conclusion: It was found that reproductive health knowledge and services utilization amongst rural adolescents remained insufficient. Community-conversation in line with adolescent-to-adolescent-counseling, peer education and parent-adolescent communication should address sensitive topics such as sex education and other reproductive health issues.

1. Background

According to World Health Organization (WHO) adolescents are defined as persons between 10 and 19 years of age, are characterized by significant physiological, psychological and social changes that place their life at high risk and they make up about 20% of the world's population, of whom 85% live in developing countries. Yet, they have been neglected as a distinct group and have generally been subsumed under the heading of child, family or women's health and welfare. This has at least partially been because adolescents were considered to be a relatively healthy age group, one without a heavy "burden of disease", compared, for instance, to newborn infants or elderly people. However, recognition has been growing in recent years among policy-makers that adolescents have special health-related vulnerabilities (1, 2).

A comprehensive adolescent reproductive health (ARH) program can provide right information at the right age (3). The concern about adolescent sexual and reproductive health (ASRH) has grown following reports that sexual activity, early pregnancies and sexually transmitted infections (STIs) including human immune deficiency virus (HIV) infection rates are increasing at unprecedented rates among adolescents (4).

Since the 1994 International Conference on Population Development (ICPD) in Cairo, Egypt, adolescent-friendly reproductive health services (AFRHS) have been recognized as an appropriate and effective strategy to address sexual and reproductive health (SRH) needs of adolescents (5). ASRH has become an issue of concern to governments, demographers and planners all over the world. Nevertheless, the needs of the young people remain poorly understood or served in much of the world (6).

However, education pertaining to ASRH can mitigate the deep-rooted problems by improving knowledge, access to RH services such as family planning (FP) and enabling decision making on their utilization (9).

Studies in both developed and developing countries demonstrate that the behavioral patterns of RH services and use differ significantly between adolescents and adults. This difference may be attributed to the maturity, higher knowledge and access to services and experiences among adults compared to adolescents (10).

Adolescents know little about how to protect themselves and are often unable or unwilling to use the services. Many of these young people do not consider themselves to be at risk, they tend to view their sexuality positively and keep it secret for fear of disapproval by their elders and sometimes they have a feeling of anxiety and shame. As a result, they receive little guidance about rights and responsibilities how to protect themselves against unwanted pregnancy and diseases and have little access to healthcare services (11).

In order to lead healthy, responsible and fulfilling lives and protect themselves from RH problems, adolescents need to be knowledgeable about themselves and need adequate information regarding the physical and psychological changes that take place during puberty, menstruation, pregnancy and child birth (11). The need to address these problems through RH education as has been recognized at various national and international forums is paramount.

Despite 35% of the world population being in the 10-24 age group, the health needs of adolescents have neither been researched nor addressed adequately particularly their RH needs are often misunderstood, unrecognized or underestimated (14). Early & unprotected sexual activity and misconceptions about HIV/AIDS are prevalent in rural adolescents putting them at greatest risk of ill-health conditions (11).

In Ethiopia, nearly 20% are young people of whom four-fifth live in rural parts of the country (7, 17, 18).

1.1 Statement of the problem

Focusing on adolescents' RH is both a challenge and an opportunity for healthcare providers (14). Adolescents in rural areas may face troubles due to lack of right and accurate information regarding their own physical and/or sexual developments. The need to address this problem through health education by health professionals needs to be ascertained (12). The knowledge and awareness levels about RH among rural adolescents may not be similar to that of their counterparts from urban areas.

The review of literatures reveals that there are few studies on knowledge, attitude and practice (KAP) of adolescents in relation to their RH in Ethiopia showing a significant discrepancy between knowledge about and the level of services utilization in particular and poor access to RH services in general (17-19, 27).

However, few attempts have been made particularly in rural settings to communicate with them for addressing their critical concerns or provide them with the necessary SRH services.

Rural adolescents in the study area may experience the same trend with their counter parts in other parts of the country and the study result is intended to come up with their RH knowledge, services utilization pattern, identify associated factors and recommend the way forward to narrow the existing gap particularly with respect to knowledge & services utilization pattern amongst these "windows of hope" population.

1.2 Rationale of the study

Little is known about the quality and accuracy of adolescents' knowledge and preferences of health services and their utilization (16).

As "age-appropriate" interventions specific to a particular setting are desirable to address the diverse needs and contexts of adolescents' lives, studying their knowledge, services utilization and their associated factors is highly relevant to design appropriate program interventions and strategies in the local context (17, 18).

2. Literature Review

2.1 Reproductive Health Knowledge

Knowledge of RH and respective services is an important prerequisite to gaining access to and eventually adopting SHR services among adolescents (11, 18).

A base line study done among rural adolescents in India revealed that they lacked scientific information and misconceptions were widespread on various RH issues. Girls were found less knowledgeable (31%) compared to boys (33%) on these issues; around three-fourth of boys and two-third of girls accurately knew the modes of STIs and HIV/AIDS transmission; nearly 50% of the adolescents knew that changes marked boys entering into adulthood and girls into womanhood (22).

Reproductive health knowledge and services utilization among rural adolescent migrants in China showed that low levels of RH knowledge on pregnancy and fertilization (29.4%) and contraception (9.1%). Female showed more knowledge about pregnancy and STIs but with less knowledge on FP policy than the male. Also, 15-19 years old had the least knowledge on pregnancy and FP policy ($P<0.001$). There was relatively high level of knowledge about STIs and nearly half of them received free contraceptives/condoms (23).

Study on STI knowledge, communication and perceived risk in the Eastern Cape, South Africa, showed that nearly 88% of the adolescents learned about STIs from healthcare workers, the media, educators, schools and friends. Only a small proportion reported having learned about these issues from their parents/guardians (24).

Accessibility to SRH information in Ghana showed that, about 58% of adolescents knew FP whilst 41% did not know about it. The main FP methods known by most adolescents were pills (33.9%) and the least known were sterilization, intra-uterine devices (IUDs) and norplant. The majority did not know any FP method and could not mention any method (39%). In terms of sex segregation, the males were more knowledgeable than the females (39% vs. 25% for condoms) (6).

In Ethiopia, effective knowledge of HIV/AIDS is contingent on knowledge of ways to avoid contracting the virus. Despite that AIDS awareness is relatively high among adolescents in Ethiopia, one in four young women and more than one in ten young men have not heard of AIDS

or know whether it could be avoided. Nearly a third of young women and a sixth of young men did not know a specific way to avoid the infection (18). According to EDHS (2011) report, about 97% of rural adolescents in Ethiopia had heard of AIDS but 50% were knowledgeable on HIV prevention methods (8).

2.2 Reproductive Health Services Utilization

Adolescents, as a rule, are left out of various RH educations and intervention programmes as they are considered either too young or old to be in the programmes' target groups. As a result, 60-80% of females in the 11-18 years age group were illiterate and unexposed to life outside the household (24).

Ever use of RH services is basically measured as the cumulative experience of adolescents with RH services (7) and it was found to be 41.1% (25).

In China, the most often obtained RH service was the STI/AIDS prevention health education (female: 49.6%, male: 50.2%) and only 16.1% of females knew and took advantage of the free RH checkup (23).

One study in northwest Ethiopia found that contraceptive use including condoms was lower among rural adolescents (AOR=0.10; 95%CI (0.04, 0.3)). Only 2% of the rural compared to 35% of the urban sexually active adolescents had ever used condoms (27).

According to EDHS (2005), the contraceptive prevalence rate for currently married teenaged women between 15 and 19 years was only 8.9%. Moreover, even if adolescents use contraceptive, they were less likely to use most effective methods like sterility and long term methods than older woman (data not shown) (7).

The use of condoms during the last sexual intercourse among rural adolescents (15-19 years) was nearly 16% (24.3% among adolescents of Amhara region (15-19 years)) (8).

2.3 Factors associated with Reproductive Health Knowledge and Services Utilization

2.3.1 Socio-demographic and Socio-economic Factors

Various local and international studies have shown that socio-demographic and socio-economic characteristics of adolescents such as residence and education were reported to have close relationship with RH knowledge and healthcare-seeking behaviors (9).

Assessment of the magnitude of socioeconomic inequalities in RH services utilization among adolescents in Asia and Sub-Saharan African (SSA) countries revealed that contraceptive use was significantly less common among adolescents in the poorest quintile than those in the richest (25).

Sexual behaviors and the use of services among adolescents not only vary across countries and regions, but vary within a given country as well. For example, in Burkina Faso and Mali specific factors such as higher levels of education, urban residence and family wealth were associated with higher levels of sexual activity and use of respective services (10).

Evaluation on the effect of health education by health professionals on adolescent girls' knowledge and attitudes towards RH showed remarkable improvement in relation to knowledge about puberty, menstrual cycle, pregnancy, contraception and also transmission and prevention of STIs. This study showed that health education as intervention increases the awareness level among adolescent girls in rural areas who belonged to low socio- economic status, thus empowering them to take care of their own health and protect themselves from possible health problems like unwanted pregnancies and risk of getting STIs in their future life (13).

Govindasamy P, et al. indicated that Ethiopian teens were less likely to have information about AIDS than youth in their twenties (73.3% versus 83.9). Youths in more urban areas of the country were much more likely to have information about AIDS than their rural counterparts (95.9%); it also revealed that awareness of RH services utilization was higher among ever married than never-married youth. Females had more opportunities to acquire RH education than males, while males obtained more free contraception tools. It showed that males were poorer for RH consultation services, but received more RH health education in contrast to females. Income had no statistically significant impact on services utilization and the unmarried

illustrated much lower knowledge on pregnancy and fertilization than married (41.6% versus 14.2%) and contraception (21.3% versus 9.1%) (20).

A base line study among rural adolescents in India, showed that age, faculty of education, peer interaction and erotic exposure were significantly related with their RH knowledge levels; junior and primary school students obtained most of the RH health education and were the least who had utilized the check up services (22).

A community-based survey in rural western Kenya showed that having more than 8 years of education and being of higher socio-economic status were the most important factors associated with RH services utilization (data not shown) (29).

According to Tewodros A, et al. on determinants of adolescent fertility in Ethiopia, the effect of FP as a determinant of fertility was observed only in urban areas while it had almost negligible effect in rural areas (30).

Study conducted by Fantahun M, et al. in Amhara region of Ethiopia revealed that urban residence and educational status had significant association with modern health services utilization in health institutions (AOR=3.4, 95%CI (1.8, 4.5)); it also showed that teenagers were less likely to visit and utilize modern health services (32).

Access and health services operational problems were found to be the major reasons that prevent rural adolescents from visiting health institutions (data not shown) (26).

Youths aged 20-24 year and educated were more likely to be currently using a contraceptive method than teens and uneducated youths. At the same time, women in urban areas, who listen to the radio and ever-married, were more likely to be using contraception than their counterparts (data not shown). Residing in urban areas was significant in improving knowledge among women and men regarding utilization of the available services (20).

2.3.2 Cultural Factors

According to a baseline survey of ARH interventions, restrictive socio-cultural norms inhibit disclosure of information about sexual activities and other RH-related issues to unmarried

adolescents. Hence, the rural adolescents, particularly females, had a substantially lower level of knowledge about HIV/AIDS (data not shown) (10, 21).

Reasons for remaining sexually abstinent reported in India were value towards sex, fear/pressure of family, religion, unwanted pregnancy or STIs and inconvenient place, partner and money. The informal channels that provided information of sex related issues were peers, pornographic materials and media. Over 83% boys and girls expressed the need to introduce sex education in schools and colleges (22).

A quasi-experimental pre-test post-test research on RH awareness program for adolescents in Tanzania revealed that sexual experience in girls and boys differed significantly ($x^2(1)=7.282$, P=0.007); nearly half reported that it was by force (31).

2.3.3 Behavioral Factors

Desire for child appears to be the primary reason for non-use of contraception among currently married female non-users in Bangladesh. Lactational amenorrhoea was the next most commonly cited reason for non-use (17.4%). Other reasons mentioned include infrequent sex (7.5%), side effects/health concerns (7.5%) and opposition from husband/relatives (5.3%) (10, 21).

Communication with the students and their parents differed between girls and boys; more girls than boys communicated with their parents about their daily life (73.2% for girls versus 65.1% for boys) (31). Concerning communication about sex and HIV/AIDS, it was 37.3% for the girls & 29.6% for the boys. Moreover, most of the adolescents preferred to communicate with friends (38.67%) and siblings (28%) about sex; only 15% talked to either parent (30). The majority of adolescents (67.3%) would like to go to a health facility for SRH information (6).

3. Objectives

3.1 General Objective

To assess the reproductive health knowledge and services utilization among rural adolescents in Machakel woreda, East Gojam Zone, Amhara National Regional State, Northwest Ethiopia, 2012.

3.2 Specific Objectives

- To determine the level of reroductive health knowledge among rural adolescents in Machakel woreda, East Gojam Zone, Northwest Ethiopia, 2012.
- To determine the level of reproductive health services utilization among rural adolescents in Machakel woreda, East Gojam Zone, Northwest Ethiopia, 2012.
- To identify factors associated with reproductive health knowledge & services utilization among rural adolescents in Machakel woreda, East Gojam Zone, Northwest Ethiopia, 2012.

4. Methods

4.1 Study area and period

The study was conducted in Machakel woreda, one of the 18 woredas of East Gojam zone, Amhara National Regional state (ANRS) in February 2012. Amanuel is the woreda's town. It is 28kms and 328kms far from Debremarkos, the capital of the zone, and Addis Ababa respectively. It borders with four districts: Debre-elias in the west, Senan in the east, Dembecha in the north and Gozamen in the south. The woreda comprises 25 kebeles (1 urban and 24 rural kebeles). Based on the 2007 census and according to regional population projection in 2009, the district had a total population of 128,655, of whom 8749 (6.8%) live in urban and 119,928 (93.2%) in rural areas; nearly 44, 386 (34.5%) were people of age group 10-24 years. The total number of households (HHs) in the woreda was 29,918 and the average population density was 936 people per square kilometer. At the time of the survey, in the district, there were 6 health centres, 25 health posts (1 urban and 24 rural) and 185 healthcare workers of which 55 were HEWs; two non-governmental organizations (NGOs), Clinton Foundation and integrated family health project (IFHP), were working on RH.

4.2 Study Design

A community-based cross-sectional study was conducted to assess the RH knowledge and services utilization of rural adolescents in Machakel woreda. The study employed both quantitative and qualitative (in-depth interview (IDI)) methods. The IDI for qualitative part of the study was chosen as most of the issues to be discussed were sensitive personal experiences and hence to allow the respondent tell his/her story in his/her own way and also to let the study unit to be explored in depth to discover the nature of the experiences, feelings and perceptions; moreover, it was preferred to study individual level factors.

4.3 Source and Study Population

4.3.1 Source Population

All rural adolescents who lived in Machakel woreda for the last six months were considered as a source population.

4.3.2 Study Population

Eligible adolescents from the selected HHs were the sample population.

Inclusion Criteria: All rural adolescents of Machakel woreda who lived for the last six months were included.

Exclusion Criteria: Rural adolescents who fulfilled the inclusion criteria, but seriously ill during the data collection period were excluded.

4.4 Sample Size determination

The sample size was calculated using single population proportion formula by taking p (proportion of modern contraceptive utilization by adolescents) to be 57% (27).

The assumptions of 95% confidence level (level of significance, α=0.05), 5% margin of error and 10% for non-respondents were used to determine the sample size.

