

HARAMAYA UNIVERSITY
SCHOOL OF GRADUATE STUDIES

**Prevalence and Associated factors of Teenage Pregnancy among Secondary
School Female Students in Dire Dawa City, Eastern Ethiopia**

MPH Research Thesis

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**Prevalence and Associated factors of Teenage Pregnancy among Secondary
School Female Students in Dire Dawa City, Eastern Ethiopia**

**A Thesis Submitted to the Department of Public Health, School of Graduate
Studies**

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**In Partial Fulfillment of the Requirements for the Degree of Master of Public
Health in Reproductive Health**

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ABBREVIATIONS/ACRONYMS

AOR	Adjusted Odd Ratio
EDHS	Ethiopian Demographic and Health Survey
FP	Family Planning
IHRERC	Institutional Health Research Ethics Review Committee
LMIC	Low and Middle Income Country
NGO	Non Governmental Organization
RH	Reproductive Health
SRH	Sexual and Reproductive Health
SSA	Sub Saharan Africa
TP	Teenage pregnancy
UNFPA	United Nation Fund for Population Agency
WHO	World Health Organization

ABSTRACT

Background: The problem of teenage pregnancy is a global health and economic challenge. Sub Saharan African countries accounts for highest rate (101 per 1000) of birth to teen mothers' accounts for more than half of all birth. In Ethiopia teenage pregnancy is public health and demographic challenge that makes the second most populous country in Africa. Preventing the teen pregnancy is among the priority issues of the Ethiopian Federal Ministry of Health. Limited studies on sexuality and teenage pregnancy in our country were included all adolescent in denominator which understates the magnitude of teenage pregnancy.

Objective: To assess prevalence and associated factors of teenage pregnancy among secondary school female students in Dire Dawa city from Nov 4 to 18/2020, Eastern Ethiopia.

Methodology: Institutional-based cross-sectional study was conducted among 677 students selected from secondary schools of Dire Dawa city. Pretest was conducted on 35 feemale teenagers. One stage cluster sampling technique was used to select study participants. Data was intered into EpiData-version 3.1 and exported to STATA version 16 for analysis. Bivariable and multivariable binary logistic regression was carried out to assess association between outcome and predictor variables and p-value < 0.05 was considered as significant.

Resul: prevalence of teenage pregnancy was 135 (19.94%, 95% CI: 16.9-23). age group (AOR=5.21, 95% CI 2.97-9.13), living with either of biological parents(AOR=2.44 95% CI 1.40-4.22), Living with neither of biological parents(AOR=3.22, 95% CI 1.62-6.41), knowledge of fertile period in the menustrial cycle(AOR=2,34, 95% CI 1.39-3.93), influence of peer pressure to have sex(AOR=3.28, 95% CI 1.87-5.72) and contraceptive non use(AOR=2.97, 95% CI 1.82-4.85) were significantly associated with teenage pregnancy.

Conclusion: Nearly one-fifth of teenagers had teenage pregnancy. Teenage pregnancy is high indicating more to be done to insure that teenage pregnancy prevention is effective and improve adolescent health. age group, living arrangement, knowledge of fertile period in cycle, influence of peer pressure to have sex and contraceptive non use were found to have a statistically significant association with teenage pregnancy.

Key word: Teenage pregnancy, Adolescent, associated factors, School, Dire Dawa

1. INTRODUCTION

1.1. Background

According to World Health Organization (WHO) the term adolescent is often used synonymously with teenager. In this sense adolescent pregnancy is defined as the occurrence of pregnancy among girls aged 10-19 years irrespective of the legal status of the marriage of the women(WHO, 2014) .

Teenage is transitional period from childhood to adulthood characterized by rapid physical, psychological (cognitive and emotional) and social change. It is a time in which new capacities are developed. Therefore the diagnosis and management of pregnancy during this age deserves acknowledging risks an appropriate elements of care required for successful maternal and child health outcomes as well as communities they are living in.(Nathalie Fleming, 2015). Adolescence pregnancies have noted to have higher maternal, obstetrical and neonatal risk that lead to both short and long term consequences. Therefore pregnancy during adolescence should have to be managed as high risk program that can accommodate their unique risk and concern(Nathalie Fleming, 2015).

Though, the problem of teenage pregnancy is a concern in the world, African girls experienced teenage pregnancies are left without getting access to health, education, skill development and earning opportunities which expose them to threat of poverty, social exclusion, powerlessness and numerous deprivation and stigmatization. Teenage pregnancy makes girls incapable in practicing their human rights and decision making(Tekie and Pati, 2016). Addressing teenage pregnancy and motherhood is key components to encourage the rights of adolescent through a variety of means, including advocacy and communication to draw attention to girls' needs and realities, because of the harmful and life-threatening risks they face from pregnancies.(Loaiza and Liang, 2013).

1.2. Statement of problem

Teenage pregnancy remains a major contributor to maternal and child mortality, and to intergenerational cycle of ill-health and poverty. Pregnancy and child birth complications are the leading cause of death among 15-19 years old girls globally, with Low and Middle Income Countries (LMICs) accounting for 99% of global maternal death of women ages 15 to 49 years. Additionally some 3 million girls aged 15-19 years undergo unsafe abortions each year, contributing to maternal mortality and lasting health problems(Kiani et al., 2019). Teenage pregnancy can also have negative social and economic effect on girls, their families and communities(WHO, 2018).

Teenage pregnancy is a global health and economic challenge. Globally an estimated 18 million teenage girls give birth each year at the rate of 53 births per 1000 women; 95% of these occur in developing countries. About 11% of all births are for women aged 15-19 years. Sub-saharan Africa accounts for highest rate of births to teen mothers accounts for more than half of all births; an estimated 101 per 1000 births are to women aged 15-19 years which is approximately twice the global average(Williamson, 2013). Every year an estimated 21 million teenage girls aged 15-19 years and 2 million girls aged less than 15 years become pregnant in developing region(WHO, 2018). In Ethiopia According to Ethiopian Demographic Health Survey (EDHS) 2016 13% of women have begun child bearing at the age of 15-19 years: 10% have given birth and 2% were pregnant with their first child(EDHS, 2016).

Most maternal and child morbidity due to teenage pregnancy are linked to hypertensive disorder of pregnancy, infection, low birth weight and preterm delivery (Ganchimeg et al., 2014). Teenage pregnancy expose the women to problems that are less common in adult women such as obstetric fistula often lead them to lifelong consequences because their body growth is not yet completed(Purandare and Adanu, 2015). Teenage pregnancy has also implication on educational opportunity; It leads to poor educational attainment and high school dropout (Mathewos and Mekuria, 2018).

The government of Ethiopia including different Non Governmental Organizations (NGO) has taken many measures to reduce teen pregnancy and its consequences such as preventing early marriage, adolescent and reproductive health strategy, legalization of abortion, awareness creation against harmful traditional practices (Ayele et al., 2018c). However, still Teenage pregnancy is very common in Ethiopia, and it is an important demographic factor that makes the country the second most populous country in Africa with the total population of about 101 million in 2016 (Ayanaw Habitu Y et al., 2018).

Previous studies showed that several factors contribute to teenage pregnancy such as educational status of parents, economic status, family structure, parent-daughter communication age, media, fertility knowledge, lack of knowledge about Family Planning (FP), contraceptive non use factor determining teenage pregnancy (Alemayehu et al., 2010, Ayanaw Habitu Y et al., 2018, Ayele et al., 2018a, Beyene et al., 2015, Birhanu et al., 2019, Mathewos and Mekuria, 2018, Mitiku et al., 2019). Despite these a number of gaps on the previous literature on teenage pregnancy among adolescents were identified. Limited studies conducted were typically included all adolescents in denominator which understate the magnitude of teenage pregnancy. When the rate is recalculated including only sexually active adolescents it is found to have highest rate of pregnancy, arguing for continued focus on sexually active adolescents to assess TP.

In Ethiopia including Dire Dawa the different traditional customary practice such as risky sexual behaviour along with contraceptive non use contributes to the risk of teenage pregnancy. So to take any measures with limited studies conducted on the status of teenage pregnancy is difficult. To reduce the adolescence pregnancy, it is impressive to identify all associated factors comprehensively and focusing on sexually active teenagers as it will help to fully understand the prevalence and factors surrounding teenage pregnancy in order to consider the intervention that may impact reduction of TP. Hence, this study is aimed to investigate and provide information that fills identified gaps on prevalence and associated factors of teenage pregnancy among secondary school adolescents in Dire Dawa, eastern Ethiopia.

1.3. Significance of the study

The finding of this study will provides information on prevalence and associated factors of teenage pregnancy among secondary school students by analyzing the impact of different variables on the presence of teenage pregnancy

Specifically:

- The results are expected to give some knowledge about the prevalence and associated factors of teenage pregnancy
- A sound understanding of factors surrounding pregnant teenagers is important for Dire Dawa administration health bureau as well as local Non-Government Organizations (NGOs) to revise and modify their policy to undertake required intervention programs helps to reduce pregnancy among teenagers. It will help local health manger at regional level to understand the extent of the problem and use of information obtained from evidence based decision.
- Moreover, the knowledge generated from this study will enrich literature available on the issue and may trigger other researcher to conduct similar study in various part of the country.

1.4. Objective

1.4.1. General objective

To assess prevalence and associated factors of teenage pregnancy among secondary school female students in Dire Dawa city from Nov 4 to 18/2020, eastern Ethiopia

1.4.2. Specific Objective

- To assess prevalence of teenage pregnancy among secondary school students in 2020
- To identify factors associated with teenage pregnancy among secondary school female students in 2020

2. LITERATURE REVIEW

2.1. Prevalence of teenage pregnancy

The prevalence of teenage pregnancy is different in different world, studies in Pakistan show that the prevalence TP ranges from 10.3% to 6.5% across the region and the problem is higher among adolescent aged around 18 years age group(Mubeen and Baig, 2016). It has been reported that the prevalence of teenage pregnancy is high. In recent report, the pregnancy rate among 15-19 years was high (57/1000) females in United State (US)(Sedgh et al., 2015). Different study was conducted in different European countries like Denmark and Romania, the finding showed that the prevalence of teenage pregnancy was 1.8%(Ugianskiene et al., 2015) and 39.4%(Diaconescu et al., 2015) respectively.

A cross sectional study conducted in rural part of Nepal on prevalence of teenage pregnancy emphasize that among 7054 adolescents, study finding showed high (29.6%) prevalence of teenage pregnancy (Maharjan et al., 2019). A global report shows that the global birth rate among adolescent is 50 births per 1000 of which majority of this birth occurred in Low and Middle Income Countries (LMIC). In sub-Saharan Africa, of all adolescent pregnancy one third of them are unintended pregnancy ended with either unplanned birth (22%) or abortion (13%) (Woog et al., 2015). Another study conducted among secondary school adolescent in South Africa revealed high (11%) prevalence of teenage pregnancy (Jonas et al., 2016b).

A cross sectional study conducted in 2010 at Accra, Ghana among 820 sampled adolescents aged 15-19 year revealed that the magnitude of teenage pregnancy were 16%. (Ahorlu et al., 2015). The same study done in North West Cameroon among 293 adolescents school girls of the age 15 to 19 year from august to October 2017 showed that high (60.75%) prevalence of teenage pregnancy in sampled institutions(Donatus et al., 2018). Similar study conducted in south region of Cameroon among 250 sampled secondary school adolescents showed that the prevalence of teenage pregnancy were 5.20% (Gabriel et al., 2020). Another cross sectional study done in urban areas of Kenya in 2010 revealed that the magnitude of teenage pregnancy was around 11% of which majority (76%) of the pregnancy were unwanted(Okigbo and Speizer, 2015). Similarly study conducted rural part of Kenya revealed that the prevalence of teenage pregnancy were 23.3% (Omoro et al., 2017).