$n=\frac{(z_{\alpha/2})^2\, p\,(1-p)}{d^2}$ + 10% non-response rate

Where,

n= required sample size,

p= proportion of modern contraceptive utilization among adolescents

d=margin of error=0.05,

$z_{\alpha/2}$= confidence level corresponding to 95% CI=1.96 ($\alpha = 0.05$)

$=\frac{(1.96)^2\,(0.57\,(1-0.57))}{(0.05)^2}$

=377+0.1 (377)

=377+38=415

4.5 Sampling Procedure

For quantitative study:

Machakel woreda was selected based on its accessibility to the principal investigator (PI). Then six (6) kebeles were selected randomly among the 24 rural kebeles in the woreda. Sample HHs were proportionally allocated for each eligible kebele. Within each of the 6 randomly selected kebeles, HHs were selected using systematic random sampling technique. The first HH within a kebele was selected by rolling a stick standing at the centre of each kebele and following the random direction of the stick. Once the first HH was selected, the consecutive HHs were systematically picked. Within each of the selected HHs, one adolescent in the age group of 10-19 years, was selected for the interview. If there were more than one adolescent in a particular

HH, one of them was selected using a lottery method. In the absence of adolescent in the selected HH or when the house was found closed, data collectors made a repeated visit up to three times and then went to the next HH (Annex II).

For qualitative study:

For in-depth exploration of adolescents' RH knowledge and pattern of services utilization including their experiences, feelings and perceptions, participants were selected for IDI purposively those who lived for the last six months in the selected kebeles and were not included in quantitative assessment; the IDI also included those who could express themselves well. Considering resources, IDI was organized for six adolescents representing each selected rural kebele for qualitative study.

4.6 Data Collection procedures

Quantitative Data:

Pre-tested structured questionnaire was prepared by reviewing previously done studies on the topic of interest (7, 14, 23, 26, 27 and 32).

The questionnaire contained three parts:

1. Demographic, social and economic characteristics,
2. Knowledge on RH (fertility, contraception, STIs/HIV/AIDS, VCT) and
3. Patterns of RH services utilization.

Data were collected after conducting a pre-test on 10% of the study samples in place which was similar with the study area (Senan, one of the woredas in the zone and bordering the study area in the east) and refinement on the data collection tools was made accordingly. Information on socio-demographic and economic variables, RH knowledge and services utilization were collected (Annex IV). The data collectors were six health extension workers (HEWs) who had been working in each kebele after two days training on data collection tools. Face-to-face interviews were conducted with the selected adolescent in a HH. The PI & two Bachelor of Science holders in public health supervised the data collection process.

Qualitative Data:

An IDI was used to get insight into issues that could not be addressed by the quantitative survey. The interview was held in areas convenient to the participants near their homes. Open-ended questions were used to guide the interview. The interviews were undertaken by the PI and

assisted by a rapporter, who took notes and supported by a tape recorder after assent and/or consent was obtained from the participants. The discussion was facilitated by the PI (Annex V).

4.7 Data Quality management

To ensure data quality, consistency was checked by translating the Amharic version back to English by different persons who had Bachelor of Science in public health and were proficient enough in both languages. Pre-test was undertaken on the questionnaire before the actual data collection started to examine the reliability and construct the validity of the instrument. The data collectors and supervisors were provided with intensive training on the objective of the study, contents of the questionnaires and how to maintain confidentiality and privacy of the study subjects. The collected data were checked by the PI on daily basis for any incompleteness and/or inconsistency. If any incompleteness and/or inconsistency appeared, correction was made by going back to the HH for which incompleteness/inconsistency appeared. Data were entered into Epi Info software package as part of data quality management. During data cleaning, logical checking techniques were employed to identify errors.

4.8 Data Processing and analysis

Quantitative Data:

Data were entered in to Epi Info 3.5.1 and transferred to SPSS 16.0 for windows for statistical analysis. The first step before analysis was data exploration to visualize the general feature of the data to be analyzed. After exploration, percentages were used to determine the level of RH knowledge and services utilization among rural adolescents. Data were presented using tables and graphs accordingly.

Demographic characteristics, RH knowledge and pattern of services utilization were analysed descriptively; the effect of demographic, social and economic characteristics and other factors on RH knowledge and services utilization by rural adolescents were analysed using logistic regression model. To determine the association between different factors and RH knowledge and services utilization, a logistic regression model was employed and two steps were followed. First, each factor was entered into a separate binary logistic regression model. Second, variables which were significant at P-value of 0.05 were put together into the logistic regression model to come up with the independent effects of factors on RH knowledge and services utilization. Variables that remained significant at a P-value of 0.05 in the final multivariate logistic

regression model were considered as independent factors of RH knowledge and services utilization.

Qualitative Data:

Responses were transcribed and translated into Amharic and then to English. Most important findings were *summarized*, *narrated* and *incorporated* in the report.

4.9 Study Variables

Dependent:

- Reproductive health knowledge
- Reproductive health services utilization

Independent:

- Socio-demography (age, sex, religion, ethnicity, marital status)
- Socio- economic variables (educational status, occupation, income)
- Reasons/factors for RH knowledge and services utilization

4.10 Operational Definition

Reproductive Health Knowledge: the adolescents were asked questions which covered the expectations about male and female adolescents' fertility, FP, STIs and VCT for HIV/AIDS and services expected to be provided with and utilized by adolescents in the study area including information, education and communications about health services for RH. The investigator developed an index which summarized adolescents' knowledge about the above issues that assigned a score of **1** for each **''Yes'' or correct** response and **0** for **''No'' or incorrect** response.

Key: 1. Knowledgeable if the summary index equals/ greater than the mean.

2. Not knowledgeable if the summary index is less than the mean.

Overall RH knowledge: average of the summary index for RH knowledge.

Reproductive health services: services provided for adolescents such as FP, abortion and post abortion care, IEC, VCT, medical checkup and treatment for STIs.

Reproductive health services utilization: use of any SRH services such as medical checkup, consultations, FP, health education on HIV/AIDS and STIs treatment rendered in healthcare services providing centers.

4.11 Ethical Considerations

Ethical clearance was obtained from the Research and Ethical Committee of the School of Public Health of Addis Ababa University. Permission was also obtained from Machakel woreda administration and health bureau. Information sheet was prepared and read to the eligible participants to obtain verbal consent and/or assent (Annex III). Without permission no data collector tried to go through with eligible adolescent. Data collectors approached the adolescent by extending their greetings and introducing themselves. After introduction, they continued explaining the purpose & other information of their visit by reading the information sheet to the eligible study unit. Then they were requested for verbal consent and/or assent. Data collection was conducted after verbal consent and/or assent had been obtained. Any person found to be sick in the HH during data collection was advised to visit the nearby health facility.

4.12 Dissemination of Results

After the data were analysed and conclusions & recommendations were drawn, 2 copies were submitted to SPH of AAU, in order to make it available for final thesis defense. Copies will be submitted to the Machakel woreda health department and east Gojam zone health bureau. Attempts will be made for publication in national scientific journals.

5. Results

5.1 Quantitative finding

5.1.1 Socio-demographic and Socio-economic Characteristics

A total of 381 rural adolescents were volunteered to participate in the interview yielding a response rate of 92%. Due to incompleteness & inconsistency during data cleaning, 6 (1.6%) of the samples were excluded from analysis. Therefore, 375 (90.4%) rural adolescents were considered for analysis.

The mean age of the adolescents was 14.6 $\pm$ 4.1 years and about half 190 (50.7%) were males. The majority 372 (99.3%) constituted Amhara by ethnicity and almost all 371 (99.2%) were Orthodox by religion. Most adolescents 319 (85.1%) were single and the rest 56 (14.9%) were ever married. About four-fifth 304 (81.1%) have ever attended formal education of which 145 (47.7%) and 159 (52.3%) were elementary and secondary school respectively; more than two-third 258 (68.9%) of the adolescents were in-school. About half families of the adolescents could not read and write (49.3% fathers versus 49.5% mothers). The mean number of family size was 4.43 $\pm$ 1.73. Two hundred eleven 258 (58.9%) of the study participants were students followed by 42 (11.2%) farmers, 39 (10.4%) house wives, 31 (8.2%) merchants and 6 (1.6%) daily laborers. Two hundred twenty three (60.6%) adolescents were living with both parents, followed by single parent 98 (26.4%), husband/wife 44 (11.4%) and others (grandparents and other relatives) 9 (1.7%). Regarding their economic status as measured by perceived family income relative to neighbors, the majority responded medium 212 (56.5%) followed by poor 143 (38.1%) and rich 20 (5.3%) respectively. About two-third of the adolescents 251 (67.4%) possessed means of communication (Table 1).

Table 1: Socio-demographic and Socio-economic Characteristics of Rural Adolescents in Machakel woreda, northwest Ethiopia, February 2012.

Variables	Frequency(n=375)	Percent
Sex		
Male	190	50.7
Female	185	49.3
Age		
10-14	127	33.9
15-19	248	66.1
Mean	14.6 ± 4.1	
Marital status		
Single	319	85.1
Ever married	56	14.9
Ethnicity		
Amhara	372	98.2
Agew	3	0.8
Religion		
Orthodox	371	98.9
Muslim	3	0.7
Protestant	1	0.4
Ever attended school		
Yes	304	81.1
No	71	18.9
Educational status	**(n=304)**	
Elementary	145	47.7
Secondary	159	52.3
Current schooling		
In-school	258	68.9
Out-of-school	117	31.1
Father's education		
Cannot read & write	185	49.7
Literate	190	50.3
Mother's education		
Cannot read & write	184	49.5
Literate	191	50.5
Current living arrangement		
Both parents	227	60.6
Single parent	99	26.4
Husband/wife	43	11.4
Other (grandparents & other relatives)	6	1.7
Family size		
</=5	143	38.1
>5	232	61.9
Mean	4.43 ± 1.73	
Current occupational status		
Student	258	68.9
Farmer	42	11.2
Housewife	39	10.4
Merchant	31	8.2
Daily laborer	6	1.6
Perceived family income		
Poor	143	38
Medium	212	56.7
Rich	20	5.3
Possess any means of communication		
Yes	251	67.4
No	124	32.6

5.1.2 Reproductive Health Knowledge of Rural Adolescents

The mean age at menarche for female adolescents was 13.8±1.4 years. The majority 200 (53.5%) of the adolescents responded that a girl could get pregnant the first time she had sex and the age at which it could occur was mentioned as "during puberty" by over a third 138 (36.6%), followed by "after puberty" 141 (37.7%) and "before 10 years" of age 5 (1.3%); however, a significant proportion of the adolescents 91 (24.3%) did not know the age at which pregnancy could occur. Regarding menstrual cycle with high chance of getting pregnancy, only 53 (14.2%) responded it was in the "middle of the cycle" and a considerable proportion of the study subjects 118 (31.3%) did not know at which cycle it would occur at all. The male counterpart could be matured enough or physically made a girl pregnant "during puberty" was reported only by 129 (34.4%) of the adolescents and even 105 (28.2%) did not know when the boy would be physiologically matured enough to do so. Adolescents' overall knowledge was evaluated by summarizing all reproductive health-related questions. Accordingly, the study showed that the mean knowledge score was 10.01±2.7. Based on this mean score, more than two-third 251 (67%) of the adolescents were knowledgeable about RH issues (Table 2).

Table 2: Reproductive Health Knowledge of Rural Adolescents in Machakel Woreda, northwest Ethiopia, February 2012.

Variables	Frequency(n=375)	Percent
Age at menarche (years)	**n=185**	
10-14	121	65.4
15-19	64	34.6
Mean age at menarche	13.8± 1.4	
Age at which a girl can be pregnant		
During puberty	129	34.5
After puberty	141	37.7
Before 10 years of age	5	1.3
I do not know	91	24.3
A girl gets pregnant the 1st time she has sex		
Yes	200	53.5
No	175	46.5
Menstrual cycle with the greatest chance of pregnancy		
During her period	40	10.5
Right after period is ended	128	34.1
Just before her period begins	42	11
In the middle of her cycle	58	15.6
The same throughout the cycle	12	3.2
I do not know	95	25.5
Know ways of avoiding pregnancy		
Yes	282	75.1
No	93	24.9
Know about STIs		
Yes	236	63
No	139	37
Know about HIV/AIDS		
Yes	297	79.5
No	78	20.5
Ways of HIV/ AIDS transmission	**(n=297)**	
Unsafe sexual intercourse	198	66.6
Sharing needles and syringes	66	22.2
Blood transfusion	44	14.8
During pregnancy and childbirth	18	5.9
Other	11	3.7
HIV/AIDS can be acquired with 1st contact		
Yes	210	56.2
No	165	43.8
Know any way to prevent HIV/AIDS		
Yes	270	72
No	105	28
Know about VCT		
Yes	243	65
No	132	35
Overall Knowledge		
Knowledgeable	251	67
Not knowledgeable	124	33

More than four-fifth of the rural adolescents knew ways of avoiding unwanted pregnancy and the majority mentioned oral contraceptive pills 221 (78.2%) followed by condoms 51 (18%) and injectables 36 (12.8%) as means of preventing it but long acting and permanent contraception methods such as norplant 1 (0.4%), intrauterine devices 1 (0.3%) and sterilization 3 (1%) were mentioned insignificantly (Figure 1).

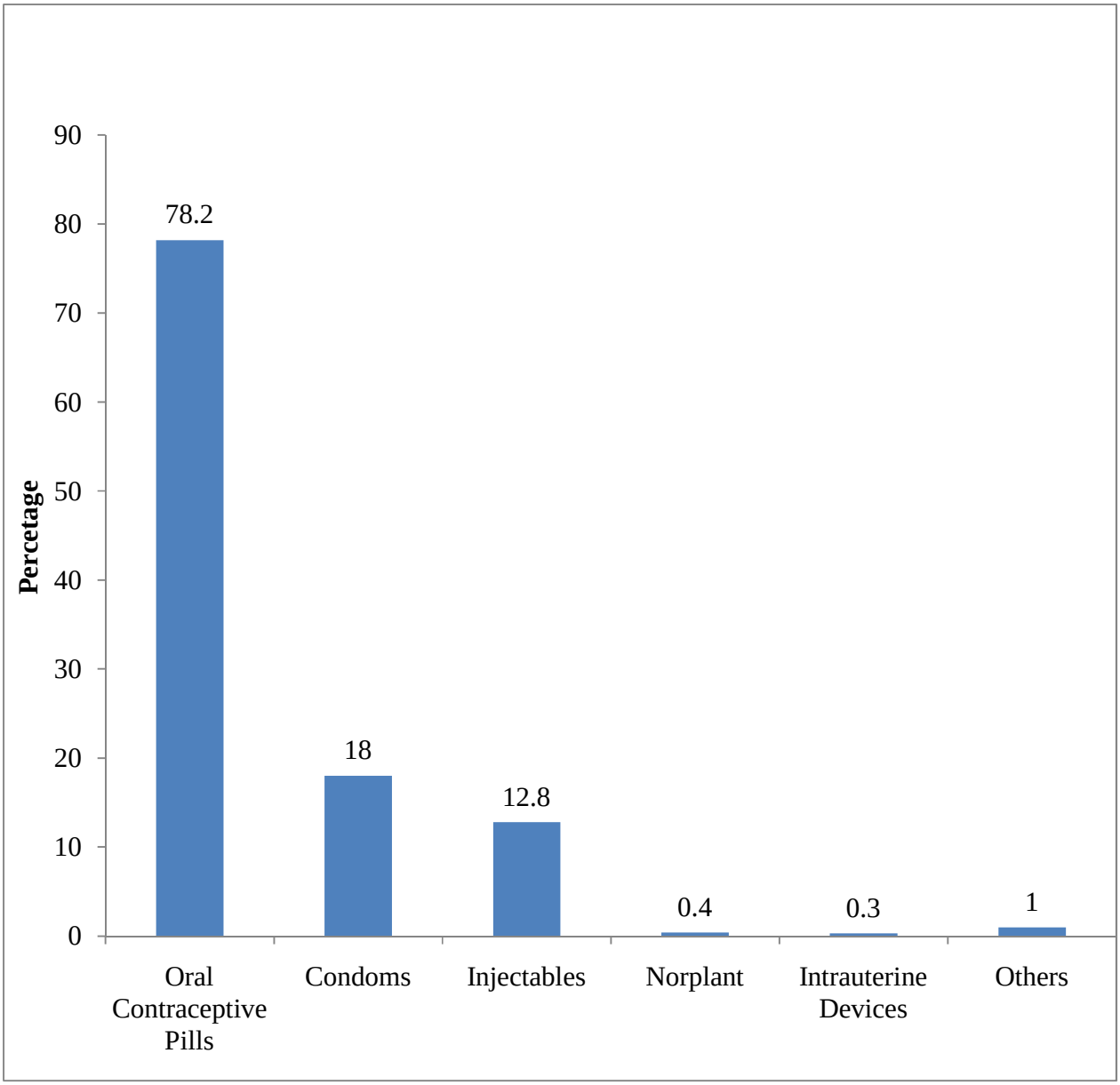

Figure 2: Knowledge of Contraception Methods of Rural Adolescents, Machakel woreda, East Gojam Zone, Northwest Ethiopia, February 2012.