So far different studies have reported high prevalence of teenage pregnancy in some parts of Ethiopia. For example Institution-based cross sectional study conducted in southern Ethiopia, Arbaminch town among 578 sampled adolescents from four school indicated that the prevalence of teenage pregnancy were 7.7%, in this study it has been reported that only few (27.9%) pregnancy were wanted(Mathewos and Mekuria, 2018). The same study conducted in Aletawondo, Sidama zone indicated that of 18.3% adolescent students who had premarital intercourse15.3% of them face unwanted pregnancy which majority (83%) of them undergone abortion(Tekletsadik et al., 2014). similarly study done in Asosa, Ethiopia among 783 teenage females revealed that the prevalence or teenage pregnancy was around 20.4%(Beyene et al., 2015). another community based cross sectional study conducted in north east Ethiopia among 542 adolescent aged between indicated that the prevalence of teenage pregnancy was high(28.6%) of which more than half (63.3%) of them were unplanned and 37.6% were unhappy about their pregnancy(Ayanaw Habitu Y et al., 2018).

2.2. Factors associated with teenage pregnancy

2.2.1. Socio demographic factors

2.2.1.1. Age

Age is usually considered as demographic variable which influence teenage pregnancy, some studies attribute the risk of exposure to pregnancy and child bearing increase with age. The study conducted in Kenya indicated that odds of history of pregnancy among sexually active girls were significantly higher among participants aged 17-19 years (AOR=6.8, CI=3.4, 13.4) and 15-16 years (AOR=2.7, CI=1.3, 5.5) (Omoro et al., 2017). Study by Tewdiros A, et.al in Ethiopia on determinants of adolescent fertility investigated that female teenagers who were aged between 18 and 19 years were 7.7 times more likely to be fertile than those aged between 15 and 17 years (AOR= 7.6, CI= 6.0, 9.9) (Alemayehu et al., 2010). Determinants of teenage pregnancy were assessed by ayele et al. 2018 using data collected in Tembien district Tigray region. According to their results being in the age group of 18–19 years were found to be significantly associated with teenage pregnancy AOR = 16.75 (95% CI 6.45–43.47) (Ayele et al., 2018b). Study conducted in Assosa shows teenages aged between 13-14 AOR 0.21(CI=0.06-0.67) was significantly associated with teenage pregnancy (Beyene et al., 2015).

2.2.1.2. Residence

Place where women resides influence teen pregnancy since rural teenagers are less educated and have limited access to contraceptive and practice of encouraging the bearing of children is common in rural setting. A cross sectional study conducted in Wodagi, northeast Ethiopia among 514 teenagers indicated that teenage from rural setting were four times more likely to be pregnant than their counterpart (AOR= 3.93, CI= 1.20, 12.83) (Ayanaw Habitu Y et al., 2018). Another study done in Uganda on predisposing factor of teenage pregnancy among teenage girls revealed that teens who lived in rural area were 2 times (OR= 1.91, CI= 1.02, 3.57) more likely to experience teenage pregnancy than who lived in urban areas(Tuyiragize et al., 2018)

2.2.1.3. Marital status

Marital status of teenagers is one of the key drivers of teenage pregnancy. Teens who have married have both the lowest use of contraception and little to say about whether or when they become pregnant. A magnitude of teenage pregnancy was assessed by Beyene et al. 2015 using

data collected in Assosa general Hospital. According to their results single teenagers were 0.06 less likely to become pregnant (AOR= 0.06, 95%CI= 0.03-0.12) (Beyene et al., 2015).

2.2.1.4. Educational status of the parents

In different studies education is found to be most determinant factor for teenage pregnancy. Prevalence and determinants of teenage pregnancy was assessed by Kassa et al., 2018 in Africa. According to the study teen with mother's educational status of not educated and father's education status of not educated were almost two times and 1.65 times more likely to start child bearing during adolescence period than their counter part (AOR= 1.88, 95% CI = 1.29-2.73) and (AOR=1.65, 95% CI = 1.14-2.38) respectively(Kassa et al., 2018). A cross sectional study done by Gebreyesus et al. 2019 in Asgede-Tsimla, northern Ethiopia showed that those that their mother's educational status are illiterate were reported less likely to utilize SRH service which further leads to early pregnancy (AOR=0.33, 95% CI=0.14-0.77)(Gebreyesus et al., 2019a). In Ethiopia, study conducted on determinants of teenage pregnancy and motherhood report that educational status were found to be significantly (AOR= 0.40, CI= 0.21, 0.78) associated with teenage pregnancy(Mitiku et al., 2019).

2.2.1.5. Economic status of parents

Finding from Different studies conducted in different countries attribute the risk of exposure to sexual relationship with adults and powerless to negotiate the for safer sex is increase among adolescents of poor parents since it is a means to afford some basic needs for adults to take advantage of this situation. Study by Yakubu, I. and W.J. Salisu, on determinants of teenage pregnancy in Sub-saharan Africa revealed that economic status of the parents increase the likelihood of adolescent pregnancy.(Yakubu and Salisu, 2018) Resent study conducted in Bangladesh revealed that the likelihood of adolescent pregnancy were high among the poorest Thus, study observed that adolescent pregnancy were near 2.05 times higher among adolescents from poorest compared to the richest house hold (AOR= 2.05, CI= 1.42, 2.95) (Sarker et al., 2018). Another study conducted in Degua, northern Ethiopia showed that lower monthly income was significantly (AOR= 23.96, CI= 4.89, 117) associated with teenage pregnancy(Ayele et al., 2018a)

2.2.2. Parenting and family related factors

The social relationship between parents and their children influence teenage pregnancy, while the closeness or familiarity of the parents to their daughter determine the level of information passed to their daughter about pregnancy. A cross sectional study on teenage pregnancy and associated factors among school adolescents in Arba Minch town, southern Ethiopia, result showed that adolescent who had poor parent-daughter communication on sexuality related issues were found to be 3.7 times more likely to be pregnant during teen age compared to their counterparts (AOR= 3.7, CI= 1.3, 10.2) (Mathewos and Mekuria, 2018). The same study suggest that the risk of teenage pregnancy among adolescents who were living with either of biological parents and neither of biological parents was higher as compared to those who were living with both biological parents (AOR=3.3, CI= 1.1,8.7) (Mathewos and Mekuria, 2018). Similarly, a cross sectional study done in Ghana shows that teens whose parents live together were 0.73 times less likely to become a pregnant compared to teens whose parents do not live together (AOR= 0.73, CI= 0.08-0.86)(Bedzo.JY and Manortey.S, 2019).

Finding from studies in different country suggest that Separation from the parents due to divorce is attributed to teenage pregnancy due to low parental control and lack of support and care from their parents. Cross sectional study in Mtwara, Tanzania on access to reproductive health and factors contributing to teenage pregnancy among 156 participants indicated that one of the major cause for teenage pregnancy were poor parental support as the result of divorce. According to this study low support from parents is associated with risky behavior like alcohol use and early sexual activity(Dunor and Urassa, 2017). A cross sectional study conducted in north east Ethiopia indicated that teenage from divorced parents were nearly 2 times more exposed to teenage pregnancy compared to those who were from married parents (AOR=1.98, CI= 1.13, 3.93)(Ayanaw Habitu Y et al., 2018). Another study done in Ghana revealed that teenagers were more likely to belong to families with strict rules and regulations compared to pregnant teenagers (OR= 0.14, CI= 0.07, 0.25) (Ahinkorah et al., 2019).

2.2.3. Knowledge and SRH related factors

A Study by Tuyiragize et al, on predisposing factor of teenage pregnancy in Uganda found that there were statistically significant association between knowledge of FP method($p=0.000$) and teenage pregnancy. Another study done in Ogbomosho, Nigeria revealed that lack of knowledge

about puberty (21.3%) were found to be major factor determining teenage pregnancy(Salami and Ayegboyin, 2015). Another study conducted in Lake Victoria Island and Mountain districts, Uganda suggested that knowledge of ovulation cycle was significantly associated with teen pregnancy indicating that teens who know ovulation cycle had two times (OR= 2.24, CI= 1.27, 3.97) more likely experience teenage pregnancy(Tuyiragize et al., 2018). Study by Mathewos S and Mekuria in Arba Minch town on prevalence and factor associated with TP showed that pregnancy were three times (AOR= 3.3, CI= 1.4, 7.4) much higher among adolescent who do not know the exact time when to take ECP compared to those who now(Mathewos and Mekuria, 2018).

Several studies found that early sexual debut is a significant predictor of teenage pregnancy. Study by Esher et al, on predictive factor related to teenage pregnancy in Cameroon reported that having first sexual intercourse between the age 14 and 16 years were found to be significantly (AOR= 2.19, CI= 1.17, 4.10) associated with teen pregnancy (Esther et al., 2018). Similarly study by Niguyen et al, on prevalence and factor associated with teen pregnancy in Vietnam showed that the experience of early sexual debut were 2.06 more likely associated with higher odd of pregnancy among teen girls ($p < 0.001$). According to this study several individual characteristics of adolescent like early initiation of sexual activity is one of important factor put them at risk of pregnancy(Nguyen et al., 2016). Similarly study done on trends and risk factor associated with adolescent pregnancy in east African countries found that early sexual debut is one of the predisposing factor for early motherhood (Wado et al., 2019).

A community based cross sectional study conducted in Wogadi, north east Ethiopia. The finding showed that contraceptive non-use was found to be significantly associated with teenage pregnancy. The result indicated that teenagers who did not use contraceptive were 10 times more likely to be pregnant compared to those who use contraceptive methods (AOR= 10.62, CI= 5.28, 21.36) (Ayanaw Habitu Y et al., 2018). Similarly study done in Assosa indicated that teenage pregnancy were significantly (AOR=2.39, CI= 1.20, 4.75) associated with not using family planning method (Beyene et al., 2015). Another study done Uganda showed significant association between contraception and teenage pregnancy. According to this study teenagers who did use contraception were 0.1 less likely to became pregnant compared to those who did not use conraeptive methods (AOR=0.1, CI= 0.04-0.61)(Ochen et al., 2019).

2.2.4. Social factors

A cross sectional study conducted on contributing factors of teenage pregnancy in Dhaulagiri zone among 50 pregnant teenagers found that early marriage were one of the contributing factor for teenage pregnancy which indicate that early marriage is significant predictor of teenage pregnancy(Chalise and Bajracharya, 2016). similar finding from another study by Chirwa et al, in Malawi on socio economic inequality related to teenage pregnancy indicated that early marriage (50%) were found as predictor of teenage pregnancy(Chirwa et al., 2019). Another study in Ethiopia report that early marriage is one of proximate determinants of adolescent fertility. According to this study delayed marriage and non marriage were responsible for more than half (54%) of observed fertility among female adolescents(Alemayehu et al., 2010). Similar study in the same country revealed that being married at an early age (before 15 years) were 30.1 times (AOR=30.1, CI= 16.8, 53.9) more likely to be pregnant at an early age compared to who were not married before the legal age(Birhanu et al., 2019).

Research supports the widespread idea that peer play an important role in teenage lives. Since the peer pressure is one of the factors affecting adolescent pregnancy. A cross sectional study done in eastern region of Ghana showed that being influenced the peers were found to be significantly associated with teen pregnancy (AOR= 8.00, CI= 1.54, 41.70). Study by Kuyinu et al, in Lagos, Nigeria on a causative factor for sexual and reproductive health (SRH) status of the pregnant adolescent revealed that Teenagers with sexually active friends are more likely to be engaged in early sexual initiation for sake of desire to maintain their relationship(Kuyinu et al., 2017). Another cross sectional Study by Francisco et al conducted in North-Eastern Mexico among 3,130 adolescents. The result showed that socialization with friends who smoke and/or consume alcohol were found to be significantly associated with smoking in adolescents of unplanned pregnancy (AOR= 2.11, CI= 1.25, 3.55 and AOR= 17.35, CI= 4.14, 72.63) respectively (Francisco et al., 2016).

Experience of violence is associated with higher pregnancy among teenagers. Study performed on sexual abuse and neglected situation as risk factor for adolescent pregnancy in Colombia among 499 adolescents has indicated that experience of sexual abuse were found to be significantly (AOR= 8.95, CI= 2.1, 38.4) associated with teen pregnancy(Restrepo et al., 2017). Another Study by ANAND et al, on intimate partner violence and teenage pregnancy among

adolescent and young adult girls in south Asia revealed that physical or sexual violence was found to be significantly (OR= 1.438, CI= 1.067, 1938) associated with TP ($p<0.05$)(ANAND et al., 2016). Similarly a cross sectional study conducted in Kumbo, Cameroon on factor associated with adolescent school girl's pregnancy report that physical violence are factor that significantly associated with teenage pregnancy. According to this study about 46.42% were influenced either by relation or boyfriend and 6.48% were raped (Donatus et al., 2018).

2.2.5. Substance use

Substance use is gateway for risky sexual behavior among adolescent which result in teenage pregnancy with consequent health and social implications. Since, it constitutes a deviation from conventional behavior; it is regarded as problem behavior. Study done in Arba Minch, Ethiopia investigated that substance use is significant predictor of teenage pregnancy at $P<0.05$, study showed that adolescent who use substance (alcohol/chat/cigarette) were more likely to experience teenage pregnancy compared to those who did not use (AOR=3.1, 95% CI: 1.1-8.8)(Mathewos and Mekuria, 2018). The same study on teenage pregnancy rate and association with other health risk behavior done in South Africa showed that predictor variables like smoking cigarette AOR= , being drinking and drug use were found to be significant predictor of teen pregnancy during adolescent. As a result all predictor variables were strongly associated with teenage pregnancy(Jonas et al., 2016b).

2.2.6. Exposure to media

The behavior of teenagers and cultural preservations are slowly being eroded by exposure to foreign culture through access to media and internet that show adult content with open sexual activity. Exposures to media were found to be the factor that influences adolescent pregnancy both negatively and positively indicating that effect of mass media on adolescent pregnancy is mixed. A cross sectional study done in eastern region of Ghana among 223 selected teenagers revealed that teenagers being influenced by social media activities (AOR= 5.80, CI= 1.65, 20.24) were found to be significantly increase the odds of being pregnant (Bedzo and Manortey, 2019). A longitudinal study by Chandra et al showed that exposure to sexual content on television was strongly associated with teenage pregnancy. Hence, finding suggests that teenagers who were exposed to high level of television on sexual content were 2 times more likely to experience pregnancy(Chandra et al., 2008). Another study done in east African countries showed that

media exposure has protective effect on adolescent pregnancy. In this study in Kenya and Zambia, it has been reported that exposure to media from three or more source were 43% (OR: 0.57, 95% CI: 0.34-0.95) and 56% (AOR: 0.44, 95% CI: 0.28-0.67) less likely to experience early pregnancy compared to those with no exposure to any media source respectively(Wado et al., 2019).

2.3. Conceptual framework

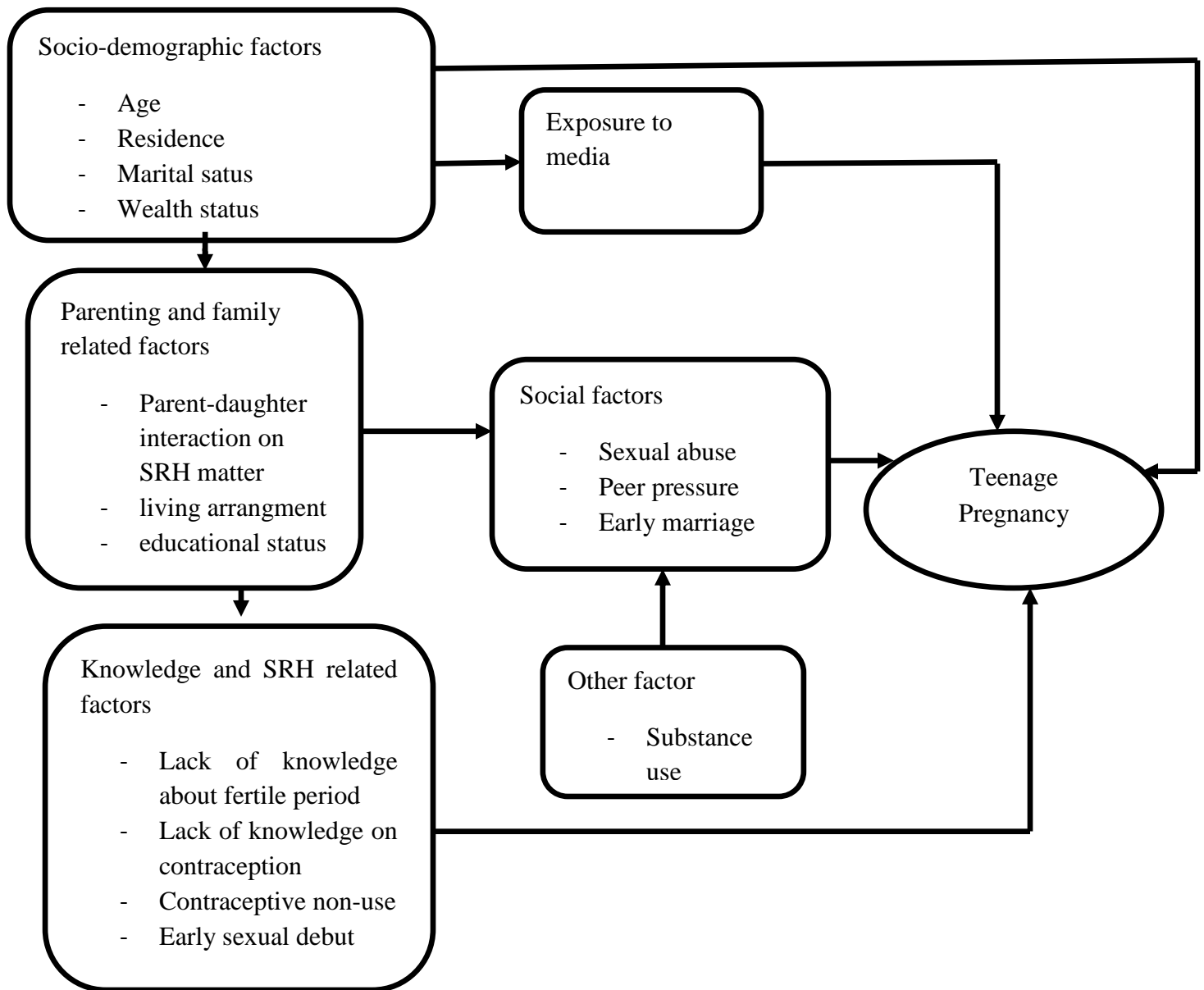


Figure 1 conceptual framework for the study on prevalence and associated factors of teenage pregnancy developed by researcher from different literatures by principal investigator.

3. METHODS AND MATERIAL

3.1. Study area

Study was conducted in Dire Dawa city among secondary school female students which is found in eastern part of Ethiopia. Dire Dawa is commercial and industrial center located 515km from Addis Ababa. This led it, to becoming an important center of trade between the port of Djibouti and capital city of Ethiopia, Addis Ababa. Dire Dawa is one of the two federal cities in Ethiopia. Based on 2012 estimation made by central statics agency of Ethiopia, Dire Dawa has total population of 506,639 of 248,253 (49%) are males and 258,386 (51%) are females. Out of the total populations, 343,490 live in urban and 163,150 lives in rural area. It has 47 kebele's (9 urban and 38 rural) (Dire Dawa Administrative Health Bureau, 2012). According to the 2011 E.C statistical report of Dire Dawa education bureau, there are 21 secondary schools (13 private and 8 governmental) and 9 preparatory schools in the city (6 private and 3 governmental). A total of 5,534 female adolescent student's age 15-19 years were registered as of 2020 in secondary school of the city (Dire Dawa Administration Education Bureau, 2012).

The study was conducted Nov 4 – 18, 2020 in Dire Dawa city, eastern Ethiopia.

3.2. Study desing

Institution-based cross sectional study using quantitative data collection method was conducted.

3.3. Population

3.3.1. Source population

All sexually active female students aged between 15-19 years in secondary school of Dire Dawa city.

3.3.2. Study population

Sexually active female students aged between 15-19 years in randomly selected secondary schools of Dire Dawa city

3.4. Inclusion and exclusion criteria

3.4.1. Inclusion criteria

All sexually active students 15-19 years of age attending class at the time of data collection

3.4.2. Exclusion criteria

All students who are absent during data collection were excluded

3.5. Sample size determination

Specific objective 1- Prevalence of teenage pregnancy

To determine the sample size for this study, the outcome variable and various factors significantly associated with the outcome variable were considered. Therefore, for the first and second specific objectives the sample size was calculated separately and a larger sample size were used in this study. The required sample for the first specific objective was calculated by using single proportion sample size calculation formula considering the following assumption. 95% confidence interval (CI), 3% margin of error, and population proportion formula through the assumption of proportion of teenage pregnancy was 7.7% from cross sectional study in Arbaminch town(Mathewos and Mekuria, 2018).

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

$$n = \frac{(1.96)^2 \times 0.077(1-0.077)}{(0.03)^2} = 303$$

Where n is the minimum sample size required

P=estimated proportion of teenage pregnancy

Z= the standard value of confidence level of $\alpha=95\%$

D=the margin of error between the sample and the population which is 0.03 is considered

P=, z=1.96, d=0.03

Then by using the above formula, the value of sample size will be

By taking 15% non response rate and design effect 2, the total sample size is $(303+45)*2=696$. Hence, the design effect is used because clustering increase sampling variation.

Specific objective 2- Factors associated with teenage pregnancy

To determine the required sample size for second specific objective of this study, by considering various factors which is significantly associated with the outcome variable with the confidence level of 95%, margin of error of 5% and power of 80%, ratio 1:1 and by using open Epi Info 7 statcalc software program for double population proportions formula the sample size was calculated for those selected variables and the maximum sample size was taken for final required sample size

Table 1 : Double population proportion based sample size determination for a study on prevalence and associated factors of teenage pregnancy among high school female students in Dire Dawa city, Eastren Ethiopia.

Variable	Teenage pregnancy		AOR	Sample size considering 2 design effect and 15% non response rate	Reference
	Exposed	Unexposed			
ever use of contraception	43.5% not use	24.4% did use	2.39	$(212+32)*2 = 488$	(Beyene et al., 2015)
Knowledge on FP	39.7% don't know	19.8% did know	2.67	$(184+28)*2 = 424$	(Yohannes Fikadu Geda, 2019)
Wealth quantile	24.2% richest	9.6% poorest	3.01	$(232+39)*2 = 542$	(Yohannes Fikadu Geda, 2019)

Finally, the sample size for the first objective which is calculated for prevalence of teenage pregnancy is greater than the second objective which is calculated for factors associated with teenage pregnancy. Therefore the sample size of the first objective is taken as the final sample size which is 696.

Therefore to get the required sexually active adolescents; prevalence (30.8%) of previous study conducted in Bahirdar town (Mulugeta and Birhane, 2014) among female secondary school adolescent is considered and calculated as follows

$$(696 \times 100 / 30.8) = 2,260$$

3.6. Sampling procedure

A single stage cluster sampling technique was used to select representative sample of students in selected schools to select the study units. In the study area, there are 30 secondary schools in the city (21 high schools and 9 preparatory schools). Among 30 secondary schools of Dire Dawa city five schools were selected by simple random sampling method. Finally data were collected from all students (2260) which are in sampled schools. Finally from surveyed students the sample size (696) of all sexually active teenagers in the selected schools was included in the resultig sample.