Over two-third 255 (68%) of the rural adolescents have ever heard any disease a person could get through sexual intercourse; gonorrhea and HIV/AIDS were the major STIs mentioned by 118 (46.4%) and 108 (42.5%) of the adolescents respectively. Genital ulcer was indicated by more than half of the study subjects 141 (55.2%) as the sign/symptom of such disease conditions followed by pain during urination 22 (8.6%) and abnormal genital discharge 13 (4.9%); however, more than one-fifth did not know any manifestation of such infections.

Most of the adolescents 343 (91.5%) have ever heard about HIV/AIDS and listed unsafe sexual intercourse as the major way of acquiring the disease 198 (66.6%) followed by sharing sharp materials like needles and syringes 66 (22.2%); only 18 (5.9%) responded mother-to-child transmission as route of acquiring the virus. More than four-fifth of the adolescents 279 (81.2%) responded as there were mechanisms through which STIs and HIV/AIDS could be avoided/prevented. Abstaining from sexual intercourse was the major means to prevent oneself from acquiring such infections 188 (67.4%) followed by avoiding unsafe or casual sex 41 (14.8%) and remaining faithful to a partner 39 (14%). A person could not get HIV with the first sexual contact and through careful looking at a person HIV/AIDS status of an individual would be determined were reported by 41.1% and 12% of the adolescents respectively.

Two hundred seventy 270 (72%) have ever heard about VCT and described reduction of the dissemination of HIV, enabling one to know his/her disease status and increasing one's confidence as its main advantages.

5.1.3 Pattern of Reproductive Health Services Utilization among rural Adolescents

As described in Table 3, more than a third of the adolescents 144 (38.3%) have ever heard of RH services and reported health professionals 116 (80.4%) as the main sources of information followed by radio 22 (15.5%), television 4 (3.1%) and print media (posters/leaflets) 2 (1%).

As to their utilization pattern, 31 (21.5%) of the adolescents ever utilized RH services (Figure 2) and 6 (18.8%) have visited a RH services providing centres in the last 6 months. For majority of adolescents, government health facilities 17 (54.8%), health posts 8 (25.8%) and private health facilities 5 (16.1%) were the preferred health institutions from where the services were obtained. There was also a sizeable contribution of traditional healers for 1 (3.1%) of the adolescents.

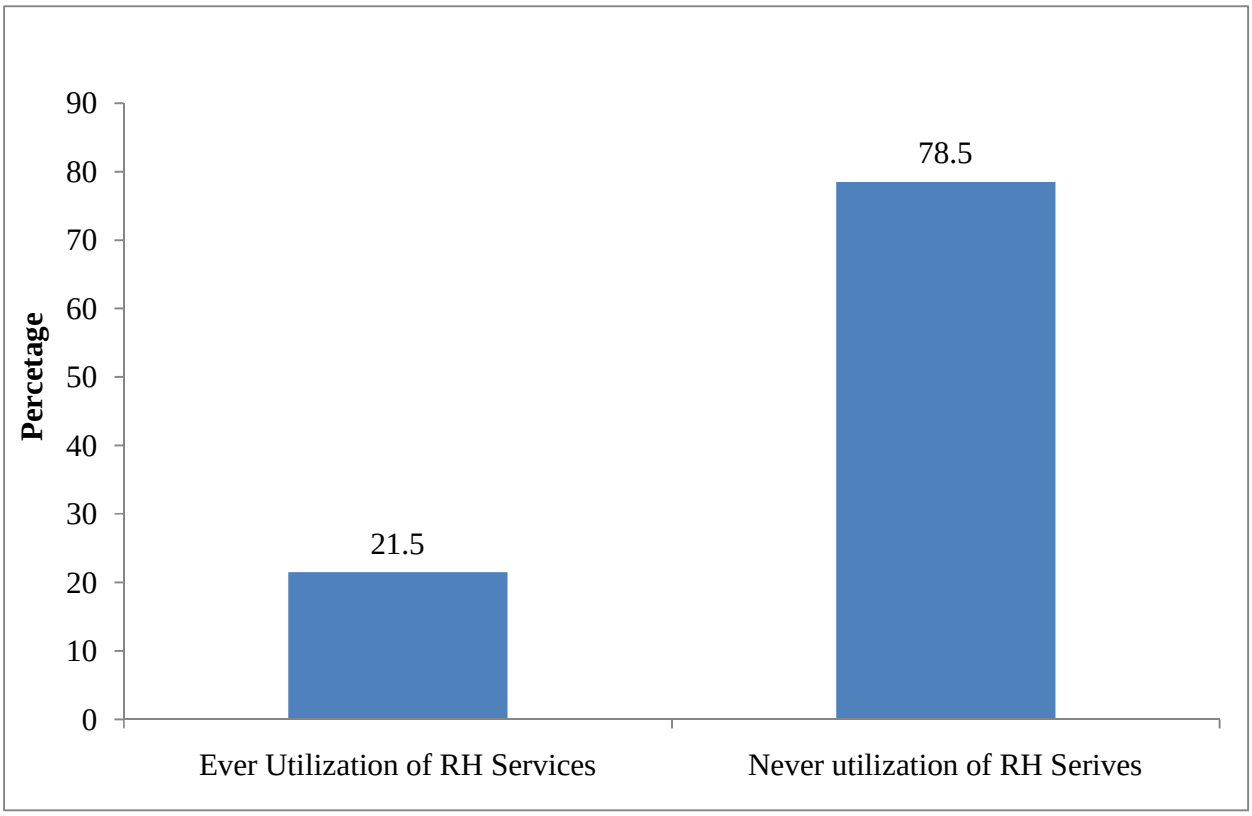

Figure 3: Utilization of RH Services by Rural Adolescents of Machakel woreda, East Gojam Zone, northwest Ethiopia, February 2012.

Effectiveness, proximity of the services rendering units and free treatments provided were indicated as the reasons to visit such institutions. The services rendered in such facilities included medical checkup 12 (39.8%), STIs treatment 8 (23.1%), delivery 6 (21.1%) and others 5 (16%) such as FP, abortion/post abortion care, VCT & IEC. Healthcare professionals with the same sex were preferred by the majority of the adolescents 18 (58.9%).

Among other factors, parent (s) disapproval 51 (37%), lack of information 36 (31.9) and pressure from partners 28 (24.8) were reported to hinder adolescents from accessing RH services (Figure 3).

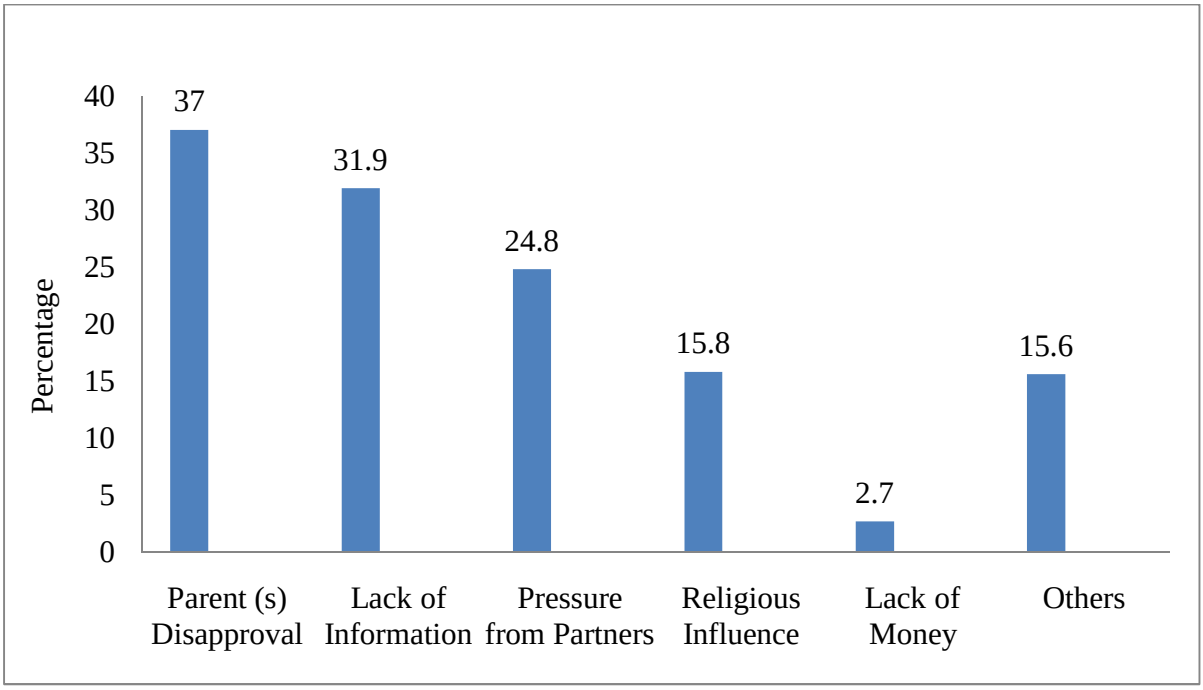

Figure 3: Factors Hindering RH Services Utilization among Rural Adolescents, Machakel woreda, northwest Ethiopia, February 2012.

The main obstacles from the adolescents' perspective refraining/preventing them from getting RH services from health institutions were mentioned as never thought of the services, unnecessity of the services, lack of knowledge and being young/healthy were listed by 128 (50.6%), 87 (34.4%), 65 (24.3%) and 44 (17.4%) of the adolescents respectively among others.

Three quarters of the adolescents have never discussed RH topics with their parents due to its unnecessity 63 (24.9%), fear 188 (74.3%), social and cultural restriction 52 (20.6%) and others 18 (7.1%). The majority of the adolescents prefer to discuss RH issues to friends/peers 174 (46.4%), followed by health professionals 105 (28%) and mothers 41 (10.8%).

According to this study, only 105 (28%) of the rural adolescents were well informed about RH such as contraceptives and other issues. Schools 51 (48.1%) and friends 14 (14.5%) were found to be important sources of SRH information among rural adolescents (Table 3).

Table 3: Reproductive Health Services Utilization and related Factors among Rural Adolescents of Machakel, northwest Ethiopia, February 2012.

Variables	Frequency (n==375)	Percent
Ever heard of RHS		
Yes	144	38.3
No	231	61.7
Ever utilized RHS (n=144)		
Yes	31	21.5
No	113	79.5
Visited RHS centres in the last 6 months	**(n=144)**	
Yes	6	18.8
No	138	81.2
Category of healthcare workers preferred	**(n=144)**	
Professionals with the same sex	18	58.9
Professionals with the same age group	11	35.5
Professionals with same age group and different sex	8	25.8
No sex and/or age preference	6	19.4
Main obstacles preventing adolescents from getting RHS		
Never thought of the services	128	50.6
Services not necessary	87	34.4
Lack of knowledge	65	24.3
Too young/healthy	44	17.4
Ever discussed RH topics with parents		
Yes	122	32
No	253	68
Reasons for not discussing RH topics with parents	**(n=253)**	
Not necessary	63	24.9
Fear	188	74.3
Social and cultural restriction	52	20.6
Others	18	7.1
Well informed about RHS		
Yes	130	34.7
No	245	65.3
Preferably discuss RH issues to		
Friends/peers	141	36
Mother	69	18.4
Father	44	11.7
Boyfriend/girlfriend	32	5
Partner (husband / wife)	38	7
Health professional	38	7
Others	32	7.6

5.1.4 Association of Socio-demographic and Socio-economic Characteristics and Reproductive Health Knowledge

In order to understand the social and demographic factors related to RH, a logistic regression analysis was done. Among the socio-demographic and economic characteristics of the respondents' sex, age, educational status, living arrangement (living with grandparents and other relatives) and family income were found to have statistically significant association with RH knowledge. However, adolescents' marital status, religion, ethnicity, history of schooling (ever attended school), current occupational status, families' educational history, family size and means of communication were found to have no statistically significant association.

Accordingly, female adolescents were found to be less knowledgeable than their male counterparts for RH (COR=0.56 (0.11-0.89)). Late adolescence (15-19) was positively associated with RH knowledge (COR=1.29 (1.01, 3.63)). Reproductive health knowledge was higher among secondary education adolescents than primary education (COR=1.35 (1.06, 6.12)) as well as it was higher among in-school adolescents than their out-of-school counterparts (COR=1.05 (1.03, 4.98)). Adolescents mostly living with their grandparents and other relatives were more knowledgeable (COR=2.69, 95%CI (1.48, 14.99)). It was two times higher for adolescents from rich families than their poor counterparts (COR=2.15 95%CI (1.67, 6.98)).

Even after adjusting for socio-demographic and economic variables, age, family arrangement & perceived family income remained to have statistically significant association with RH knowledge of the adolescents. The odds of RH knowledge was about 4 times higher among adolescents of age 15-19 than 10-14 years (AOR=3.77, 95%CI (3.1, 8.98)). It was also about 2 times higher among respondents currently living with their grandparents & other relatives than those who were living with their parents (either both or single parent) and spouse (AOR=2.21, 95%CI (1.81, 6.04)). Moreover, adolescents from rich families were 3 times more knowledgeable than from poor families (AOR=3.37, 95%CI (1.65, 6.87)) (Table 4).

Table 4: Bivariate and Multivariate Analysis of Socio-demographic and Socio-economic Characteristics and Reproductive Health Knowledge among Rural Adolescents of Machakel woreda, East Gojam, ANRS, February 2012.