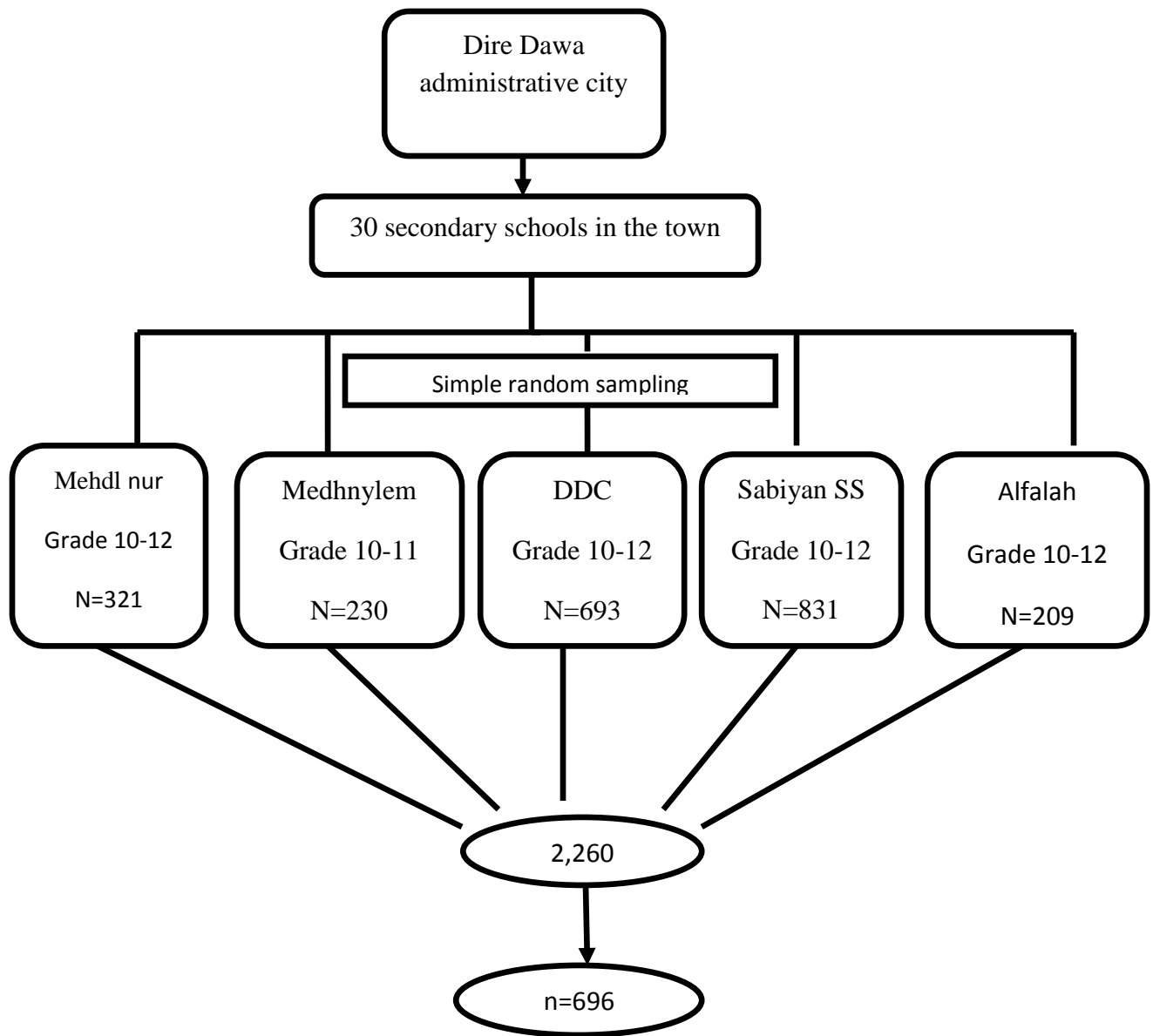


Figure 2 sampling procedure for prevalence and associated factors of teenage pregnancy among secondary schools female students in Dire Dawa city, Eastern Ethiopia.

3.7. Data collection tool and method

Data were collected by adapted, pretested structured facilitator guided self administered questionnaire. Questionnaires were developed from EDHS data collection tool, adolescent SRH toolkit and other relevant previous published studies (Ayele et al., 2018; CSA, 2016; Mathewos and Mekuria, 2018; UNFPA and WHO, 2009). Initially questionnaire was developed in English and then translated to Amharic, Afan Oromo and Af Somali and two supervisors monitored the whole data collection process in the selected secondary schools.

The questionnaire had three sections

Section 1 – Socio-Demographic characteristics of respondents

Section 2 – Parenting and family related factors

Section 3 – Knowledge and SRH related factors

3.8. Study variable

3.8.1. Dependent variable

Teenage pregnancy

3.8.2. Independent variables

Socio demographic variables

- Age
- Residence
- Marital status
- Wealth status

Parenting and family related factors

- Parents educational status
- Living arrangements
- Parent daughter interactions

Knowledge and SRH related factors

- Fertile period knowledge
- Contraceptive knowledge
- Contraceptive use
- Early sexual debut

Social factors

- Early marriage
- Sexual abuse
- Peer pressure

Other

- Exposure to media
- Substance use

3.9. Operational definition

- ✓ **Ever pregnant:** is self reported experience of pregnancy which includes pregnancy that ended in live birth, still birth, and abortion.(Mathewos and Mekuria, 2018)
- ✓ **Sexually active:** a student who had a penetrative sexual intercourse (vaginal) at least once prior to the study(Behulu et al., 2019)
- ✓ **Knowledge of contraception:** awareness for at least one method (CSA, 2016)
- ✓ **Knowledge of fertile period:** knowledgeable if correctly know that women is most likely to conceive the time 4 days before and after fourth days of her frist menstrual cycle(Mathewos and Mekuria, 2018).
- ✓ **Good parent-daughter interaction:** those who score the mean value of parent daughter interaction measuring questions and poor unless otherwise(Mathewos and Mekuria, 2018)..

3.10. Data quality control

In order to assure data quality, one day training was given to data collectors and supervisors as well. The training was on introducing data collection tool, data collection period, wisely using of time data handling and submitting the collected data. The questionnaire were prepared in English and translated into the local language Amharic, Afan Oromo, Af Somali and translated back to English to check for its consistency. Regular monitoring for completeness, consistency and accuracy of the data was held on daily basis on each day of data collection period by the assigned supervisors.

3.11. Method of data analysis

The collected data was carefully checked for its completeness and cleaned before data entry in computer. Across checking it was coded and intered into Epi-Data version 3.1 and then exported to STATA version 16 statistical softwere for ananalysis. In addition, frequency was run to check for any missing values and checked accordingly. Descriptive analysis was done and result was presented by narration, tables and graphs. Binary logistic regression analysis was used to identify factors associated with the outcome variable. Variables that yield p-value of less than 0.25 in bivariate analysis will be considered to be candidate for multivariable logistic regression analysis to control all possible confounders and detect factors that associated with teenage pregnancy. Adjusted Odds ratio with 95% Confidence Interval (CI) was computed. Finally, variables whose

p-value less than 0.05 ($p < 0.05$) in binary logistic regression was used to state statistically significant. Moreover, the Hosmer-Lemeshow goodness of-fit test was used to test for model fitness and it was 2.10. Multi co-linearity test were carried out to see the correlation between independent variables and the amount of the mean Variance Inflation Factor VIF was 1.36.

Family wealth index was done by Principal Component Analysis (PCA) method by considering locally available house hold assets and categorized in to five categories (very poor, poor, medium, rich and very rich).

Knowledge of fertile period in the menstrual cycle was an independent variable identified as a predictor of teenage pregnancy which was measured through yes-no question adapted from literature (Mathewos and Mekuria, 2018). then, the responses were categorized as 1=know (if she answer the letter of choice contains the time 4 days before and after 14th day of her menstrual cycle) and 0= don't know (if other wise).

Parent daughter interaction was measured through a combination of 4 questions which was adapted from previous published literature (Mathewos and Mekuria, 2018). The response to each questions was categorized as 1=yes and 0=no then, the median score from the four questions was computed and labelled as 1=poor interaction (if scored ≤ 1) and 2= good interaction (if scored >1).

Teenage pregnancy is main outcome variable and was measured by the item "Have you ever been pregnant" which was asked of all female teenagers. The answer options included yes (1) and No (0).

3.12. Ethical consideration

An ethical clearance was obtained from Institutional Health Research Ethics Review Committee (IHRERC) of Haramaya University College of Health and Medical Sciences. Official letter was obtained to Dire Dawa education bureau and letter was sent to sample selected schools before data collection was started. Informed, voluntary, written and signed consent was obtained from each head of selected school and student parent committee prior to the data collection. Participants were informed clearly about the purpose and benefit of the study and confidentiality of their response and informed consent/assent was obtained from every participant after explaining the purpose of the study in detail. Hence, the study is sensitive topic related to

sexuality and reproduction, obtaining consent from a parent or guardian is challenging to the minor because of nature of the study as stated in National Guideline(FDRE, 2014).

3.13. Dissemination plan

The finding of this study will be presented on MPH defence at Haramaya University and hard copy will be submitted for Haramaya University, Dire Dawa Education Bureau and Dire Dawa Health Bureau. Finally, efforts will be made to present the findings on national and international conference and publish article as well.

4. Result

4.1. Socio-demographic characteristics

A total of 2260 participants were surveyed of whom 1583 were not sexually active and thus excluded. A total of 677 sexually active female teenagers aged 15-19 years were identified for analysis, which makes response rate of 97.3%. The mean age of respondents was 17.6 (SD ± 1.05) year. About 55.38% (402) of the respondents were in the age group of 18-19 years. The majority 335 (49.48%) of them are orthodox religion followers followed by Muslim 252 (37.22%). With regard to level of education of the respondents majority 371 (54.80%) of them were grade twelve while the remaining 185 (27.32%) and 121 (17.87%) were grade eleven and ten respectively. Majority 643 (94.98%) of the respondents were single and in relation to household wealth very poor and very rich are, (20.53%) and (18.91%) respectively.

Table 2 Socio-demographic characteristics teenagers in secondary school of Dire Dawa city, Eastern Ethiopia, 2020

Variables (n = 677)	Category	Frequency	Percentage
Age in years	15-17	275	40.62
	18-19	402	59.38
Residents	Rural	17	2.51
	Urban	660	97.49
Religion	Orthodox	335	49.48
	Muslim	252	37.22
	Protestant	83	12.26
	Other	7	1.03
Ethnicity	Amhara	294	43.43
	Oromo	235	34.71
	Somali	43	6.35
	Other	105	15.51
Marital status	Single	643	94.98
	Married	34	5.02
Education level	Grade 10	121	17.87
	Grade 11	185	27.33
	Grade 12	371	54.80
Exposed to media	Yes	92	13.59
	No	585	86.41
Ever use internet	Yes	409	60.41
	No	268	39.59
Use internet in last	Yes	331	80.93

13m	No	78	19.07	
Family quintile	Wealth	Very poor	139	20.53
		Poor	133	19.65
		Medium	155	22.90
		Rich	122	18.02
		Very rich	128	18.91

4.2. Parenting and family related factors

Family and parenting related characteristics of the respondents were also assessed; about 172 (25.41%) and 156 (23.04%) respondents have reported that their fathers and mothers completed primary education respectively. The majority four hundred and eight seven (71.94%) of the students lived with both biological parents and two hundreds and ninety eight (44.02%) of them reported that they had poor parent daughter interaction.

Table 3 parenting and family related characteristics of teenagers in secondary school of Dire Dawa city, Eastern Ethiopia, 2020

Variables (n = 677)	Category	Frequency	Percent
Educational status of fathers	No formal education	246	36.34
	Primary	172	25.41
	Secondary	154	22.75
	College and above	105	15.51
Educational status of mother	No formal education	355	52.44
	Primary	156	23.04
	Secondary	115	16.99
	College and above	51	7.53
Occupational fathers	of Farmer	66	9.75
	Daily labourer	159	23.49
	Government employee	239	35.30
	Merchant	168	24.82
	Other	45	6.65
Occupational mothers	of Farmer	9	1.33
	Housewife	337	49.78
	Government employee	100	14.77
	merchant	190	28.06
	Other	41	6.06

Living arrangement	With both parents	487	71.94
	Either of biological parents	107	15.81
	Neither of biological parents	83	12.26
Parent-daughter interaction	Good interaction	379	55.98
	Poor interaction	298	44.02

4.3. Knowledge and SRH related factors

Regarding ovulation time knowledge among 677 sexually active students, majority 475 (70.18%) of them did not know the ovulation time in their menstrual cycle. The median age at the first sexual intercourse was 17 years and (71.94%) had their first sexual intercourse before the age of 18 years. Desire to have a sex 466 (68.83%), peer pressure 106 (15.66%), coercion (sex for money, gift and favor) 56 (8.27%), physically forced/raped 40 (5.91%) and sexual abuse 28 (4.14%) were reported means for first sexual intercourse.

About 641 (94.68%) respondents knew at least one method of modern contraception. Pills 615 (95.94%), condoms 598 (93.29%), and injectable 541 (84.40%) were the most commonly known contraceptive methods. Regarding contraceptive use 282 (41.65%) had ever used at least one kind of modern contraceptive. About 91 (13.44%) respondents reported that they used substances.

Table 4 Knowledge and SRH related characteristics of teenagers in secondary schools of Dire Dawa city, Eastern Ethiopia, 2020

Variables	Categories	Frequency	Percentage
Ever pregnant (n = 677)	Yes	135	19.94
	No	542	80.06
Age at first pregnancy (n= 135)	15-17	70	51.85
	18-19	65	48.15
Was that planned pregnancy (n=135)	Yes	20	14.81
	No	115	85.19
Currently pregnant(n=135)	Yes	13	9.63
	No	122	90.37
Age at first menses	10-12	205	30.28

	13-15	472	69.72
Know fertile period in menses	Yes	202	29.84
	No	475	70.16
Age at first sex	17 yrs and below	587	71.94
	18 yrs and above	190	28.06
Means of your first sex	Desire to have sex	446	68.83%
	Peer pressure	106	15.66%
	Parent pressure	12	1.77%
	Exchange of sex for money/clothing or gifts	56	8.27%
	Rape	37	5.47%
Influenced by Peer to have sex	Yes	106	15.66
	No	571	84.34
Sexually abused	Yes	28	4.14
	No	649	95.86
Know contraceptive methods	Yes	641	94.68
	No	36	5.32
Type of contraceptive ever known (n=641)	IUCD	179	27.93
	Inject able	541	84.40
	Implants	314	48.99
	Pills	615	95.94
	Condoms	598	93.29
	ECP	367	57.25
Ever use contraception (n=641)	Yes	282	41.65
	No	395	58.35
Currently use contraceptive (n=282)	Yes	80	28.37
	No	202	71.63
Condom use at last sex (n=80)	Every time	47	81.03
	Almost every time	7	12.07
	Some times	4	6.90
Use alcohol/chat/cigarette	Yes	91	13.44
	No	586	86.56

*Each respondents could have known that more than one contraceptive methods; so that the frequencies and percentage didn't add up 641 and 100% respectively.

4.4. Magnitude of teenage pregnancy

Among teenage respondents 135 had their first pregnancy between the ages of 15 to 19 years making the prevalence of teenage pregnancy (19.94%, 95% CI: 16.9-23). The median age at first pregnancy was 17 years. Of 135 pregnancy the majority 115 (80.06%) were unplanned.

Proportion of experience of first pregnancy among each age category (n = 135)

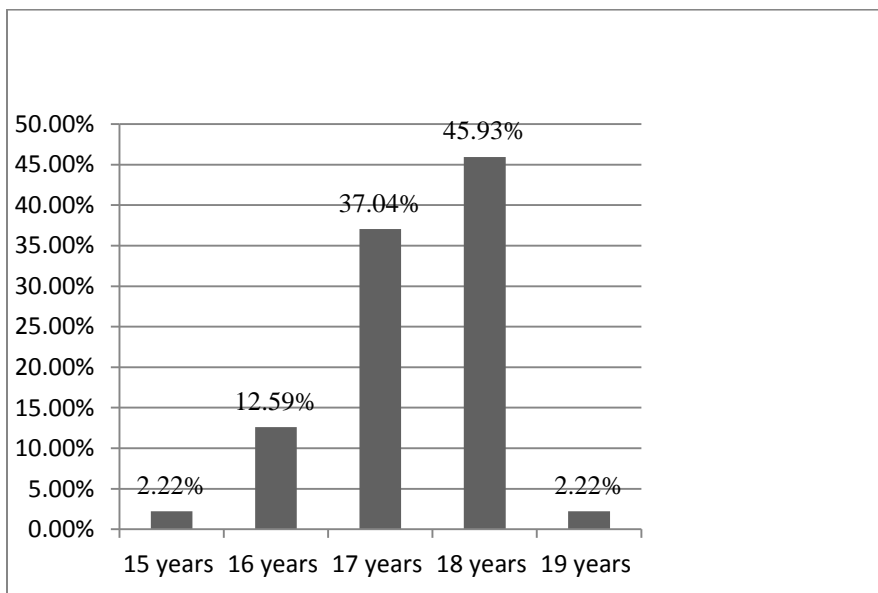


Figure 3 Proportion of age at first pregnancy among each age category among secondary schools female students in Dire Dawa city, Eastern Ethiopia, 2020

4.5. Factors associated with teenage pregnancy

After descriptive statics bivariate logistic regression analysis were carried out in order to determine factors associated with teenage pregnancy. Variables which yield $P < 0.25$ or associated with teenage pregnancy were age group, marital status, residence, educational status of mother, educational status of father, living arrangement, parent-daughter interaction, knowledge on ovulation time, peer pressure, sexual abuse, contraceptive use and use alcohol/chat/cigarettes.

Table 5 Bivariate binary logistic regression analyses for teenage pregnancy and associated factors among secondary school female students in Dire Dawa city, Eastern Ethiopia, 2020

Variables	Ever pregnant		COR	P-value
	Yes	No		
Age				
15-17	21(7.6%)	254(92.4%)	1	1
18-19	114(28.4%)	288(71.6%)	4.79(2.92-7.85)	0.000
Marital status				
Single	116(18%)	527(82%)	1	1
Married	19(55.9%)	15(44.1%)	5.75(2.84-11.66)	0.000
Residence				
Rural	6(35.3%)	11(64.7%)	2.25(0.82-6.18)	0.118
Urban	129(19.5%)	531(80.5%)	1	1
Educational status of fathers				
No formal education	59(24%)	187(76%)	1	1
Primary education	30(17.4%)	142(82.6%)	0.67(0.4-1)	0.109
Secondary education	19(12.3%)	135 (87.7%)	0.45(0.25- 0.78)	0.005
College and above	27(25.7%)	78(74.3%)	1.0(0.65-1.9)	0.730
Educational status of mothers				
No formal education	78(22%)	277(78%)	1	1
Primary education	26(16.7%)	130(83.3%)	0.71(0.43-1.16)	0.171
Secondary education	17(14.8%)	98(85.2)	0.62(0.35-1.09)	0.097

College and above	14(27.5%)	37(72.5%)	1.34(0.69-2.61)	0.383
Living arrangements				
With both parents	65(13.3%)	422(86.7%)	1	1
Either of biological parents	34(31.8%)	73(68.2%)	3.02(1.86-4.90)	0.000
Neither of biological parents	36(43.4%)	47(56.6%)	4.97(2.99-8.25)	0.000
Parent-daughter interaction				
Poor-interaction	82(21.6%)	297(78.4%)	1.28(0.87-1.87)	0.214
Good-interaction	53(17.8%)	245(82.2%)	1	
Know fertile period in menses				
Know correctly	29(14.4%)	173(85.6%)	1	1
Don't know	106(22.3%)	369(77.7%)	1.71(1.09-2.68)	0.019
Peer-pressure				
Yes	34(32.1%)	72(67.9%)	2.19(1.39-3.48)	0.001
No	101(17.7%)	470(82.3%)	1	1
Sexually abused				
Yes	2(7.1%)	26(92.9%)	0.29(0.07-1.27)	0.102
No	133(20.5%)	516(79.5%)	1	1
Ever used contraceptive				
Yes	35(12.4%)	247(87.6%)	1	1
No	100(25.3%)	295(74.7%)	2.39(1.57-3.64)	0.000
Use alcohol/chat/cigarette				
Yes	32(35.2%)	59(64.8%)	2.54(1.57-4.11)	0.000
No	103(17.6%)	483(82.4%)	1	1

In multivariable logistic regression age group of teenagers, living arrangement, knowledge of ovulation time, peers pressure, and contraceptive use were significantly associated with teenage pregnancy. Teenage in age groups of (18-19 years) were 5.21 times more likely to become pregnant than teenage in age groups 15-17 years (AOR=5.21, 95% CI: 2.97-9.13). Teenage live with either of their biological parents and neither of their biological parents (AOR=2.44, 95% CI: 1.40-4.22) and (AOR=3.22, 95% CI: 1.62-6.41) were more likely to become pregnant than

teenage lived with both biological parents respectively. Teenage who did not know ovulation time in the menstruation were 2.34 times more likely to experience pregnancy than those who did know (AOR=2.34, 95% CI: 1.39-3.93). Teenage who have engaged in sexual activity by peer pressure were 3.28 times more likely to become pregnant than their counterpart (AOR=3.28, 95% CI: 1.87-5.72). Teenagers who have never used contraception before were 2.97(1.82-4.85) times more likely to experience pregnancy than who have ever used contraceptive (AOR=2.97, 95% CI: 1.82-4.84).

Table 6 Multivariable logistic regression analysis of prevalence and associated factors of teenagers pregnancy among secondary school female students in Dire Dawa city, Eastern Ethiopia, 2020

Variables	Ever pregnant		COR	AOR
	Yes	No		
Age				
15-17	21(7.6%)	254(92.4%)	1	1
18-19	114(28.4%)	288(71.6%)	4.79(2.92-7.85)	5.21(2.97-9.13)*
Marital status				
Single	116(18%)	527(82%)	1	1
Married	19(55.9%)	15(44.1%)	5.75(2.84-11.66)	1.76(0.66-4.66)
Residence				
Rural	6(35.3%)	11(64.7%)	2.25(0.82-6.18)	0.56(0.15-2.11)
Urban	129(19.5%)	531(80.5%)	1	
Educational status of fathers				
No formal education	59(24%)	187(76%)	1	1
Primary education	30(17.4%)	142(82.6%)	0.67(0.4-1)	1.15(0.62-2.14)
Secondary education	19(12.3%)	135 (87.7%)	0.45(0.25- 0.78)	1.00(0.47-2.13)
College and above	27(25.7%)	78 (74.3%)	1.0(0.65-1.9)	1.93(0.88-4.24)
Educational status of mothers				
No formal education	78(22%)	277(78%)	1	1
Primary education	26(16.7%)	130(83.3%)	0.71(0.43-1.16)	0.83(0.44-1.56)