Factors	Reproductive Health Knowledge		COR [95%CI]	AOR(95%CI)
	Yes	No		
Sex				
Male	117 (46.6)	73 (58.9)	1	1
Female	134 (53.4)	51 (41.1)	**0.56 (0.11, 0.89)**	**0.39 (0.47, 1.34)**
Age				
10-14	54 (21.5)	73 (58.9)	1	1
15-19	167 (66.5)	51 (41.1)	**1.29 (1.01, 3.63)**	**3.77 (3.1, 8.98)**
Marital status				
Single	214 (85)	105 (84.7)	1	1
Ever married	37 (15)	19 (15.3)	0.24 (0.13, 0.46)	1.96 (0.49, 1.57)
Ever attended school				
Yes	187 (74.5)	117 (94.4)	1.43 (0.654, 3.14)	1.74 (0.31, 2.5)
No	34 (25.5)	37 (5.6)	1	1
Level of school completed				
Elementary	106 (42.2)	53 (42.7)	1	1
Secondary	105 (57.8)	39 (57.3)	**1.37 (1.06, 6.12)**	**1.35 (1.06, 6.12)**
Current Schooling				
In-school	153 (61)	105 (84.7)	**1.05 (1.03, 4.98)**	**1.05 (1.03, 4.98)**
Out-of-school	68 (39)	49 (15.3)	1	1
Living mostly with				
Both parents	117 (46.6)	94 (75.8)	1	1
Single parent	68 (27)	26 (21)	0.94 (0.57, 1.53)	0.94 (0.57, 1.53)
Husband/wife	36 (14)	2 (1.6)	0.95 (0.48, 1.87)	0.95 (0.48, 1.87)
Others	4 (1.4)	2 (1.6)	**2.69 (1.48, 14.99)**	**2.21 (1.81, 6.04)**
Occupational status				
Student	191 (76.1)	21 (17.1)	1	1
Farmer	33 (13.1)	20 (17)	0.89 (0.43, 1.85)	0.89 (0.43, 1.85)
Housewife	34 (13.5)	5 (6.5)	1.13 (0.36, 3.56)	1.13 (0.36, 3.56)
Merchant	30 (12)	12 (10.2)	4.22 (0.95, 7.71)	4.22 (0.95, 7.71)
Daily laborer	19 (7.3)	10 (8.2)	1.4 (0.34, 5.79)	1.40 (0.34, 5.79)
Perceived family income				
Poor	49 (19.5)	94 (75.8)	1	1
Medium	61 (24.3)	24 (19.4)	1.1 (0.58, 2.1)	1.1 (0.58, 2.1)
Rich	141 (56.2)	6 (4.8)	**2.15 (1.67, 6.98)**	**3.37(1.65, 6.87)**
Means of communication				
Yes	132 (52.6)	5 (4)	1	1
No	119 (41.4)	119 (96)	0.94 (0.56, 1.59)	0.04(0.56, 1.59)

Adjusted for sex, age, level of education, current schooling, living arrangement and family income

5.1.5 Association of Socio-demographic and Socio-economic Characteristics and Reproductive Health Services Utilization

Social, demographic and economic characteristics including, marital status, religion, ethnicity, history of education, families' educational background, family size, family income and means of communication had no statistically significant association with RH services utilization. However, sex, age, being in-school and educational status showed statistically significant association with RH services utilization among the adolescents. Female adolescents were less likely to use RH services than their male counterparts (COR=0.17, 95%CI (0.14, 0.33)). RH services utilization was about 2 times higher among late adolescents (COR=1.5, 95%CI (1.3, 5.21)). Adolescents with secondary education were less likely to use RH services than elementary school correspondents (COR=0.57, 95%CI (1.48, 0.93)). Further more, in-school adolescents were found to use RH services 3 times higher than their out-of-school counterparts (COR=3.3, CI95% (2.51, 6.43)). After adjusting for possible confounding variables, age and educational status remained to have statistically significant association with RH services utilization. Adolescents whose age ranges from 15-19 years were about 2 times more likely to use RH services than whose age ranges from 10-14 years (AOR=2.18, 95%CI (1.13, 8.03)). Adolescents with secondary education used RH services 2 times more likely than those in elementary school (AOR=2.41, 95%CI (2.98, 7.11)) (Table 5).

Table 5: Bivariate and Multivariate Analysis of Socio-demographic and Socio-economic Characteristics and Reproductive Health Services Utilization among Rural Adolescents of Machakel woreda, ANRS, February 2012.

Factors	RH services utilization		COR [95%CI]	AOR (95%CI)
	Yes	No		
Sex				
Female	26 (84)	159 (46.2)	**0.17 (0.14, 0.33)**	0.67 (0.39-1.15)
Male	5 (16)	185 (53.8)	1	1
Age				
15-19	21 (67.7)	261 (66)	**1.5 (1.3, 5.21)**	**2.18 (1.6, 10.7)**
10-14	10 (32.3)	83 (24)	1	1
Marital status				
Single	9 (29)	310 (90)	0.05 (0.58, 1.81)	0.01 (0.98, 2.13)
Ever married	22 (71)	34 (10)	1	1
Ever attended school				
Yes	18 (58)	276 (80)	0.34 (0.06, 1.25)	0.45 (1.23, 4.51)
No	13 (42)	68 (20)	1	1
Level of school completed				
Secondary	20 (64.5)	139 (61)	**0.57 (0.48, 0.93)**	**2.41 (1.42, 4.1)**
Elementary	11 (35.5)	134 (39)	1	1
Current Schooling				
In-school	27 (87)	231 (67)	**3.3 (2.5, 6.42)**	0.95 (0.5, 1.8)
Out-of-school	4 (13)	113 (33)	1	1
Living mostly with				
Both parents	11 (35.5)	207 (60)	1	1
Single parent	7 (22.5)	88 (26)	1.04 (0.64, 1.69)	2.21 (1.21, 3.62)
Husband/wife	11 (35.5)	28 (8)	1 (0.51, 1.95)	2.31 (1.78, 8.82)
Others	2 (6.5)	4 (6)	0.43 (0.08, 2.4)	1.56 (3.65, 6.98)
Family size				
</=5	18 (58)	125 (36)	1.81 (0.13, 1.46)	2.23 (1.09, 6.87)
>5	13 (42)	219 (64)	1	1
Occupational status				
Student	15 (48.4)	243 (70)	1	1
Housewife	12 (38.7)	44 (10)	0.64 (0.35, 1.17)	0.88 (3.34, 6.65)
Others	4 (10.9)	106 (20)	0.97 (0.49,1.9)	1.24 (1.03, 4.76)
Perceived family income				
Poor	3 (9.7)	140 (41)	1	1
Medium	13 (41.9)	199 (58)	0.3 (0.19, 0.47)	0.88 (3.45, 4.56)
Rich	15 (48)	5 (1)	0.64 (0.25, 1.69)	0.79 (2.12, 11.7)
Means of communication				
Yes	26 (84)	225 (65)	2.75 (0.54, 4.31)	4.65 (0.11, 10.1)
No	5 (16)	119 (35)	1	1

Adjusted for sex, age, level of education and current schooling.

5.1.6 Factors affecting Reproductive Health Services Utilization

On bivariate analysis of factors affecting RH services utilitzation by adolescents, it was associated with IEC, adolescent-parent discussion of SHR topics and RH knowledge. The likelihood of its uptake was about 4 times higher where there was adolescent-parent communication regarding RH topics (COR=3.70, 95%CI (1.89-5.68)). Adolescents having knowledge for RH had more likelihood of using RH services (COR=1.46, 95%CI (1.35-4.23)).

On multivarite analysis, RH services utilization was associated with factors enhancing its uptake by adolescents such as IEC, adolescent-parent discussion about SRH topics and RH knowledge.

The odds of RH services utilization was 3 times higher among rural adolescents who have ever heard about RH services; moreover, adolescents who have ever discussed RH topics with their parents and well informed about RH issues were about 2 (AOR=2.4, 95%CI (2.1-8.54)) and 4 (AOR=4.33, 95%CI (3.78-12.5)) times more likely to use RH services respectively. The likelihood of RH services utilization was also significantly associated with RH knowledge (AOR=1.23, 95%CI (1.23-4.21)) (Table 6).

Table 6: Bivariate and Multivariate Analysis of Factors affecting Reproductive Health Services Utilization among Rural Adolescents of Machakel woreda, East Gojam, ANRS, February 2012.

RH-related factors	RH services utilization		COR (95% CI)	AOR (95% CI)
	Yes	No		
Ever heard about RHS				
Yes	22 (71)	116 (33.7)	**4.80 (1.32-6.71)**	**3.1 (1.56-8.97)**
No	9 (29)	228 (66.3)	1	
Ever discussed RH topics				
Yes	19 (61.3)	103 (30)	**3.70 (1.89-5.68)**	**2.4 (2.1-8.54)**
No	12 (38.7)	241 (70)	1	
Well informed about RH issues				
Yes	24 (77.4)	106 (30.8)	**7.69 (3.2-10.21)**	**4.33 (3.78-12.5)**
No	7 (22.6)	238 (69.2)	1	
Reproductive health knowledge				
Yes	23 (74.2)	228 (66.3)	**1.46 (1.35-4.23)**	**1.23 (1.1-4.21)**
No	8 (25.8)	116 (33.7)	1	

5.2 Results from Qualitative Data

To support and capture the findings from quantitative data, 6 adolescents were interviewed by using in-depth interview guide. Important findings were summarized, narrated and incorporated.

Table 7: Socio-demographic and Economic Characteristics of In-depth interviewees, Machakel woreda, northwest Ethiopia, February 2012.

Participants	Sex	Age (yrs)	Educational status	Marital status	Religion	Ethnicity
01	Male	16	Grade 9	Single	Orthodox	Amhara
02	Male	18	Grade 10	Single	Orthodox	Amhara
03	Female	19	Out-of-school	Single	Orthodox	Amhara
04	Female	15	Grade 8	Single	Orthodox	Amhara
05	Female	18	Grade 10	Single	Orthodox	Amhara
06	Male	16	Grade 9	Single	Orthodox	Amhara

5.2.1 Reproductive Health Knowledge and associated Factors

Misunderstanding of reproductive health concepts was seen among the adolescents.

The in-depth interview was started with general question that, 'what is RH?', two of the six participants noted, as they did not know it literally the meaning, while, gradually four of them indicated as it was a family planning method.

Misconceptions regarding the ongoing physiological changes in reproductive health such as when to engage in sexual relation with opposite sex and what to do to avoid consequent risks like unwanted pregnancy were not uncommon among rural adolescents.

"I believe that a girl cannot become pregnant from a single act of sexual intercourse; therefore, to avoid pregnancy, some young men prefer to have sex in a causal relationship or have sex only once in a month with the same girl".

Knowledge on SRH was found to be significant for adolescents even in their earlier age than expected in order to get ready to use the existing services.

"… for example, desire to have sexual relation with the opposite sex starts

approximately at about the age of five to ten; therefore, it is very important to introduce sexual education at this age to increase awareness about the ongoing conditions: when and how something happens & what should be done if it becomes to reality."

Most of the interviewees found it extremely difficult to discuss sexual matters with their parents. Some interviewees felt that if they talk about sex they made themselves more interested in exploring and practising sex. Moreover, adolescents feared that by raising the topics of sexuality for discussion, their parents would interpret it as actual evidence of sexual involvement.

"…many cases I fear because my parents may think I am becoming an unfaithful/bad girl and/or boy."

The IDI also revealed that the preferred sources of sex information were friends and peers.

"…I would prefer to get information from friends or relatives who are not harsh to me, those I do not fear and those I used to."

"…I prefer other young people with whom I can exchange ideas better than older people".

5.2.2 Reproductive Health Services Utilization and associated Factors

Regarding using RH services such as condoms & pills, there was a perception by adolescents that condoms were not suitable for young people.

"We young people are not believed to use condoms, becausec our reproductive organs are still small; condoms are manufactured for adults only."

"I do not think that these methods like pills are good for use by adolescents of our age group; when we use them they can harm future fertility and if used for a long time there will be a lot of abortions."

The IDI also revealed that adolescents had little access to integrated RH services, where they could get appropriate information and services on RH. Especially for the younger age groups, it was difficult to buy/collect condoms and pills due to non-friendly reproductive health services providers and shame.

"…they think we are young and it is bad for us to use condoms."

"…for collecting pills I would feel shy because everybody would know I am going to play sex."

6. Discussion

This study included adolescents who were found at home at one of the three consecutive visits for interview by data collectors and those who were not found at home were excluded. On the way to access and use RH services, adolescents' level of knowledge is paramount. Advocating and increasing awareness about SRH is also crucial to the success of any ARH effort. Hence, this study represented an initial effort to assess the SHR knowledge and services utilization status of adolescents in rural setting of Machakel woreda. It has tried to include adolescents aged between 10-19 years who were residing in the study area. About 92% of the adolescents were voluntary to participate in the study, resulting in an effective sample size of 375 for analysis. The relatively high non-response rate might be due to the sensitive nature of the topic incorporating sexuality issues which could not easily be revealed by most societies. Comparison might be difficult because of lack of similar studies with similar objectives, using similar method & target population in local context.

In this study misconceptions in terms of most physiologic changes taking place during adolescence period were reported by significant proportion of the study subjects; for instance, misunderstanding like a girl could not get conceived the first time she has sex was reported by 46.5% and even 24.3% of the adolescents did not know at which age category the occurrence of pregnancy is most likely. Moreover, about 14% of the adolescents responded that the middle of a menses has high chance of getting pregnancy and a third did not know the cycle with the highest chance. This result is lower with the finding from China where 29.4% of rural migrant adolescents knew issues on fertility (23). A basic knowledge of the physiology of reproduction and fertility is important especially for the successful practice of coitus-related methods such as periodic abstinence. The successful use of such methods depends in part on an understanding of when during the ovulatory cycle a woman is most likely to conceive (7). Most rural adolescents in this study did not know changes marked boys entering into adulthood and girls into womanhood which contradicts with the study in India, where nearly half of the adolescents were well informed about such an issue (22).

This finding was also supplemented by qualitative findings from IDI.

> *"I believe that a girl cannot become pregnant from a single act of sexual intercourse; therefore, to avoid pregnancy, some young men prefer to have sex in a causal relationship or have sex only once in a month with the same girl".*

About a third of adolescents have never heard of any disease that could transmit through unsafe sexual intercourse and about one-fifth (23.3%) did not know the manifestations of such diseases. Among STIs, gonorrhea and HIV/AIDS were reported by most of the adolescents which might be due to the advocacy efforts towards these disease conditions. A significant proportion of the adolescents (91.5%) have ever heard HIV/AIDS and 72% knew ways of preventing it which is greater than EDHS (2011) report where only half of the rural Ethiopian adolescents have knowledge on HIV prevention methods (8). Unsafe sexual practice was considered to be the main transmission route; however, mother-to-child transmission of the infection was reported only by 5.9% of the adolescents indicating directions for concerted efforts by all stakeholders to educate and raise awareness about this route of transmission in the general population and among the adolescents in particular. By more than two-third (67.4%) of the respondents, abstaining from unsafe sexual practice was mentioned as means of preventing oneself from acquiring HIV infection. This finding is in favor of national ARH package where more than two-third of Ethiopian adolescents know a specific way to avoid the infection (18). However, misconceptions regarding its transmission was significantly high; false impressions such as a person could not get HIV with the first sexual contact & through careful looking at a person HIV/AIDS status of an individual would be determined were reported by 41.1% and 12% of the adolescents respectively. It shows similar results from Bangladesh where rural adolescents, particularly females, had a substantially lower level of knowledge about HIV/AIDS compared to that of the urban counterparts (data not shown) (10, 21).