Secondary education	17(14.8%)	98(85.2)	0.62(0.35-1.09)	0.59(0.27-1.27)
College and above	14(27.5%)	37(72.5%)	1.34(0.69-2.61)	0.75(0.30-1.88)
Living arrangements				
Both biological parents	65(13.3%)	422(86.7%)	1	1
Either of biological parents	34(31.8%)	73(68.2%)	3.02(1.86-4.90)	2.44(1.40-4.22)*
Neither of biological parents	36(43.4%)	47(56.6%)	4.97(2.99-8.25)	3.22(1.62-6.41)*
Parent-daughter interaction				
Poor-interaction	82(21.6%)	297(78.4%)	1.28(0.87-1.87)	1.59(0.99-2.52)
Good-interaction	53(17.8%)	245(82.2%)	1	1
Know fertile period in menses				
Know correctly	29(14.4%)	173(85.6%)	1	1
Don't know	106(22.3%)	369(77.7%)	1.71(1.09-2.68)	2.34(1.39-3.93)*
Peer-pressure				
Yes	34(32.1%)	72(67.9%)	2.19(1.39-3.48)	3.28(1.87-5.72)*
No	101(17.7%)	470 (82.3%)	1	1
Sexually abused				
Yes	2(7.1%)	26(92.9%)	0.29(0.07-1.27)	0.35(0.07-1.63)
No	133(20.5%)	516(79.5%)	1	1
Ever used contraceptive				
Yes	35(12.4%)	247(87.6%)	1	1
No	100(25.3%)	295(74.7%)	2.39(1.57-3.64)	2.97(1.82-4.85)*
Use alcohol/chat/cigarette				
Yes	32(35.2%)	59(64.8%)	2.54(1.57-4.11)	1.80(0.99-3.27)
No	103(17.6%)	483(82.4%)	1	1

*statistically significant at P-value < 0.05

5. DISCUSSION

The prevalence of teenage pregnancy is extremely varies in the different countries. Some of the reason for the difference could be variation in socio demographic, sexual and reproductive health characteristics of the respondents. The study showed that the prevalence of teenage pregnancy among sexually active female teenagers was 19.94% in the study area. Factor associated with it were increase in age, living arrangements, knowledge of ovulatory cycle, peer pressure and contraceptive non use. This finding is comparable with studies conducted in Assosa, finding from EDHS 2016 report of Somali region and Kenya which showed that the prevalence of teenage pregnancy is 20.4%(Beyene et al., 2015), 19%(CSA, 2017) and 23.3%(Omoro et al., 2017) respectively. This similarity could be due to the presence of some related socio demographic and individual teenagers characteristics in the current and those studies. For instance the minimum and maximum age of teenagers at frist sexual encounter in Assosa study was similar with that of current study and 71.6% had their frist sexual intercourse before they were 18 years in Assosa study which is similar with the current study. Moreover, the median age at frist sexual intercourse in the national report of Somali region was 17 years which the same with current study.

This finding is much higher than the study conducted in Arbaminch town which is 7.7%(Mathewos and Mekuria, 2018). The possible reason may be that arbaminch study included all adolescents irrespective of the risk of pregnancy, where as this study conducted on sexually active teenagers because as the proportion of sexually active increase the probability of exposure to pregnancy also increased.

This finding is higher than those of the studies conducted in national report on teenage pregnancy 13.0%(CSA, 2017), Nigeria 5.7%(Aderibigbe SA et al., January 2011), and Cameroon 5.2%%(Gabriel et al., 2020). The variation could be due to the presence of some socio demographic, sexual and reproductive characteristics of participants. The possible reason may be due to different in settlement as national demographic survey includes all the settlmemnts both rural and urban settings. Whereas as some of the evidences showed that rular women begin having sexual intercourse earlier than urban women which further leads to early experience of pregnancy. However this study was conducted urban region of Dire Dawa city. In addition, the age range of study population in Nigeria and Cameroon included teenagers 10-19 and 13-19

years where as this study included those in the age range of 15-19 years, as the probability of being pregnant is higher among older adolescents stage than early stage. In addition, more than more than half of the study participants in the Cameroon were not sexually active while all the study participants in the current study was sexually active. This is due to the fact that as proportion of sexually active teenagers increase the the teenage pregnancy also increase.

This finding is lower than those of the studies conducted in northeast Ethiopia (Ayanaw Habitu Y et al., 2018) and north west Cameroon (Donatus et al., 2018). The possible reason may be that norh east Ethiopia study was conducted in one of the rural district where there is high prevalence of early marriage which might lead to early pregnancy and poor education. This might be related to the empowerment of the teens attending schools with necessary skills to prevent pregnancy.

In this study the adjusted odd of having had history of pregnancy were five times as high for older teens (aged 18-19) as for younger teens (15-17) years. This finding is consistence with that of Vietnam, Kenya, national study in Ethiopia, northeast Ethiopia, Assosa, Tigray (Omorro et al., 2017, CSA, 2017, Ayanaw Habitu Y et al., 2018, Beyene et al., 2015, Ayele et al., 2018b, Nguyen et al., 2016). This is an expected result given that the proportions of female teenagers who have started their sexual activity as well as longer exposure to biological factor and social factor increase with age.

The social relationship between parent and their children influence teenage pregnancy as it determine the level of information passed to their daughters about pregnancy. In the current study teenagers lived with either of their biological parents and neither of their biological parents were 2.22 and 3.22 times more exposed to teenage pregnancy compared to those who were living with both biological parents respectively. This finding is consistent with the study done in Arbaminch town and Ghana(Mathewos and Mekuria, 2018, Bedzo.JY and Manortey.S, 2019) The possible reason could be that teens that live with both biological parents have a good parental control and communication about sexual and reproductive issues, so that they can get support from their families that minimize their chance of exposure to sexual experience.

The fact that having knowledge on fertile period of the menuastration to prevent pregnancy is strongly supported by the finding from this study. The probability of experiencing pregnancy among those who know the fertie period was about 14% but it was 22% for those who do not

know, the odds of being pregnant was 2.34 times much higher among teens who do not know fertile period than their counterparts. which is in line with national study done in Ethiopia which explained that women who had knowledge of their ovulatory cycle had less likely to have teenage pregnancy than who had no knowledge of ovulatory cycle(AOR = 0.36, CI: 0.26–0.51)(Yohannes Fikadu Geda, 2019). This finding is also consistent with the study done in malawi and Ghana (Mandiwa et al., 2018, Nyarko, 2015). The possible reason may be that ovulation cycle knowledge helps them better understand when the fertile period is and so that they can take a measure to prevent pregnancy.

The results of this study reveals that peer pressure were significantly associate with teenage pregnancy (AOR=3.28, 95% CI: 1.87-5.72). This results was occur with different studies that is done in Uganda and Ghana(Ochen et al., 2019, Bedzo.JY and Manortey.S, 2019) that have postulate that peer pressure place teens at higher risk of teenage pregnancy. Peers play an important role in teenagers live; teenagers with sexually active friends are more likely to have sex through the influence of their age group leading to risky behavior and unprotected sexual activity which may lead to pregnancy.

Teen's contraceptive use was found to be significantly associated with teenage pregnancy. The odds of having pregnancy who have never used contraception before was nearly three times more likely compared to teens ever used contraception before. This is supported by study done northeast Ethiopia, Assosa, Uganda and South Africa (Ayanaw Habitu Y et al., 2018, Beyene et al., 2015, Ochen et al., 2019, Jonas et al., 2016a). It is obvious that as proportion of contraceptive user increase pregnancy also decrease.

6. LIMITATION AND STRENGTH OF THE STUDY

6.1. Strength of the study

- The study used primary data to assess teenage pregnancy.
- High response rate, adequate sample size, sampling procedure and analysis methods utilized were appropriate to the study.
- The study provides useful information that will inform policy makers to design strategy to decrease a number of female teenager students who suffer from teenage pregnancy.

6.2. Limitation of the study

- Knowledge about contraception is not measured in comprehensive questions.
- Students from 9th grade were not included in this study, since they are postponed to be enrolled due to the pandemic of covid 19.
- The students aged less than 15 years were not included in this study
- Since the experience of pregnancy was collected through self report, there might be underreporting of some behaviors.
- It assesses personal and sensitive issues related to sexual behaviors which might prone to social desirability bias.
- The effect of pregnancy on teenagers is paramount such as school dropout, healthrisk during pregnancy and child birth and abortion. It is vital to undertake more detailed further studies inorder to check the imact of teenage pregnancy.

7. CONCLUSION AND RECOMMENDATION

7.1. Conclusion

Teenage pregnancy is high indicating more to be done to insure that teenage pregnancy prevention is effective and improve adolescent health. Increased age, living arrangement of parents, knowledge of ovulatory cycle, influence of peer pressure on sex and contraceptive non use were found to have a statistically significant association with teenage pregnancy.

7.2. Recommendations

Dire Dawa city administrative health and education bureau

- Showing the consequence of separation from parents in the community
- Strengthening contraceptive service promotion by giving special attention to school teenagers.
- Adolescent sexual and reproductive health education including safe sex practice has to be acknowledged in the school.
- Parent's female teenagers should be encouraged via mass media to intensify the education of their female adolescents on their ovulatory cycle early enough before menarche.

Dire Dawa secondary schools

- Providing knowledge and reinforcing positive social norms through various types of abstinence and sex education
- Enforce programs that involve support, tutoring, education and recreation to decrease high risk behaviour (sexual activity without contraceptive use) among teens to prevent teenage pregnancy in schools.
- Promote and improve peer to peer sexuality education program.
- Offering contraceptive service either in school or nearby or making referrals for them.

8. REFERENCE

- ADERIBIGBE SA, ARAOYE MO, AKANDE TM, MUSA OI, MONEHIN JO & OA., B. January 2011. Teenage Pregnancy and Prevalence of Abortion among In-school Adolescents in North Central, Nigeria. *Asian Social Science*. , Vol. 7, No. 1; , 122-7.
- AHINKORAH, B. O., HAGAN, J. E., JR., SEIDU, A. A., MINTAH, J. K., SAMBAH, F., SCHACK, T. & HORMENU, T. 2019. Examining Pregnancy Related Socio-Cultural Factors Among Adolescent Girls in the Komenda-Edina-Eguafo-Abrem Municipality in the Central Region of Ghana: A Case-Control Study. *Front Public Health*, 7, 93.
- AHORLU, C. K., PFEIFFER, C. & OBRIST, B. 2015. Socio-cultural and economic factors influencing adolescents' resilience against the threat of teenage pregnancy: a cross-sectional survey in Accra, Ghana. *Reproductive health*, 12, 117.
- ALEMAYEHU, T., HAIDER, J. & HABTE, D. 2010. Determinants of adolescent fertility in Ethiopia.
- ANAND, E., UNISA, S. & SINGH, J. 2016. INTIMATE PARTNER VIOLENCE AND UNINTENDED PREGNANCY AMONG ADOLESCENT AND YOUNG ADULT MARRIED WOMEN IN SOUTH ASIA. *Journal of Biosocial Science*:.
- AYANAW HABITU Y, AND, Y. A. & AZALE BISETEGN T 2018. Prevalence and Factors Associated with Teenage Pregnancy, Northeast Ethiopia, 2017: A Cross-Sectional Study. *Journal of pregnancy*, 2018.
- AYELE, B., GEBREGZABHER, T., HAILU, T. & ASSEFA, B. 2018a. Determinants of teenage pregnancy in Degua Tembien District, Tigray, Northern Ethiopia: A community-based case-control study. *PloS one*, 13, e0200898.
- AYELE, B. G., GEBREGZABHER, T. G., HAILU, T. T. & ASSEFA, B. A. 2018b. Determinants of teenage pregnancy in Degua Tembien District, Tigray, Northern Ethiopia: A community-based case-control study. *PLoS One*, 13, e0200898.
- AYELE, B. G. K., GEBREGZABHER, T. G., HAILU, T. T. & ASSEFA, B. A. 2018c. Determinants of teenage pregnancy in Degua Tembien District, Tigray, Northern Ethiopia: A community-based case-control study. *PloS one*, 13, e0200898.
- BEDZO, J. Y. & MANORTEY, S. 2019. Factors Influencing Teenage Pregnancy in the Lower Manya Krobo Municipality in the Eastern Region of Ghana: A Cross-Sectional Study. *Open Access Library Journal*, 6, 1-17.
- BEDZO.JY & MANORTEY.S 2019. Factors Influencing Teenage Pregnancy in the Lower Manya Krobo Municipality in the Eastern Region of Ghana: A Cross-Sectional Study. *Open Access Library Journal*.
- BEHULU, G. K., ANTENEH, K. T. & AYNALEM, G. L. 2019. Premarital sexual intercourse and associated factors among adolescent students in Debre-Markos town secondary and preparatory schools, north west Ethiopia, 2017. *BMC research notes*, 12, 95.
- BEYENE, A., MUHIYE, A., GETACHEW, Y., HIRUYE, A., MARIAM, D. H., DERBEW, M., MAMMO, D. & ENQUSELASSIE, F. 2015. ASSESSMENT OF THE MAGNITUDE OF TEENAGE PREGNANCY AND ITS ASSOCIATED FACTORS AMONG TEENAGE FEMALES VISITING ASSOSA GENERAL HOSPITAL.
- BIRHANU, B. E., KEBEDE, D. L., KAHSAY, A. B. & BELACHEW, A. B. 2019. Predictors of teenage pregnancy in Ethiopia: a multilevel analysis. *BMC public health*, 19, 601.