Ever use of RH services is basically measured as the cumulative experience of adolescents with RH services and only about a fifth of adolescents have ever utilized the servicces. This study shows that there is a significantly lower RH services utilization rate among rural adolescents when it is compared with the study undertaken in Jimma where 41.1% have experienced ever utilization of the services (26) even though the latter finding is not more comparable as it was undertaken in urban setting. Consistent with other studies in South Africa, Tanzania and Ghana

(6, 24, 30), the most likely sources of information mentioned were healthcare professionals, schools and friends. Seeking FP was reported by 30% of the rural adolescents and there is a significant increase (about 15 times) with respect to this RH services component when it is compared with the situation before a decade in the same area which was only 2% (27). The possible reason for this significant difference might be the effort of health extension program and HEWs in promoting and providing the services. About four-fifth (78.2%) of rural adolescents were familiar with oral contraceptive pills and this finding complements the finding from Ghana showing that most adolescents (33.9%) knew pills as the main FP methods (6); moreover, similar with the findings from Ghana and EDHS (2005), long acting contraceptive methods were less likely used by the adolescents (6, 7). Knowledge of contraceptives and their utilization are important prerequisites to gaining access to and eventually adopting SRH services among adolescents (11, 18).

Parent (s) disapproval (35%) and lack of information (22.4%) were reported as reasons that make obtaining RH services difficult. Similar to this finding opposition from husband/relatives was reported as one of the reasons for not using FP methods among adolescents in Bangladesh (10). From the adolescents perspective being never thought of the services (31.5%) less awareness about the need of the services now (22.4%) and being too young and healthy (13.7%) were reported as the main perceptions/obstacles restricting them from utilizing RH services pointing direction for risk assessment and designing health education programs pertinent to increase awareness towards such issues.

Reasons refraining adolescents from discussing RH issues with their parents were fear, unnecessity and social and cultural restrictions. As a result, less than a third of adolescents were well informed about such issues. This complements with the situation in Bangladesh where restrictive socio-cultural norms inhibit disclosure of information about sexual activities and other RH-related issues to unmarried adolescents (21).

Logistic regression analysis (multivariate analysis) was done to reveal the association between RH knowledge and services utilization and different social, demographic, economic and other factors. Accordingly, age, level of school, living status (arrangement) and perceived family income were found to affect the level of knowledge among the rural adolescents.

After adjusting for possible confounding factors, adolescents in their late adolescence period (14-19) were 4 times more likely to have RH knowledge than their early counterparts**.** It reveals similar finding with the study in India that showed age of the rural adolescents was significantly related with their RH knowledge levels (21); this might be due to as age increases exposure for RH related issues also increases**.** However, it contradicts with the finding from China (23). Living arrangement (adolescents living with their grandparents and other relatives) had about 2 times more knowledge for RH. The possible explanation for this would be more freedom to communicate about SHR issues with relatives. In terms of economic status, those from rich families were 3 times more knowledgeable than their poor counterparts. The higher knowledge status among the rich might be due to the probability of exposure for such issues through mass media (20, 22) though this study did not show any association with the availability of means of communications neither with RH knowledge nor services utilization. This finding is consistent with other studies from SSA countries (20, 22). Moreover, RH services utilization had a positive relation with age (14-19 years) and educational status of the adolescents. This finding is supported by other studies in northwest Ethiopia and Kenya where higher educational status is positively associated with RH services utilization (27, 29, 32).

However, being from rich family did not show any association with RH services utilization among the adolescents. It complements the findings from other study in Ethiopia, Kenya and Bangladesh revealing that income had no significant impact on RH services utilization (20, 21, 32) and contradicts the finding from SSA on the magnitude of socioeconomic inequalities in RH services utilization showing that contraceptive use was significantly less common among adolescents in the poorest quintile than in the richest (29). One of the socio-demographic factors, sex, did not show association neither with RH knowledge nor services utilization as opposed to many studies showing male gender is more knowledgeable and the female counterpart having more tendency of utilizing RH services (22, 29). The odds of reproductive health services utilization were positively associated with exposure of IEC, parent-adolescent discussion about sexuality and the knowledge level of the adolescents. This is due to more disclosure for SRH information and hence bringing behavioral change.

7. Strengths and Limitations

7.1 Strengths

- As the study was a community-based study, it tried to explore the contexts of ARH issues and provide baseline information for further investigation.
- The use of IDI is believed to increase the strength of the study by exploring deep insights of the adolescents.

7.2 Limitations

- The sensitive nature of the topic under investigation and the use of face-to-face interview might have underestimated the magnitude of the issues and posed for possible interviewer bias; moreover, self-report might lead for recall and social desirability bias respectively.
- Attitude aspect of the adolescents was not addressed as knowledge alone is usually insufficient to bring about behavioral change and preventive knowledge needs to be complemented by an enabling environment that includes supportive attitude of adolescents to make responsible choices about their lives.
- ARH perspectives of the families, teachers, communities and health professionals were not addressed to design all-inclusive AFRH programs.
- As any cross-sectional study, it did not show the temporal relation between the outcomes and factors affecting them.

8. Conclusions

In general, it was found that RH knowledge v services utilization amongst rural adolescents in the study area remained insufficient as evidenced by only about two-third of the adolescents had basic knowledge v a fifth using available services for RH.

Socio-demographic and economic factors including age, level of education, living arrangement and being from well to do families were found to be predictors of RH knowledge and services utilization. Parent (s) disapproval, lack of basic information for RH and pressure from partners were found to deter adolescents from accessing RH services; moreover, low parent-adolescent communication on SRH issues was evidenced showing that sexual and reproductive health-related issues continued to be socio-cultural taboos among the societies.

9. Recommendations

– To families, community leaders and education institutions:

- Community-conversation in line with adolescent-to-adolescent counseling and parent-adolescent communication should address sensitive topics such as sex education, part of life-skills and family-life education.
- There should be an ongoing need to educate adolescents about the changes taking place during this particular stage of growth and the content of formal education should continue to include socially sensitive topics such as sex education, RH, FP, higher risk sexual behaviors, HIV/AIDS and other STIs.

– To healthcare institutions:

- Sex and age preference of adolescents should be considered while providing RH services in developing and supporting AFRHS programs.

– To research institutions and organizations working on ASRH:

- There is a need to perform further research in order to deeply explore the RH knowledge and services utilization pattern of adolescents especially focusing and including other stakeholders such as families, teachers and community and religious leaders perspectives so that enable planners to design all-inclusive AFRHS.

– To ministry of health

- Adolescent-friendly RH services provision should be strengthened and mainstreamed across all levels of healthcare system with particular emphasis to address hard-to-reach adolescents.

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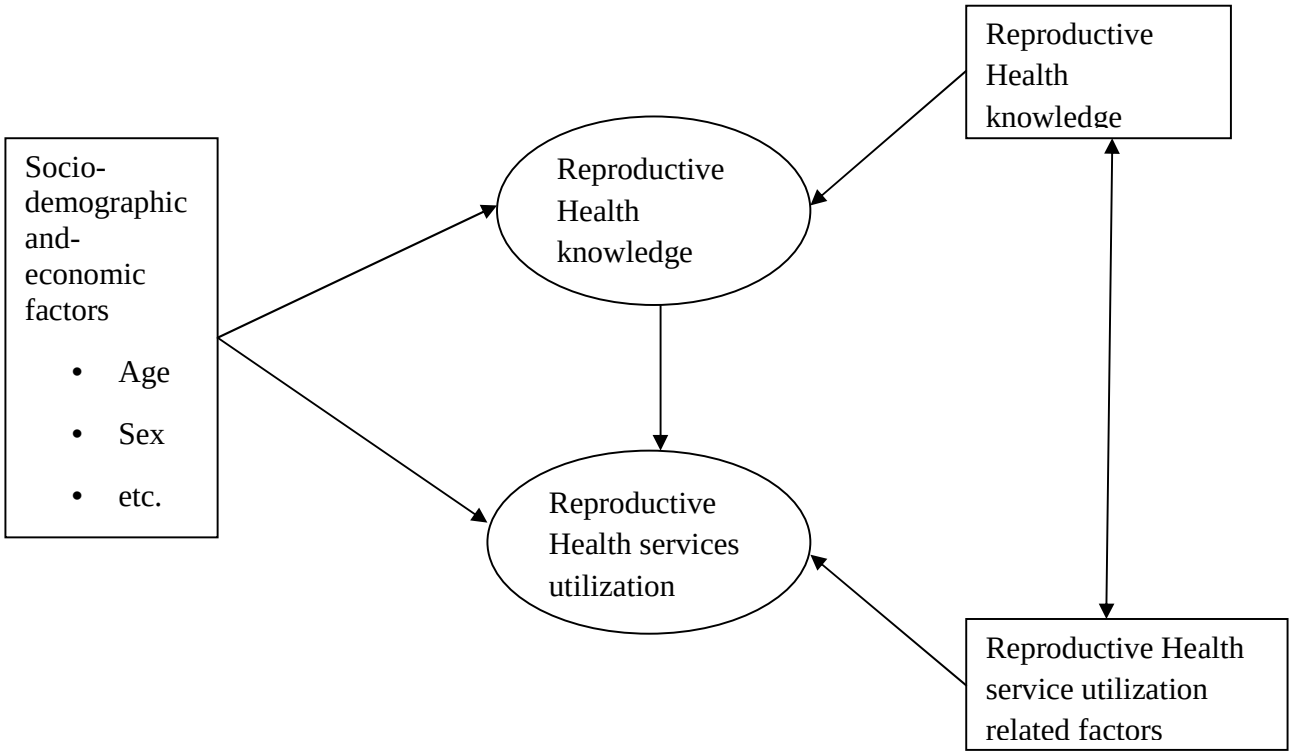
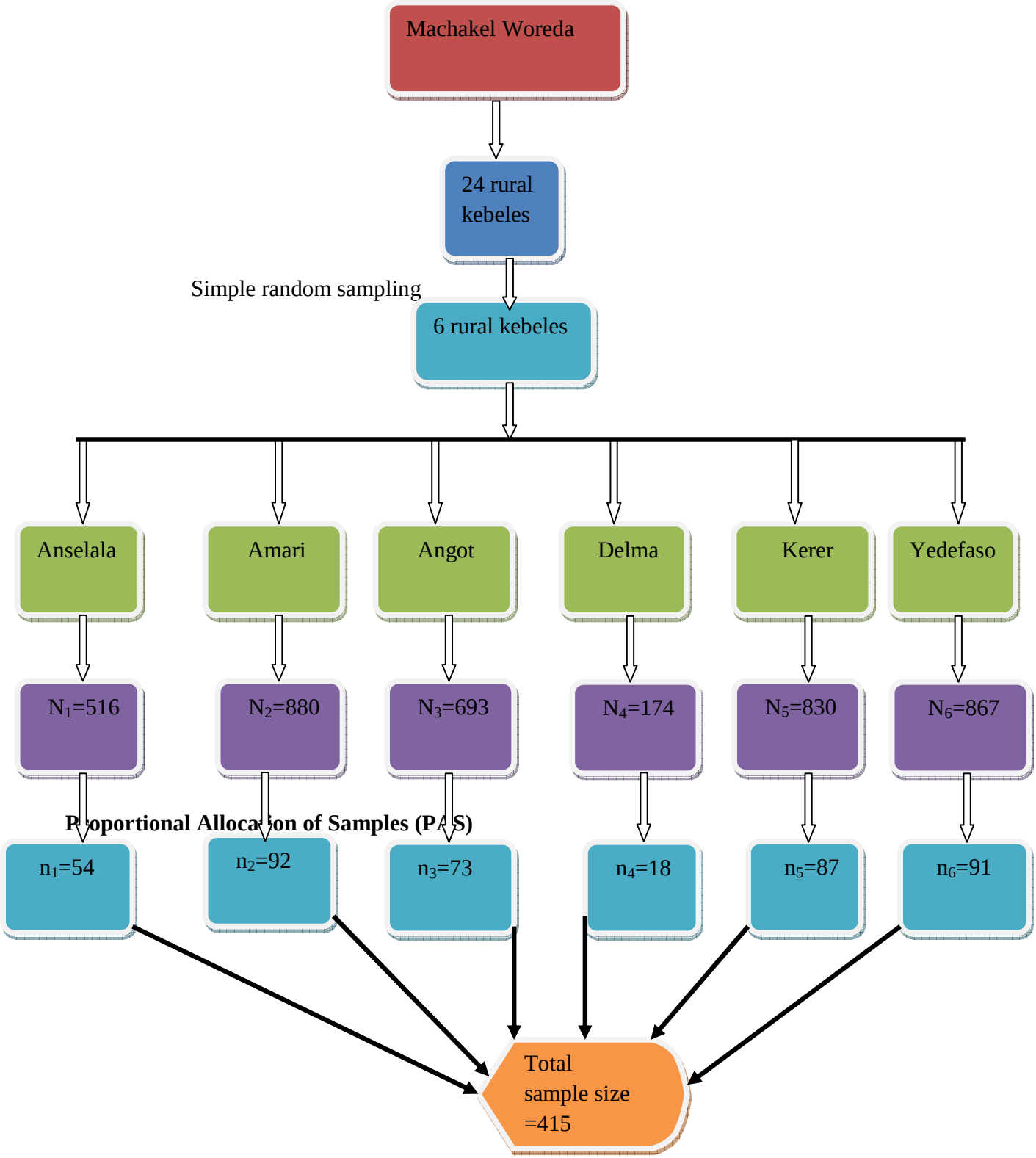
11. Annexes

Annexe I: Conceptual frame work of study variables



Annex II: A schematic representation of sampling procedure



Annexe III: Study Information Sheet (SIS)

Title of the project: Reproductive Health Knowledge and Services Utilization among Rural Adolescents in Machakel woreda, East Gojam zone, Amhara Regional National State, 2011.

Background of the study (Summary): Adolescents in rural areas face troubles due to lack of right kind of information regarding their own physical &/or sexual developments.

However, few attempts have been made particularly in rural settings to communicate with adolescents for addressing their critical concerns or providing them the necessary sexual and reproductive health services.

Objective: The main objective of this study is to assess the reproductive health knowledge & services utilization among rural adolescents.

Significance of the study: This planned study will assess the reproductive health knowledge & services utilization among rural adolescents so as to address the diverse needs & contexts of adolescents' lives, studying their RH knowledge & services utilization pattern & hence studying factors associated with services utilization is relevant to design an appropriate program interventions & strategies in the local context.

Study site and period of the study: The study was conducted among rural adolescents in Machakel woreda February 2012.

Study procedures: The study was conducted using interview with adolescents & in-depth interview of key informant adolescents.

Potential risks/Benefits associated: there was no any risk or direct benefit of this study for participants, except that participants might sacrifice their few minutes during interview & can also be benefited from the final result of the study.

Confidentiality/Justice/Privacy: the information collected from each adolescent was kept in a secret manner within only the investigator & other legal authorities who need it.

Rights of participation (Voluntary Participation): each participant has the right to fully understand the objectives and methods of this study and to refuse his/her consent of participation and you are not required to provide personal information like name or address.

Termination of the study: in this study if participants got discomfort, they were free to withdraw from the study at any time & this was not bringing any impact on them.

If there were/are any questions, rights & complaints, participants could/can contact the PI through the following address: Amanuel Alemu

Mobile: 0921-54-00-59 E-mail: amanuel_alemu@yahoo.com.

Annex IV: Written Informed Consent and/or Assent

Dear participant,

In ensuring the health of adolescents in rural area, the understanding of RH knowledge & existing services utilitilization on this tomorrow's generation of the population is vital. In line with this fact, this study is proposed to assess the RH knowledge & utilization of services in eligible HHs of adolescents in selected kebeles to participate in this study. Therefore, I would like to inform you that you & I would have a short discussion concerning this study. Before we go to our discussion, I will request you to listen carefully to what I am going to read to you about the purpose & general condition of the study & tell me whether you agree or disagree to participate in the study.

The purpose of this study is to assess & generate information on RH knowledge & services utilization among adolescents (10-19 years) & to forward appropriate recommendations through which the reproductive health knowledge & services utilization of this segment of the population will be improved.

The study will involve various intimate & private life questions, so I am going to ask you some very personal questions that some people find difficult to answer. Your answers are completely confidential. Your name will not be written in this form & will never be used in connection with any of the information you tell me. You do not have to answer any questions that you do not want to answer & you may end this interview at any time you want to. However your honest answers to these questions will help us to better understand the RH knowledge & services utilization of rural adolescents & design an intervention that targets this group of population. I would greatly appreciate your help in responding to this survey.

The interview is voluntary & will take about 30 minutes. Are you willing to participate in this study?

Yes:_____ No:_____

Signature:_____Date:_____

Thank You.

Assent Form for Adolescents Aged 10-17 year:

In ensuring the health of adolescents in rural area, the understanding of RH knowledge & existing services utilization on this tomorrow's generation of the population is vital. In line with

this fact, this study is proposed to assess the RH knowledge & utilization of services in selected HHs of adolescents in this kebele is chosen to participate in this study. Therefore, I would like to inform you that your child & I would have a short discussion concerning this study. Before we go to our discussion, I will request you to listen carefully to what I am going to read to you about the purpose & general condition/environment of the study & tell me whether you agree or disagree to let your child to participate in this study.

The purpose of this study is to assess & generate information on RH knowledge & services utilization among adolescents (10-19 years) & to forward appropriate recommendations through which the RH knowledge & services utilization of this segment of the population will be improved.

Are you willing to let your child to participate in this study?

Yes_____ No_____

Signature_____ Date_____

Dear participant,

The study will involve various intimate & private life questions, so I am going to ask you some very personal questions that some people find difficult to answer. Your answers are completely confidential. Your name will not be written in this form & will never be used in connection with any of the information you tell me. You do not have to answer any questions that you do not want to answer & you may end this interview at any time you want to. However, your honest answers to these questions will help me to better understand the RH knowledge & services utilization of adolescent & design an intervention that targets this group of population. I would greatly appreciate your help in responding to this study.

The interview is voluntary & will take about 30 minutes. Are you willing to participate in this study?

Yes_____ No_____

Signature: _____

Date: _____

Result Code: _____ 1=Completed. 2=Refused 3=partially completed 4=Other

Interviewer Name: _____

Signature: _____

Date of interview: [____/_____/_____]

Supervisor name: _____Checked by supervisor: Signature: _____ Date: _____

(Signature of the interviewer certifying that assent has been obtained verbally)

Annex V: Questionnaire for Quantitative Assessment [English Version]

Identification

001: number of HH/ Questionnaire_____ 002. Kebele_____

Part I: Socio-demographic and Socio-economic questions

Code	Questions	Alternative responses	Skip to
101	Sex	1. Male 2. Female	
102	Age	_____(completed years) 88. I do not know	
103	Marital status	1. Single 2. Married 3. Divorced 4. Widowed	
104	Religion	1. Orthodox 2. Muslim 3. Protestant 4. Catholic 99. Other, specify _____	
105	Ethnicity	1. Amhara 2. Agew 3. Tigrie 4. Oromo 99. Others, specify_____	
106	Have you ever attended school?	1. Yes 2. No ——————————→	→108
107	What is the highest level of school you completed?	1. Grade 1-4 2. Grade 5-8 3. Grade 9-12 99. Others, Specify_____	
108	Current Schooling	1. In-school 2. Out-of-school	
109	Father's education	1. Cannot read and write 2. Literate/anttended formal school	
110	Mother's education	1. Cannot read and write 2. Literate/anttended formal school	
111	Living most of the time with	1. Both parents 2. Single parent 3. Husband or wife/spouse 99. Others, specify_____	
112	Family size	_____(completed in absolute numbers)	
113	Current occupational status	1. Student 2. Farmer	

		3. Housewife 4. Merchant 5. Daily laborer 99. Others, specify_____	
114	Perceived family income (Relative to your neighbors)	1. Poor 2. Medium 3. Rich 88. I do not know	
115	Means of communication (multiple responses are possible)	1. Radio 2. Television 3. Telephone 99. others, specify_____	

Part II: Reproductive Health knowledge-related questions

Code	Questions	Alternative responses	Skip to
201	(For Females), what was your age at menarche?	1. ---- [fill in completed years] 88. I do not rember	
202	Can a girl get pregnant the first time she had sex?	1. Yes 2. No 88. I do not know	
203	How old does a girl able to be pregnant? (multiple responses are possible)	1. During puberty 2. After puberty 2. Before 10 years of age 88. I do not know 99. Others, specify _____	
204	During which part of the menstrual cycle does a girl or woman have the greatest chance of becoming pregnant?	1. During her period 2. Right after period is ended 3. Just before her period begins 4. In the middle of her cycle 5. The same throughout 88. I do not know 99. Others, specify_____	
205	How old does a boy need to be able to physically make a girl pregnant?	1. During puberty 2. After puberty 3. Before 10 years of age 88. I do not know 99. Others,specify _____	
206	Do you know any ways to avoid getting pregnant?	1. Yes 2. No →	Q 208
207	What are the ways to avoid getting pregnant? (multiple answers are possible)	1. Oral contraceptive pills 2. Using condoms 3. Injectables	Yes No 1 2 1 2 1 2

		4. Norplant 5. IUDs 6. Sterilization 7. Abstinence 8 With drawal 9. Washing the genitalia after intercourse 10. Intercourse in the upright position 11. Safe period 99. Others, specify_____	1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2
208	Do you know/have you ever heard any diseases a person can get through sexual intercourse?	1. Yes 2. No →	 Q 211
209	Which diseases do you know about? (multiple answers are possible)	1. Gonorrhea 2. Syphilis 3. Chanchroid 4. Lymphogranuloma venerum 5. HIV/AIDS 99. Others, specify_____	Yes No 1 2 1 2 1 2 1 2 1 2
210	Please mention all the signs/symptoms you know that a person with STI manifests. (multiple answers are possible)	1. genital ulcer 2. abnormal genital discharge 3. pain during urination 4. Genital swelling 99. Others, specify_____	Yes No 1 2 1 2 1 2 1 2 1 2
211	Have you ever heard about a disease called HIV /AIDS?	1. Yes 2. No →	 Q 217
212	Please mention all the ways you believe a person can get HIV/ AIDS.(Multiple answers are possible)	1. Unsafe sexual intercourse 2. Sharing needles and syringes 3. Blood transfusion 4. During pregnancy and childbirth 5. Mosquito and other insect bite 6. Through breast milk 7. Casual contact with a person (hand shaking, sharing food etc. 99. Others specify_____	Yes No 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2
213	Can a person get HIV the first time he or she has sex?	1.Yes 2. No 88. I do not know	

214	If you look at a person carefully, can you know if she/he has HIV?	1. Yes 2. No 88. I do not know	
215	Is there anything a person can do to avoid/prevent getting STIs and HIV/AIDS?	1. Yes 2. No 88. I do not know	
216	How can one prevent STI and HIV/AIDS? (multiple answer are possible)	1. Abstain from sexual intercourse 2. Avoid casual sex 3. Remain faithful to a partner 4. Use condoms in every act of sexual intercourse 5. Avoid sex with CSWs 6. Avoid unsafe injections 7. Avoid contaminated sharp objects. 99. Others, specify _____	Yes No 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2
217	Have you ever heard about VCT?	1. Yes 2. No	
218	Have you ever undergone HIV test?	1. Yes 2. No	
219	Are you voluntary to undergo voluntary counseling and testing for HIV?	1. Yes 2. No	
220	Could you please mention some of its advantages? (multiple answers are possible)	1. Reduces AIDS dissemination 2. Enables one to know his/her disease status 3. Increases one's confidence 99. Others, specify_____	Yes No 1 2 1 2 1 2 1 2

Part III: Reproductive Health services utilization questions

Code	Questions	Alternative responses	Skip to
301	Have you ever heard of reproductive health services (RHS)?	1. Yes 2. No	
302	From where did you hear? (multiple responses are possible)	1. Health personnel 2. Radio 3. Television 4. Posters/leaflets 5. School 99. other, specify_____	Yes No 1 2 1 2 1 2 1 2 1 2
303	Have you ever utilized any	1. Yes	

	RH services?	2. No	
304	Have you visited a reproductive health services centre in the last 6 months?	1. Yes 2. No (skip to Q 198)	Q 308
305	If yes to Q 404, where did you go preferably?	1. Gov't health facilities 2. Private health facilities 3. Drug shops/ Pharmacy 4. Health posts 5. TBAs/traditional healers 99. others, specify_____	Yes No 1 2 1 2 1 2 1 2 1 2 1 2
306	Could you tell me why you prefer to seek RHS in this place? (Multiple answers are possible)	1. Effectiveness of treatment 2. Free treatment 3 Low cost of treatment 4. Proximity 5. Relative works there 6. I prefer for confidentiality 7. Parents prefer the place 99. Others, specify_____	Yes No 1 2 1 2 1 2 1 2 1 2 1 2 1 2
307	If yes to Q 304, what was the reason for your visit?	1. Medical check up 2. STI treatment 3. Family planning 4. Abortion care/post abortion care 5. Delivery 6. VCT 7. IEC 99. Others, specify_____	Yes No 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2
308	What category of healthcare provider do you prefer to obtain RHS?	1. Professionals with the same sex 2. Professionals with the same age group 3. Professionals with same sex & different age group 4. Professionals with same age group & different sex 5. Professionals with greater age 6. Professionals with greater age & same sex 7. Professionals with greater age & different sex 8. No sex and/or age preference 99. Others, specify_____	

309	Do you think that it is easy or difficult for adolescents to obtain and use RHS such as contraceptive or condoms?	1. Easy 2. Difficult 88. I do not know	Q 312 →
310	If difficult, why is it difficult? (Multiple answers are possible)	1. Lack of money to buy 2. Lack of information 3. Pressure from sex partners 4. Religious 5. Difficult to find 6. Provider disapproval 7. Parent (s) disapproval 8. Distribution places are inconvenient 9. Being afraid to buy from shops/pharmacy 10. Too far to find 11. Expensive to buy 12. Ignorance 13. Do not feel at risk 14. Never had sex 99. Others, specify _____	Yes No 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2
311	What are the main obstacles that prevent adolescents from getting RH services in health institutions?	1. I do not need now 2. Never thought of 3. I am too young 4. Lack of knowledge 5. Time constraint 6. Fear of being seen by parents 7. Lack of confidentiality 8. Sex preferred service 9. Far distance of His	Yes No 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2
312	Have you ever discussed RH topics with parents?	1. Yes 2. No	Q 314 →
313	If No, why not?	1. Not necessary 2. Fear 3. Social and cultural restriction 99. others, specify_____	Yes No 1 2 1 2 1 2 1 2
314	Do you think most rural adolescents are well informed about RH such as contraceptives?	1. Yes 2. No 88. I do not know	

315	From where do you think rural adolescents obtain most of their information about sexual & reproductive health? (Multiple answers are possible)	1. From school 2. From their friends 3. From their parents 4. From the mass media 5. From health professional 6. No where 88. I do not know 99. Others, specify_____	Yes No 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2
316	If you wanted to discuss and know more about RH matters, whom would you prefer to talk? (Multiple answers are possible)	1. Friends/peers 2. Mother 3. Fathers 4. Sister 5. Boyfriend/girlfriend 6. Partner (husband / wife) 7. Health professional 99. Others, specify_____	Yes No 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2

Annex VI: Guide for In-depth Interview

You are welcome. I am happy if you could take time to me. I am from Addis Ababa university, SPH (Individual introduces him/herself). I am carrying out a study on RH knowledge & services utilization among rural adolescents in Machakel woreda. I would like to come up with knowledge of rural adolescents on RH related issues & their services utilization pattern.

The result could be useful to individual adolescents, families or community & the country at large by showing the level of RH status & services utilization for tomorrow's hope of the nation-adolescents. You have been purposely selected to participate in this exercise because I believe that, as an adolescent, the key member of your family as well as community, you may have information & experience to share with me on this subject.

Then, selected individual is free to decide on whether or not to participate in the discussion. I encourage you to feel free to say anything concerning the topic of our discussion.

Thank you very much; (Can we proceed?)

- Could you tell me about how much of issues you know about adolescent sexuality & reproductive health?
- Can you tell me about things you know on the above topic?

  Probe:
  - Would you explain further?
  - Would you give me an example?
  - Is there anything else?
- Could you tell me how you have heard of these? / What are the sources for your information?

  Probe:
  - Would you explain further?
  - Would you give me an example?
- What do you think is the importance of knowing about reproductive health for adolescents like you?

  Probe:
  - Would you explain further?
  - Would you give me an example?
  - Is there anything else?

- What is your attitude towards adolescents' reproductive health?
    - What about your families' view?
- Have you ever used any reproductive health services?
    - ✓ Would mention the services have ever utilized?
    - ✓ Any benefit you have obtained….
- What is your families'/communities' attitude towards RHS?
- What will be the consequences if parents/ any of community members know/see when you are using RHS?

  Probe:
    - Would you explain further?
    - Would you give me an example?
    - Is there anything else?
- How about the cost issue for RHS?

  Probe:
    - Would you explain further?
    - Would you give me an example?
    - Is there anything else?
- Where will be the convenient place for obtaining RHS?

  Probe:
    - Why?
    - Would you explain further?
    - Would you give me an example?
    - Is there anything else?
- What do you expect from RH services in general?

  Probe:
    - ✓ Would you give me an example?
    - ✓ Would you explain further?
    - ✓ Is there anything else?
- Are there any cultural & religious practices in the area that could promote/prevent RH services utilization?

  Probe: Would you explain further?

Would you give me an example?

Is there anything else?

- What could be done to encourage adolescents to utilize RH serices?

  Probe: Would you explain further?

  Would you give me an example?

  Is there anything else?

Thank you very much for wasting your time & cooperation & I am pleased with your suggestions.