- CHALISE, S. & BAJRACHARYA, S. 2016. Contributing factors of teenage pregnancy among pregnant teenagers at selected hospitals of Dhaulagiri zone. *Journal of Chitwan Medical College*, 6, 8-13.
- CHANDRA, A., DRPHA, S. C. M. & MAC, D. E. K. Does Watching Sex on Television Predict Teen Pregnancy? Findings From a National Longitudinal Survey of Youth. *peds*, 2008. 3066.
- CHIRWA, G. C., MAZALALE, J., LIKUPE, G., NKHOMA, D., CHIWAULA, L. & CHINTSANYA, J. 2019. An evolution of socioeconomic related inequality in teenage pregnancy and childbearing in Malawi. *PLoS One*, 14, e0225374.
- CSA 2017. EDHS Program ICF Rockville M, USA Ethiopian Demographic and Health Survey. *CSA and ICF, Addis Ababa, Ethiopia and Rockville, MD, USA*, vol. 201,.
- DIACONESCU, S., CIUHODARU, T., CAZACU, C., SZTANKOVSKY, L.-Z., KANTOR, C. & IORGA, M. 2015. Teenage mothers, an increasing social phenomenon in Romania. Causes, consequences and solutions. *Revista de cercetare si interventie sociala*, 51, 162.
- DONATUS, L., SAMA, D. J., TSOKA-GWEGWENI, J. M. & CUMBER, S. N. 2018. Factors associated with adolescent school girl's pregnancy in Kumbo East Health District North West region Cameroon. *Pan Afr Med J*, 31, 138.
- DUNOR, H. & URASSA, J. K. 2017. Access to reproductive health services and factors contributing to teenage pregnancy in Mtwara Region, Tanzania.
- EDHS, E. 2016. demographic and health survey 2016: key indicators report. *The DHS Program ICF*.
- ESTHER, N. U. M., FÉLIX, E. & JULIUS, D. S. 2018. Predictive Factors Related to Teenage Pregnancy. *Gynecol Reprod Health*, 2, 1-6.
- FRANCISCO, V.-N., CARLOS, V.-R., ELIZA, V.-R., OCTELINA, C.-R. & MARIA, I. I. 2016. Tobacco and alcohol use in adolescents with unplanned pregnancies: relation with family structure, tobacco and alcohol use at home and by friends. *African Health Sciences*, 16, 27.
- GABRIEL, E. S. E., HALLE-EKANE, G. E., ISAH, M., WIRSIY, F. S., LEBAGA, M. L. N., SIYSILA, N. D., MUSI, C. B., CHIA, N. C. & VICTOR, M. N. 2020. Prevalence and Associated Factors of Teenage Pregnancy among Secondary and High School Students in the Tiko Health District, South West Region, Cameroon. *Journal of Biosciences and Medicines*, 08, 99-113.
- GANCHIMEG, T., OTA, E., MORISAKI, N., LAOPAIBOON, M., LUMBIGANON, P., ZHANG, J., YAMDAMSUREN, B., TEMMERMAN, M., SAY, L. & TUNCALP, O. 2014. WHO Multicountry Survey on Maternal Newborn Health Research Network. *Pregnancy and childbirth outcomes among adolescent mothers: a World Health Organization multicountry study. BJOG*, 121, 40-8.
- GEBREYESUS, H., TEWELDEMEDHIN, M. & MAMO, A. 2019a. Determinants of reproductive health services utilization among rural female adolescents in Asgede-Tsimbla district Northern Ethiopia: a community based cross-sectional study. *Reproductive Health*, 16, 1-10.
- GEBREYESUS, H., TEWELDEMEDHIN, M. & MAMO, A. 2019b. Determinants of reproductive health services utilization among rural female adolescents in Asgede-

- Tsimbla district Northern Ethiopia: a community based cross-sectional study. *Reprod Health*, 16, 4.
- HAQ, I. 2018. Influence and Determinants of Early Conception Among Women of Reproductive Age in Perspective Survey of Bangladesh. *American Journal of Social Science Research*, 4, 53-59.
- ISLAM, M. M., ISLAM, M. K., HASAN, M. S. & HOSSAIN, M. B. 2017. Adolescent motherhood in Bangladesh: Trends and determinants. *PLoS One*, 12, e0188294.
- JONAS, K., CRUTZEN, R., VAN DEN BORNE, B., SEWPAUL, R. & REDDY, P. 2016a. Teenage pregnancy rates and associations with other health risk behaviours: a three-wave cross-sectional study among South African school-going adolescents. *Reprod Health*, 13, 50.
- JONAS, K., CRUTZEN, R., VAN DEN BORNE, B., SEWPAUL, R. & REDDY, P. 2016b. Teenage pregnancy rates and associations with other health risk behaviours: a three-wave cross-sectional study among South African school-going adolescents.
- KIANI, M., M, G. & M, S. 2019. Adolescence Pregnancy: A Health Challenge. *Int J Pediatr*, 7.
- KUYINU, Y. A., FEMI-ADEBAYO, T. T., ODUGBEMI, B. A. & UKATU, E. E. 2017. Causative factors for sexual and reproductive health status of pregnant adolescent girls in urban communities of Lagos, Nigeria. *International journal of adolescent medicine and health*.
- LOAIZA, E. & LIANG, M. 2013. <ADOLESCENT PREGNANCY_UNFPA.pdf>.
- MAHARJAN, M., THAPA, N., MAHARJAN, N., RAI, P., PUN, P., PETRINI, M. A. & YANG, J. 2019. Prevalence of Teenage Pregnancy in A Community Hospital of Rural Nepal: A Cross-sectional Study. *Age (years)*, 17, 13.2.
- MANDIWA, C., NAMONDWE, B., MAKWINJA, A. & ZAMAWAWE, C. 2018. Factors associated with contraceptive use among young women in Malawi: analysis of the 2015-16 Malawi demographic and health survey data. *Contracept Reprod Med*, 3, 12.
- MATHEWOS, S. & MEKURIA, A. 2018. Teenage Pregnancy and Its Associated Factors among School Adolescents of Arba Minch Town, Southern Ethiopia.
- MITIKU, M., TEFERI, M., AYALEW, A. & TESFAY, M. 2019. Determinants of Teenage Pregnancy and Motherhood in Ethiopia: Analysis of the Ethiopian Demographic Health Survey 2016. *Research & Reviews: Journal of Medicine*, 8, 47-53.
- MUBEEN, K. & BAIG, M. 2016. Adolescent Pregnancies: The case of Pakistan. *Journal of Asian Midwives (JAM)*, 3, 69-78.
- MULUGETA, Y. & BIRHANE, Y. 2014. <1742-4755-11-40(1).pdf>. *Reproductive health journal*.
- NATHALIE FLEMING, M., OTTAWA ON TERESA O'DRISCOLL, MD, SIOUX LOOKOUT ON GISELA BECKER, RM, CALGARY AB RACHEL F. SPITZER, MD, TORONTO ON 2015. Adolescent Pregnancy Guidelines. *J Obstet Gynaecol Can*, 37, 740-756.
- NGUYEN, H., SHIU, C. & FARBER, N. Prevalence and Factors Associated with Teen Pregnancy in Vietnam: Results from Two National Surveys.
- NGUYEN, H., SHIU, C. & FARBER, N. 2016. Prevalence and Factors Associated with Teen Pregnancy in Vietnam: Results from Two National Surveys. *Societies*, 6, 17.
- NYARKO, S. H. 2015. Prevalence and correlates of contraceptive use among female adolescents in Ghana. *BMC Womens Health*, 15, 60.

- OCHEN, A. M., CHI, P. C. & LAWOKO, S. 2019. Predictors of teenage pregnancy among girls aged 13-19 years in Uganda: a community based case-control study. *BMC Pregnancy Childbirth*, 19, 211.
- OKIGBO, C. & SPEIZER, I. 2015. Determinants of Sexual Activity and Pregnancy among Unmarried Young Women in Urban Kenya: A Cross-Sectional Study. *PLoS ONE*, 10, e0129286.
- OMORO, T., GRAY, S. C., OTIENO, G., MBEDA, C., PHILLIPS-HOWARD, P. A., HAYES, T., OTIENO, F. & GUST, D. A. 2017. Teen pregnancy in rural western Kenya: a public health issue. *International Journal of Adolescence and Youth*, 1-10.
- PURANDARE, C. N. & ADANU, R. 2015. <World Report on Women's Health 2015.pdf>. *International Journal of Gynecology & Obstetrics*, 131.
- RESTREPO, M. M., TRUJILLO, L. N., RESTREPO, D. B., DE GALVIS TORRES, Y. & SIERRA, G. 2017. Sexual Abuse and Neglect Situations as Risk Factors for Adolescent Pregnancy. *Revista colombiana de psiquiatria*, 46, 74-81.
- SALAMI, K. K. & AYEGBYOIN, M. 2015. Intergenerational Life Courses of Teenage Pregnancy in Ogbomosho South- Western Nigeria. *Children & Society*, 29, 451-461.
- SARKER, A., SHEIKH, N., MAHUMUD, R. & SULTANA, M. 2018. Determinants of adolescent maternal healthcare utilization in Bangladesh. *Public health*, 157, 94-103.
- SEDGH, G., FINER, L. B., BANKOLE, A., EILERS, M. A. & SINGH, S. 2015. Adolescent pregnancy, birth, and abortion rates across countries: levels and recent trends. *J Adolesc Health*, 56, 223-30.
- TEKIE, S. & PATI, R. N. 2016. Biocultural Dynamics of Teenage Pregnancies in Ethiopia: Medico Anthropological Appraisal. *International Journal of Social Sciences and Management*, 3, 68-77.
- TEKLETSADIK, E., SHAWENO, D. & DAKA, D. 2014. Prevalence, associated risk factors and consequences of premarital sex among female students in Aletawondo High School, Sidama Zone, Ethiopia.
- TUYIRAGIZE, R., NZABONA, A., ASIIMWE, J. B., KAKUBA, C., MUSHOMI, J. & MANIRAGABA, F. 2018. Predisposing factors of teenage pregnancy in the Uganda Lake Victoria Island and Mountain districts. *BioRxiv*, 482927.
- UGIANSKIENE, A., LEDERTOUG, S., MURREKILDE, P. & BOR, P. 2015. Journal of Women's Health Care.
- WADO, Y. D., SULLY, E. A. & MUMAH, J. N. 2019. Pregnancy and early motherhood among adolescents in five East African countries: a multi-level analysis of risk and protective factors.
- WHO 2014. Adolescent pregnancy: adolescence is a time of opportunity during which a range of actions can be taken to set the stage for healthy adulthood: fact sheet. World Health Organization.
- WHO 2018. Fact Sheet: Adolescent Pregnancy.
- WILLIAMSON, N. 2013. State of world population 2013. Motherhood in childhood. Facing the challenge of adolescent pregnancy.
- WOOG, V., SINGH, S., BROWNE, A. & PHILBIN, J. 2015. Adolescent women's need for and use of sexual and reproductive health services in developing countries.
- YAKUBU, I. & SALISU, W. J. 2018. Determinants of adolescent pregnancy in sub-Saharan Africa: a systematic review.