Annex VII: *ለማርኛመጠይቅ*

በጥናቱ ለመሳተፍ የፅሁፍ የፈቃደኝነት ማረጋገጫ

ውድ ተሳታፊ፣

የገጠር ታዳጊ ወጣቶች ጤናማ ሁነው እንዲገኙ ለማድረግ አሁን ያሉበትን የስነ ተዋልዶ ጤና ሁኔታ መዳሰስ እና እነኝህን ታዳጊ ወጣቶች ከወሲብና ከመውለጃ አካላት የተያያዙ ለዉጦችን እንዲሁም ከስነ-ተዋልዶ ጤና አጠቃቀም ጋር ተዛማጅ ሁኔታዎችን መገንዘብ ጠቃሚ ነው፡፡ በዚሁም መነሻነት የታዳጊ ወጣቶችን የሥነ ተዋልዶ ጤና ሁኔታ እና ተዛማጅ የጤና አገልግሎት አጠቃቀምን ለመዳሰስ ይህን ጥናት በተመረጡ የገጠር ቀበሌዎች በሚኖሩ ታዳጊ ወጣቶች ላይ ለመስራት ታስቧል፡፡ እርስዎም በጥናቱ እንዲሳተፉ ተመርጠዋል፡፡ ስለዚህ አንድ ነገር ላሳስብዎ እወዳለሁ፤ ይህም እርስዎ እና እኔ በዚህ ጉዳይ ላይ አጠር ያለ ውይይት እናደርጋለን፡፡ ወደ ውይይታችን ከመሄዳችን በፊት ስለጥናቱ አላማ እና አጠቃላይ ሁኔታ አነብልዎታለሁና በጥሞና አዳምጠው በጥናቱ ለመሳተፍ ፈቃደኛ መሆንዎትን ወይም አለመሆንዎትን ይገልፁልኛል፡፡ የዚህ ጥናት ዓላማ በገጠር የሚኖሩ የታዳጊ ወጣቶችን (ከ10 - 19 ዓመት ያሉት ላይ) የሥነ-ተዋልዶ ጤና እውቀት እና ተዛማጅ አገልግሎት አጠቃቀምን ለመዳሰስና ስለ እውቀት እና አገልግሎት አጠቃቀም ተጨባጭ መረጃ በመያዝ የታዳጊ ወጣቶችን የሥነ ተዋልዶ ጤና የሚሻሻልበትን መንገድ ለማመቻቸት ነው፡፡ጥናቱ በርካታ በግል ህይወት ዙሪያ ጥያቄዎች አሉት፡፡ የምጠይቅዎት አንዳንድ ጥያቄዎች ለአንዳንድ ሰዎች ለመመለስ የሚያሳፍሩ ሆነው ሊያገኟቸው ይችላሉ፡፡ መልስዎ በሚስጥር የሚያዝ ነው፣ በተዘጋጀው መጠይቅ ላይ ስምዎ አይገለጽም፡፡ በጥናቱ ያለመሳተፍ፣ የማይፈልጉትን ጥያቄ ያለመመለስ እና በፈለጉት ሰዓት መጠይቁን የማቋረጥ መብትዎ የተጠበቀ ነው፡፡ ስለዚህ የእርስዎ ቅንና እውነተኛ መልሶች በገጠር የሚኖሩ የታዳጊ ወጣቶችን (ከ10 - 19 ዓመት ያሉት ላይ) የሥነ ተዋልዶ ጤና እውቀት እና ተዛማጅ አገልግሎት አጠቃቀም የሚሻሻልበትን መንገድ በማመቻቸት ረገድ ከፍተኛ ጠቀሜታ አለው፡፡ ጥናቱ በትክክል የታለመለትን ግብ እንዲመታ የሚያደርጉትን ከፍተኛ ትብብር እናደንቃለን፡፡ ጥናቱ በፍቃደኝነት የሚከናወን ሲሆን ይህ መጠይቅ ወደ 30 ደቂቃ ገደማ ይጨርሳል፡፡

በጥናቱ ለመሳተፍ ፈቃደኛ ነዎት?

አዎ _____ _____አይደለሁም _____

ፊርማ _____ ቀን _____

በጣም አመሰግናለሁ!!

ከአስራ ሰምንት ዓመት በታች ለሆኑ ወጣቶች በጥናቱ ለመሳተፍ የስምምነት ማረጋገጫ

የገጠር ታዳጊ ወጣቶች ጤናማ ሁነው እንዲገኙ ለማድረግ አሁን ያሉበትን የስነ-ተዋልዶ ጤና ሁኔታ መዳሰስ እና እነኝህን ታዳጊ ወጣቶች ከወሲብና ከመውለጃ አካላት የተያያዙ ለዉጦችን እንዲሁም ከስነዋልዶ ጤና አጠቃቀም ጋር ተዛማጅ ሁኔታዎችን መገንዘብ ጠቃሚ ነው፡፡ በዚሁም መነሻነት የታዳጊ ወጣቶችን የሥነ ተዋልዶ ጤና ሁኔታ እና ተዛማጅ የጤና አገልግሎት አጠቃቀምን ለመዳሰስ ይህን ጥናት በተመረጡ የገጠር ቀበሌዎች በሚኖሩ ታዳጊ ወጣቶች ላይ ለመስራት ታስቧል፡፡ የእርስዎም ልጅ በጥናቱ እንዲሳተፍ/እንድትሳተፍ ተመርጧል/ጣለች፡፡ ስለዚህ አንድ ነገር ላሳስብዎት እወዳለሁ፤ ይህም የእርስዎ ልጅ እና እኔ በዚህ ጉዳይ ላይ አጠር ያለ ውይይት እናደርጋለን፡፡ ወደ ውይይታችን ከመሄዳችን በፊት ስለጥናቱ ዓላማ እና አጠቃላይ ሁኔታ አነብልዎታለሁና በጥሞና አዳምጠው ልጅዎ በጥናቱ እንዲሳተፍ ፈቃደኛ መሆንዎትን ወይም አለመሆንዎትን ይገልፁልኛል፡፡ የዚህ ጥናት ዓላማ በገጠር የሚኖሩ የታዳጊ ወጣቶችን (ከ10 - 19 ዓመት ያሉት ላይ)

የሥነ ተዋልዶ ጤና እውቀት እና ተዛማጅ አገልግሎት አጠቃቀምን ለመዳሰስና ስለ እውቀት እና አገልግሎት አጠቃቀም ተጨባጭ መረጃ በመያዝ የታዳጊ ወጣቶችን የሥነ-ተዋልዶ ጤና የሚሻሻልበትን መንገድ ለማመቻቸት ነው፡፡

ልጅዎ በጥናቱ እንዲሳተፍ ፈቃደኛ ነዎት?

አዎ _____ አይደለሁም _____

ፊርማ _____ ቀን _____

ውድ ተሳታፊ፣

ጥናቱ በርካታ በግል ህይወት ዙሪያ ጥያቄዎች አሉት፡፡ የምጠይቅዎት አንዳንድ ጥያቄዎች ለአንዳንድ ሰዎች ለመመለስ የሚያሳፍሩ ሆነው ሊያገኟቸው ይችላሉ፡፡ መልስዎ በሚስጥር የሚያዝ ነው፡ በተዘጋጀው መጠይቅ ላይ ስምዎ አይገለጽም፡፡ በጥናቱ ያለመሳተፍ፣ የማይፈልጉትን ጥያቄ ያለመመለስ እና በፈለጉት ሰዓት መጠይቁን የማቋረጥ መብትዎ የተጠበቀ ነው፡፡ ስለዚህ የእርስዎ ቅንና እውነተኛ መልሶች በገጠር የሚኖሩ ታዳጊ ወጣቶችን የሥነ-ተዋልዶ ጤና ሁኔታ እና አገልግሎት አጠቃቀምን ለመዳሰስና ተጨባጭ መረጃ በመያዝ የወጣቶች የሥነ-ተዋልዶ ጤና የሚሻሻልበትን መንገድ በማመቻቸት ረገድ ከፍተኛ ጠቀሜታ አለው፡፡ ጥናቱ በትክክል የታለመለትን ግብ እንዲመታ የሚያደርጉትን ከፍተኛ ትብብር እናደንቃለን፡፡ ጥናቱ በፍቃደኝነት የሚከናወን ሲሆን ይህ መጠይቅ ወደ 30 ደቂቃ ገደማ ይጨርሳል፡፡

በጥናቱ ለመሳተፍ ፈቃደኛ ነዎት?

አዎ _____ አይደለሁም _____

ፊርማ _____ ቀን _____

በጣም አመሰግናለሁ!!

የሚስጥር ቁጥር ----------

ክፍል አንድ፡ አጠቃላይ መረጃ

ኮድ	**ጥያቄዎች**	**አማራጭ መልሶች**	**ወደ ➔**
101	ጾታ	1. ወንድ፣ 2.ሴት፣	
102	ዕድሜ (በዓመት)	1._____ ዓመት፡፡ 88. አላውቀውም፡፡	
103	የጋብቻ ሁኔታ	1. ምንም ጓደኛ/የትዳር አጋር የለኝም፡፡ 2. አግብቻለሁ፡፡ 3. ተፋትቻለሁ፡፡ 4. ባሌ/ሚስቴ የሞተብኝ፡፡	
104	ሐይማኖት	1. ኦርቶዶክስ፣ 2. እስላም፣ 3. ፕሮቴስታንት፣ 4. ካቶሊክ፣ 99. ሌላ (ይጠቀስ) _____	
105	ብሔር	1. አማራ፣ 2. አገው፣ 3. ትግሬ፣ 4. ኦሮሞ፣	

		99. ሌላ (ይጠቀስ)_____	
106	ዘመናዊ ትምህርት ተከታትለህ/ሽ ታውቃለህ/ቂያለሽ?	1. አዎ፡፡ 2. አላውቅም፡፡ (አላውቅም ካሉ ወደ ጥያቄ ቁጥር 108 ይሂዱ)	108 ይሂዱ ➔
107	የትምህርት ደረጃዎ	1. 1-4ኛ ክፍል፣ 2. 5-8ኛ ክፍል፣ 3. 9-12ኛ ክፍል፣ 99. ሌላ (ይጠቀስ) _____	
108	በአሁኑ ጊዜ ዘመናዊ ትምህርት ላይ ነህ/ሽ?	1. አዎ፡፡ 2. አይደለሁም፡፡	
109	የአባትህ/ሽ የትምህርት ደረጃ	1. ማንበብናመፃፍ አይችልም ፣ 2. ዘመናዊ ትምህርት ተከታትለዋል፣	
110	የእናትህ/ሽ የትምህርት ደረጃ	1. ማንበብናመፃፍ አትችልም፣ 2. ዘመናዊ ትምህርት ተከታትላለች፣	
111	በአሁኑ ሰዓት የሚኖሩት ከማን ጋር ነው?	1. ከሁለቱም ወላጆቼ ጋር፣ 2. ከአንድ ወላጄ ጋር፣ 3. ከባሌ /ከምስቴ ጋር፣ 99. ሌላ (ይጠቀስ) _____	
112	የቤተሰብ መጠን (በቁጥር)	_____ (በቁጥር)	
113	በአሁኑ ሰዓት የሥራዎ ዓይነት ምንድን ነው? (ከአንድ በላይ መልስ መመለስ ይቻላል)	1. ተማሪ፣ 2. ገበሬ፣ 3. የቤት እመበት፣ 4. ነጋዴ፣ 5. የቀን ሰራተኛ፣ 99. ሌላ (ይጠቀስ)_____	
114	በአንተ/ቺ ግመት የቤተሰቦችህ/ሽ የገቢ ሁኔታ ምን ይመስላል?- (ከጎረቤት ጋር ሲነፃፀር)	1. ድሃ፣ 2. መካከለኛ፣ 3. ሀብታም፣ 88. አላውቀውም፣	
115	የቤተሰብ የመገናኛ ዘዴ ምንድን ነው? (ከአንድ በላይ መልስ መመለስ ይቻላል)	1. ሬድዮ፣ 2. ቴሌቪዥን፣ 3. ስልክ፣ 99. ሌላ (ይጠቀስ)_____	

ክፍል ሁለት፡ የሥነ-ተዋልዶ ጤናን ዕዉቀት የሚመለከቱ ጥያቄዎች

ኮድ	ጥያቄዎች	አማራጭ መልሶች	ወደ ➔
201	(ለሴቶች ብቻ) የመጀመሪያ የወር አበባሽን በስንት ዓመትሽ አየሽ?	1. ----- ዓመቴ 88. አላስታውስም፡፡	
202	ሴት ልጅ ለመጀመሪያ ጊዜ በምታደርገው የግብረ ሥጋ ግንኙነት ልታረግዝ ትችላለች?	1. አዎን ትችላለች፡፡ 2. አትችልም፡፡ 88. አላውቅም፡፡	
203	ሴት ልጅ ለማርገዝ የምትችለው በየትኛው ዕድሜዋ ነው? (ከአንድ በላይ መልስ መመለስ ይቻላል)፤	1.በጉርምስናዋ ጊዜ፣ 2.ከጉርምስናዋ ጊዜ በኋላ፣ 2. ከ10 ዓመቷ በፊት፣	

		3. አላውቅም፣ 99. ሌላ (ይጥቀሱ) _____	
204	በየትኛዎቹ የወር አበባ ጊዜያት ነው አንዲት ሴት የማርገዝ እድሏ ከፍተኛ የሚሆነው?	1. የወር አበባዋ በሚፈስበት ጊዜ፣ 2. የወር አበባዋ መፍሰስ እንዳቆመ፣ 3. የወር አበባዋ ከመጀመሩ በፊት፣ 4. የወር አበባዋ ፈሶ ካቆመና እንደገና በሚመጣበት ጊዜ መካከል፣ 5. ሁሌም አንድ ነው፣ 88. አላውቅም፣ 99. ሌላ (ይጥቀሱ)_____	
205	ወንድ ልጅ ለማስረገዝ የሚችለው በየትኛውእድሜው ነው?	1.በጉርምስናው ጊዜ ፣ 2.ከጉርምስናዉ ጊዜ በኋላ፣ 3. ከ10 ዓመቱ በፊት፣ 88. አላውቅም፣ 99. ሌላ (ይጥቀሱ)_____	
206	እርግዝናን ለመከላከል የሚያስችሉ ዘዴዎች እንዳሉ ያውቃሉ?	1. አዎ፡፡ 2. አላውቅም፡፡ (መልስዎ አላውቅም ከሆነ ወደ ጥያቄ ቁጥር 208 ይሂዱ)	208 ይሂዱ
207	እርስዎ የሚያውቋቸው እርግዝናን ለመከላከል የሚያስችሉ ዘዴዎች የትኞቹ ናቸው? (ከአንድ በላይ መልስ መመለስ ይቻላል)፤	1. የሚዋጥ ክኒን፣ 2. ኮንዶም፣ 3. በመርፌ የሚሰጥ፣ 4. በክንድ ጡንቻ ውስጥ የሚቀመጥ፣ 5. በማህፀን ውስጥ የሚቀመጥ፣ 6. ማምከን፣ 7. መታቀብ፣ 8. የወንድ የዘር ፍሬን ወደ ውጭ ማፍሰስ፣ 9. ከግብረ ሥጋ ግንኙነት በኋላ ብልትን መታጠብ፣ 10. ቆሞ የግብረ ስጋ ግንኙነት ማድረግ፣ 11. የወር አበባ ቀንን ቆጥሮ መጠቀም/ከግብረ ስጋ ግንኙነት መቆጠብ፣ 99. ሌላ (ይጥቀሱ)_____	አዎ የለም 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2
208	በግብረ ሥጋ ግንኙነት ሊተላለፉ ስለሚችሉ የአባላዘር በሽታዎች ሰምተህ/ሽ ታውቃለህ/ታውቂያለሽ?	1. አዎን፡፡ 2. አላውቅም፡፡ (መልስዎ አላውቅም ከሆነ ወደ ጥያቄ ቁጥር 210 ይሂዱ)	211 ይሂዱ
209	አዎን ካልክ/ሽ ምን ምን በግብረ ሥጋ ግንኙነት የሚተላለፉ በሽታዎች ታውቃለህ/ታውቂያለሽ? (ከአንድ በላይ መልስ መመለስ ይቻላል)፤	1. ጨብጥ፣ 2. ቂጥኝ፣ 3. ከርክር፣ 4. ባምቡሌ፣ 5. ኤች.አይ.ቪ/ኤድስ፣	አዎ የለም 1 2 1 2 1 2 1 2

		99. ሌላ (ይገለጽ) _____	1 2 1 2
210	አንድ ሰው በግብረ-ሥጋ ግንኙነት በሚተላለፉ በሽታዎች ሲጠቃ የሚያሳያቸውን ምልክቶች ጥቀስ/ሽ? (ከአንድ በላይ መልስ መመለስ ይቻላል)፤	1. የብልት መቁሰል፣ 2. ያልተለመደ ፈሳሽ ከብልት መፍሰስ፣ 3. ሽንት ሲሸኑ ማቃጠል/ህመም፣ 4. የብልት ማበጥ፣ 99. ሌላ (ይጠቀስ)_____	አዎ የለም 1 2 1 2 1 2 1 2 1 2
211	ስለ ኤች.አይ.ቪ ኤድስ ሰምተህ/ሽ ታውቃለህ/ቂያለሽ?	1. አዎን፡፡ 2. አላውቅም፡፡ (መልስዎ አላውቅም ከሆነ ወደ ጥያቄ ቁጥር 217 ይሂዱ)	217 ይሂዱ
212	የኤድስ ቫይረስ የሚተላለፍባቸውን መንገዶች ግለጽ/ጪ? (ከአንድ በላይ መልስ መመለስ ይቻላል)፤	1. ልቅ የሆነ የግብረ ሥጋ ግንኙነት፣ 2. ስለታማ ነገሮችን በጋራ በመጠቀም፣ 3. በተበከለ ደም ልገሳ፣ 4. በእርግዝና እና በወሊድ ወቅት ከእናት ወደ ልጅ ሊተላለፍ ይችላል፣ 5.በትንኝ ንክሻ፣ 6. በጡት ወተት፣ 7. በንክኪ (መጨባበጥ/አብሮ መብላት ወዘተ)፣ 99. ሌላ (ይገለጽ) _____	አዎ የለም 1 2 1 2 1 2 1 2 1 2 1 2 1 2
213	ማንኛውም ሰው በህይወቱ ለመጀመሪያ ጊዜ በሚያደርገው የግብረ ሥጋ ግንኙነት በኤች.አይ.ቪ ሊያዝ ይችላል?	1. አዎን፡፡ 2. አይችልም፡፡ 88. አላውቅም፡፡	
214	አንድን ሰው አተኩሮ በመመልከት የኤች.አይ.ቪ ቫይረስ እንዳለበት ማወቅ ይቻላልን?	1. አዎን፡፡ 2. አይቻልም፡፡ 88. አላውቅም፡፡	
215	አንድ ሰው እራሱን ከኤች.አይ.ቪ/ኤድስ እና በግብረ-ሥጋ ግንኙነት ከሚተላለፉ በሽታዎች ለመጠበቅ ማድረግ የሚችለው ነገር አለ?	1. አዎን፡፡ 2. የለም፡፡ 88. አላውቅም፡፡	
216	አንድ ሰው እራሱን ከኤች.አይ.ቪ/ ኤድስ እና ሌሎች በግብረ-ሥጋ ግንኙነት ከሚተላለፉ በሽታዎች ለመከላከል ምን ማድረግ አለበት? (ከአንድ በላይ መልስ መመለስ ይቻላል)፤	1. ከግብረ ሥጋ ግንኙነት መቆጠብ/መታቀብ፣ 2. ድንገተኛ የግብረ ሥጋ ግንኙነት ማስወገድ፣ 3. አንድ ለአንድ መወሰን፣ 4. በግብረ ሥጋ ግንኙነት ወቅት ሁሌም ኮንዶም መጠቀም፣ 5. ከሴተኛ አዳሪ ጋር የግብረ ሥጋ ግንኙነት አለማድረግ፣ 6. ንጽህናው ካልተጠበቀ መርፌ መቆጠብ፣ 7. የተበከሉ ስለታማ ነገሮችን አለመጠቀም፣ 99. ሌላ (ይጠቀስ) _____	አዎ የለም 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2
217	በፈቃደኝነት ላይ ስለተመሠረተ የኤች.አይ.ቪ የምክር	1. አዎን፡፡	221 ይሂዱ

	አገልግሎት እና የደም ምርመራ ሰምተህ/ሽ ታውቃለህ/ቂያለሽ?	2. አላውቅም። (መልስዎ አላውቅም ከሆነ ወደ ጥያቄ ቁጥር 221 ይሂዱ)	
218	በፈቃደኝነት ላይ የተመሠረተ የኤች.አይ.ቪ ምርመራ አድርገህ/ሽ ታውቃለህ/ቂያለሽ?	1. አዎን። 2. አላውቅም።	
219	በፈቃደኝነት ላይ የተመሠረተ የኤች.አይ.ቪ ምርመራ ለማድረግ ብትጠየቅ/ቂ ፈቃደኛ ትሆናለህ/ሽ?	1. አዎን። 2. አልሆንም። 3. እርግጠኛ አይደለሁም።	
220	በፈቃደኝነት ላይ ስለተመሠረተ የኤች.አይ.ቪ የምክር አገልግሎት እና የደም ምርመራ ጥቅም ጥቀስ/ሽ፤ (ከአንድ በላይ መልስ መመለስ ይቻላል)፤	1. የኤች.አይ.ቪ/ ኤድስን ስርጭት ይቀንሳል። 2. ራስን ለማወቅ ይረዳል። 3. በራስ መተማመንን ይጨምራል። 99. ሌላ (ይገለጽ) _____	አዎ የለም 1 2 1 2 1 2

ክፍል ሦስት፡ የሥነ-ተዋልዶ ጤና አገልግሎት አጠቃቀምን የሚያመለክቱ ጥያቄዎች

ኮድ	ጥያቄዎች	አማራጭ መልሶች	ወደ →
301	ስለ ሥነ-ተዋልዶ ጤና አገልግሎት ሰምተህ/ሽ ታዉቃለህ/ሽ?	1. አዎን። 2. አላውቅም።	
302	ከየት ሰማህ/ሽ? (ከአንድ በላይ መልስ መመለስ ይቻላል)፤	1. ከጤና ባለሙያ፣ 2. ከብዙሀን መገናኛ፣ 3. ከትምህርት ቤት፣ 99. ሌላ (ይገለጽ) _____	አዎ የለም 1 2 1 2 1 2
303	የሥነ-ተዋልዶ ጤና አገልግሎት ተጠቀምህ ታዉቃለህ/ሽ?	1. አዎን። 2. አላውቅም።	
304	ላለፉት 6 ወራት የሥነ-ተዋልዶ ጤና አገልግሎት ማዕከል ጎብኝተሀል/ሻል?	1. አዎን። 2. አላውቅም። (ወደ ጥያቄ ቁጥር 411 ይሂዱ)	411→ ይሂዱ
305	ለጥያቄ ቁጥር 303 መልስህ/ሽ አዎ ከሆነ አገልግሎት ፍለጋ ወዴት ሄድክ/ሽ? (ከአንድ በላይ መልስ መመለስ ይቻላል)፤	1. ወደ መንግስት ጤና ድርጅት፣ 2. ወደ ግል ጤና ድርጅት፣ 3. ወደ ፋርማሲ ወይም መድሃኒት ቤት፣ 4. ወደ ጤና ኬላ፣ 5. ወደ ልምድ አዋላጅ/ባህል መድሃኒት አዋቂ፣ 99. ሌላ (ይገለጽ) _____	አዎ የለም 1 2 1 2 1 2 1 2 1 2
306	ከላይ ወደ ተጠቀሰው ቦታ ለመሄድ የመረጥከው/ሽው ለምንድን ነው? (ከአንድ በላይ መልስ መመለስ ይቻላል)፤	1. ህክምናው/አገልግሎቱ ፍቱን ስለሆነ፣ 2. የነጻ ህክምና/አገልግሎት ስለማገኝ፣ 3. የህክምናው/አገልግሎቱ ዋጋ ዝቅተኛ ስለሆነ፣ 4. ቅርብ ስለሆነ፣ 5. ሚስጥር ስለሚጠብቁልኝ፣ 99. ሌላ (ይገለጽ) _____	አዎ የለም 1 2 1 2 1 2 1 2 1 2
307	ለጥያቄ ቁጥር 303 መልስህ/ሽ አዎ ከሆነ ለጉብኝትህ/ሽ ምክንያት ምን ነበረ? (ከአንድ በላይ መልስ	1. ለጤንነት ከትትል፣ 2. ለአባላዘር በሽታ ህክምና፣	አዎ የለም 1 2 1 2

	መመለስ ይቻላል)፤	3. የወሊድ መቆጣጠሪያ ለመዉሰድ፣ 4. ለውርጃ አገልግሎት፣ 5. ለወሊድ አገልግሎት፣ 6. በፈቃደኝነት ላይ የተመሠረተ የኤች.አይ.ቪ ምርመራ ለማድረግ፣ 7. ለመረጃ እና ለጤና ትምህርት፣ 99. ሌላ (ይገለጽ) _____	1 2 1 2 1 2 1 2 1 2
308	የሥነ-ተዋልዶ ጤና አገልግሎት ለማግኘት ሲፈልጉ የትኛውን አገልግሎት ሰጪ ይፈልጋሉ?	1.ተመሳሳሳይ ዖታ ያለው/ላት፤ 2.ተመሳሳሳይ የዕድሜ ክልል ዉስጥ የሚገኝ/የሚትገኝ፤ 3. ተመሳሳሳይ ዖታ እና የተለያየ የዕድሜ ክልል ዉስጥ የሚገኝ/የሚትገኝ፤ 4. ተመሳሳሳይ የዕድሜ ክልል ዉስጥ የሚገኝ/የሚትገኝ እና የተለያየ ዖታ ያለው/ላት፤ 5. የተለያየ የዕድሜ ክልል ዉስጥ የሚገኝ/የሚትገኝ፤ 6. የተለያየ የዕድሜ ክልል ዉስጥ የሚገኝ/የሚትገኝ እና ተመሳሳሳይ ዖታ ያለው/ላት፤ 7. የተለያየ የዕድሜ ዉስጥ የሚገኝ/የሚትገኝ እና የተለያየ ዖታ ያለው/ላት፤ 8. ምንም የዕድሜ/የዖታ ምርጫ አያስፈልግም፤ 99. ሌላ (ይገለጽ) _____	
309	ኮንዶምን ለመሳሰሉ የስነ-ተዋልዶ ጤና አገልግሎቶችን ማግኘት ለታዳጊ ወጣቶች ቀላል ወይስ ከባድ ነው ብለህ/ሽ ታስባለህ/ሽ?	1. ቀላል፣ (ወደ ጥያቄ ቁጥር 411 ይሂዱ) 2. ከባድ፣ 88. አላዉቀም፣	ቁጥር 312 ይሂዱ
310	ከባድ ከሆነ ለምን? (ከአንድ በላይ መልስ መመለስ ይቻላል)፤	1. ለመግዛት አቅም ስለሌለኝ፣ 2. የመረጃ ዕጦት፣ 3. የጓደኛ ግፊት፣ 4. የሀይማኖት ተፅዕኖ፣ 5. ማግኘት ስለሚያስቸግር፣ 6. የአገልገሎት ሰጪዎች ያለመመቸት፣ 7. የቤተሰብ ፈቃደኛ ያለመሆን፣ 8. የቦታ ያለመመቸት፣ 9. መግዛት ስለሚያሳፍር፣ 10. ስለለሚርቅ፣ 11. ዉድ ስለሆነ፣ 12. እንዲሁ ያለመፈለግ፣ 13. በበሽታ እጠቃለሁ ብዬ ስለማላስብ፣ 14. ግንኙነት አድርጌ ስለማላዉልቅ፣ 99. ሌላ (ይገለጽ) _____	አዎ የለም 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2
311	ታዳጊ ወጣቶች የስነ ተዋልዶ ጤና አገልግሎት እንዳይጠቀሙ ዋና ዋና ምክንያቶች ምንድን ናቸዉ? (ከአንድ በላይ መልስ መመለስ ይቻላል)፤	1. ለማወቅ አለመፈለግ፣ 2. አለማሰብ፣ 3. በጣም ልጅ ነን ብለዉ ስለሚያስቡ፣ 4. የዕዉቀት ዕጦት፣ 5. የጊዜ ዕጦት፣ 6. በወላጅ ላለመታየት፣	አዎ የለም 1 2 1 2 1 2 1 2 1 2

		99. ሌላ (ይገለጽ) _____	1 2
312	ስለ ስነ-ተዋልዶ ጤና ከቤተሰብ ጋር ትነጋግራለህ/ሽ?	1. አዎን፡፡ (መልስዎ አዎን ከሆነ ወደ ጥያቄ ቁጥር 413 ይሂዱ) 2. አይደለም፡፡	አዎን ከሆነ 314 ይሂዱ)
313	ስለ ስነ-ተዋልዶ ጤና ከቤተሰብ ጋር ካልተነጋገረህ/ሽ ለምን? (ከአንድ በላይ መልስ መመለስ ይቻላል)፤	1. አስፈላጊ አይደለም፣ 2. ፍራቻ፣ 3. ማህበራዊ እና ባህላዊ ተጽዕኖ፣ 99. ሌላ (ይገለጽ) _____	አዎ የለም 1 2 1 2 1 2
314	የገጠር ታዳጊ ወጣቶች ስለ ስነ-ተዋልዶ ጤና በቂ መረጃ ወይም ዕዉቀት ይኖራቸዋል ብለህ/ሽ ታስብለህ/ያለሽ?	1. አዎን፡፡ 2. አይደለም፡፡ (ወደ ጥያቄ ቁጥር 415 ይሂዱ) 99. አላዉቅም፡፡	315 ይሂዱ ➔
315	መልስዎ አዎን ከሆነ፣ የገጠር ታዳጊ ወጣቶች ስለ ተዋልዶ ጤና መረጃ ከየት ነዉ የሚያገኙት? (ከአንድ በላይ መልስ መመለስ ይቻላል)፤	1. ከትምርህት ቤት፣ 2. ከጓደኞቻቸዉ፣ 3. ከቤተሰቦቻቸዉ፣ 4. ከመገናኛ ብዙሀን፣ 5. ከጤና ባለሙያዎች፣ 6.ከየትም አያገኙም፡፡ 88. አላዉቅም፡፡ 99. ሌላ (ይገለጽ) _____	አዎ የለም 1 2 1 2 1 2 1 2 1 2 1 2 1 2
316	ስለ ስነ ተዋልዶ ጤና ማወቅ ብትፈልግ/ጊ ማንን ማነጋገር ትመርጣለህ/ሽ? (ከአንድ በላይ መልስ መመለስ ይቻላል)	1. ጓደኞቼን፣ 2. እናቴን፣ 3. አባቴን፣ 4. እህቴህን፣ 5. የሴት ወይም የወንድ ጓደኛዬን፣ 6. ባሌን /ሚስቴን፣ 7. የጤና ባለሙያን፣ 99. ሌላ (ይገለጽ) _____	አዎ የለም 1 2 1 2 1 2 1 2 1 2 1 2 1 2

በጣም አመሰግናለሁ::

Declaration

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

Name: _____

Place: Addis Ababa University, College of Health Sciences, School of Public Health

Signature: _____

Date of submission: _____

Approval of the primary advisor:

This thesis has been submitted for examination with my approval as a university advisor.

Name: _____

Signature: _____

Date: _____