YOHANNES FIKADU GEDA 2019. Determinants of teenage pregnancy in Ethiopia: A Case-control study, 2019. *Current Medical Issues*, 17, 112.

9. ANNEXES

9.1. Annex A: Information sheet and informed voluntarily consent form for directors of Dire Dawa secondary schools

My name is_____ I am working as data collector for the study being conducted in this institution by mawerdi adem who are is studying for her master's degree at Haramaya University, College of Health and Medical Sciences. I kindly request you to lend me your attention to explain you about the study and your institution being selected as the study setting.

1. The study title: prevalence and associated factors of teenages aged 15-19 years pregnancy among secondary school students in Dire Dawa city, Eastern Ethiopia
2. Purpose of the study: The findings of the study can be of paramount important for the school to plan intervention programs to prevent teenage pregnancy in the school, thereby improve adolescent health in general. Moreover, the aim of this study is to write a thesis as partial requirement for the fulfillment of master's program in MPH in Reproductive Health for Principal Investigator.
3. Procedure and duration: I will administer a questionnaire to female teenagers to provide me with pertinent data that is helpful for the study. There are _____questions to answer were students will fill the questionnaire. The question will take about 20 minutes.
4. Risks and Benefits: the risk of participating in this study is very minimal, but only taking a few minutes from student's time. There would not be any direct payment for participating in this study. But the findings from this research may reveal important information for the health planners.
5. Confidentiality: the information that will be provided will be kept confidential. There will be no information that will identify the participants in particular. The findings of the study will be general for the study school and will not reflect any thing particular of individual persons. The questionnaire will be coded to exclude showing names. No reference will be made in oral or written reports that could link participants to the research
6. Rights: participation for this study is voluntary. The participants have the right to declare participate or not in this study. If they decide to participate, they have the right to withdraw from the study at any time and this will not label them for any loss of benefits

which they otherwise are entitled. They do not have to answer any question that they do not want to answer.

7. Contact address: if there are any questions or any enquires any time about the study or the procedures, please contact: mobile phone of investigator:+251910563758 (Mawerdi Adem) Email address of investigator: mawerdiadem143@gmail.com Institutional Health Research Ethics Review Committee (IHRERC) Haramaya University: Office phone (0254662011) P.O. BOX: 235, Harar.
8. Declaration of informed voluntary consent: I have read the participant information sheet.i have clearly understood the purpose of the research, the procedures, the risks and benefits, issues of confidentiality, the rights of participating and the contact address for any queries. I have been given the opportunity to ask questions for things that may have been unclear. I was informed that participant have the right to withdraw from the study at any time or not to answer any questions that they do not want. I am also informed that the institution has the right to stop this study from being conducted in the school if any mislead and unethical procedure are observed during the data collection process in the school premises. Therefore, I declare my voluntary consent on behalf of _____management to allow this study to be conducted in the school with my initial (signature).

Name and signature of director of school: _____ Date _____

Name and signature of data collector: _____ Date _____

N.B

This is signed face to face in the presence of the data collector.

9.2. Annex F: Participant information sheet and informed voluntary consent form for female teenagers >18 years (English version)

My name is _____, I am working as data collector for the study being conducted in this school by mawerdi adem who is studying her masters in reproductive health in Haramaya University, the College of Health and Medical sciences.

I kindly request you lend me your attention to explain you about the study and being selected as the study participant.

1. Study title: prevalence and associated factors of teenages aged 15-19 years pregnancy among secondary school students in Dire Dawa city, Eastern Ethiopia
2. Purpose of the study: The findings of this study can be important for dire dawa health office to plan intervention program to prevent teen pregnancies by identifying the major areas for responsible for teenage pregnancies; there by improve adolescent health in general. Moreover the aim of this study is to write thesis as partial requirement for fulfillment of master in Reproductive Health for principal investigator.
3. Procedure and duration: I will administer a questionnaire to female teenagers to provide me with pertinent data that is helpful for the study. There are _____questions to answer were students will fill the questionnaire. The question will take about 20 minutes.
4. Risk and benefit: there is very limited risk in this study .It only taking for few minutes from your time. There would not be any direct payment for participating in this study. But the finding from this research will reveal important information for regional health bureau and other interested organization on thematic area of the study.
5. Confidentiality: The information that will be provided will be confidential. There will be no information that will identify the participants in particular. The findings of the study will be general for the study school and will not reflect any thing particular of individual persons. The questionnaire will be coded to exclude showing names. No reference will be made in oral or written reports that could link participants to the research
6. Rights: participating for this study is fully voluntary. You have the right to declare to participate or not in this study. If you decide to participate, you have the right to withdraw from the study at any time and this will not label you for any loss of benefit

which you otherwise are entitled. You do not have to answer any question that you do not want to answer.

7. Contact address: if there are any questions or any enquires any time about the study or the procedures, please contact: mobile phone of investigator:+251910563758 (Mawerdi Adem) Email address of investigator: mawerdiadem143@gmail.com Institutional Research Ethics Review Committee (IHRERC) Haramaya University: Office phone (0154662011) P.O. BOX: 235, Harar.
8. Declaration of informed voluntary consent: I have read/ was read to me the participant information sheet. I have clearly understood the purpose of the research, the procedures, the risks and benefits, issues of confidentiality, the rights of participating and the contact address for any queries. I have been given the opportunity to ask questions for things that may have been unclear. I was informed that I have the right to with draw from the study at any time or not to answer any question that I do not want. Therefore; I declare my voluntary consent to participate in this study with my initials (signature) as indicated below.

Name and signature of participant: _____ Date _____

Name and signature of data collector _____ Date _____

N.B: This is to be signed face to face in the presence of data collector and the copy is provided to the participant.

9.3. Annex G: Amharic version Participant information sheet and informed voluntary consent form for female teenagers >18 years (Amharic version)

ስሜ _____ ነው ፣ እኔ በዚህ ትምህርት ቤት ውስጥ ለሚካሄደው ጥናት የመረጃ አሰባሰብ እሠራለሁ mawerdi adem በመራቢያ ጤና ትምህርቷን በሐራማያ ዩኒቨርሲቲ ፣ የጤና ኮሌጅ እና የህክምና ሳይንስ ።

ስለጥናቱ ጥናት ለማብራራት እና እንደ ጥናቱ ተሳታፊ ስለተመረጡ እንዲያተኩሩ በትህትና እጠይቃለሁ ።

1. የጥናት ርዕስ-በምሥራቅ ኢትዮጵያ በድሬዳዋ የሁለተኛ ደረጃ ተማሪዎች መካከል የወጣት እርግዝና መከሰት እና አወዛጋቢነት

የጥናቱ ዓላማ-የዚህ የጥናት ግኝቶች በአሥራዎቹ ዕድሜ ለሚገኙ ወጣቶች እርግዝና ዋና ሀላፊነቶችን በመለየት በአሥራዎቹ ዕድሜ የሚገኙ ወጣቶች እርግዝናን ለመከላከል ጣልቃ ገብነት መርሃ ግብር ለማቀድ አስፈላጊ ሊሆኑ ይችላሉ ፣ በአጠቃላይ በጉርምስና ዕድሜ ላይ የሚገኘውን ጤና ለማሻሻል በተጨማሪም የዚህ ጥናት ዓላማ በዋናነት መርማሪው በመራቢያ ጤና ላይ ጌታን ለመፈጸም በከፊል እንደ ተፈላጊው ጽሑፍ መጻፍ ነው ።

3. የአሠራር ሂደት እና የቆይታ ጊዜ: - ለሴቶች ወጣት ወጣቶች መጠይቅ አቀርባለሁ እንዲሁም ለጥናቱ ጠቃሚ የሆኑ መረጃዎችን እንዲሰጡኝ እፈልጋለሁ ። መጠይቅ የሚሞሉ ተማሪዎች የሚሞሉ ነበሩ መልስ ለመስጠት _____ ጥያቄዎች አሉ። ጥያቄው 20 ደቂቃ ያህል ይወስዳል።

4. ስጋት እና ጥቅማጥቅሞች - - በዚህ ጥናት ውስጥ በጣም ውስን ስጋት አለ ። ይህን ጊዜዎ የሚወስዱት ለጥቂት ደቂቃዎች ብቻ ነው ። በዚህ ጥናት ውስጥ ለመሳተፍ ምንም ቀጥተኛ ክፍያ አይኖርም ። ነገር ግን ከዚህ ምርምር የተገኘው ግኝት ለክልሉ ጤና ቢሮ እና ለሌሎች ፍላጎት ላለው ድርጅት በጥናቱ መስክ ላይ አስፈላጊ መረጃን ያሳያል ።

5. ምስጢራዊነት: - የተሰጠው መረጃ ሚስጥራዊ ይሆናል በተለይ ተሳታፊዎችን የሚለይ መረጃ አይኖርም ። የጥናቱ ግኝቶች ለጥናቱ ትምህርት ቤት አጠቃላይ ይሆናል እናም የግለሰቦችን ልዩ ሁኔታ ማንጸባረቅ

የለባቸውም። መጠይቁ ስሞችን ከማሳየት እንዲቆጠር ይደረጋል ። ተሳታፊዎቹን ከጥናቱ ጋር ሊያገናኝ የሚችል በአፍ ወይም በጽሑፍ ዘገባ አይቀርብም

6. መብቶች-ለዚህ ጥናት መሳተፍ ሙሉ በሙሉ ፈቃደኛ ነው ። በዚህ ጥናት ውስጥ ለመሳተፍ ወይም ለመሳተፍ የማወጅ መብት አልዎት ። ለመሳተፍ ከወሰኑ በማንኛውም ጊዜ ከጥናቱ የመውጣት መብት አልዎት እናም ይህ እርስዎ ያገኙዎቸውን የትኛውም ጥቅማጥቅም ማጣት አያደርግም ። መልስ መስጠት የማይፈልጉትን ማንኛውንም ጥያቄ መመለስ አያስፈልግዎትም ።

7. የመገኛ አድራሻ አድራሻ ወይም ጥያቄ ካለዎት ወይም ስለ ጥናቱ ወይም አሠራሩ በማንኛውም ጊዜ የሚጠይቅ ከሆነ እባክዎን ያነጋግሩ፡ - የሞባይል ስልክ መርማሪ ስልክ: +251910563758 (Mawerdi Adem) የመርማሪ ኢሜል አድራሻ mawerdiadem143@gmail.com ተቋማዊ ምርምር ሥነምግባር ግምገማ ኮሚቴ (አ.ዲ.ኢ.ሲ.) ሀራማያ ዩኒቨርሲቲ-ቢሮ ስልክ: (0254662011) ፖ.አ. ቦክስ 235 ፣ ሐረር ።

8. በፍቃደኝነት የተደረገ የፍቃድ ስምምነት መግለጫ-የተሳታፊ መረጃውን ወረቀት አንብቤያለሁ / አንብቤያለሁ ። የምርመራውን ዓላማ ፣ የአሰራር ሂደቱን ፣ አደጋዎቹን እና ጥቅሞቹን ፣ ምስጢራዊ ጉዳዮችን ፣ የተሳትፎ መብቶችን እና ለማንኛውም ጥያቄዎች የእውቂያ አድራሻን በግልፅ ተረድቻለሁ። ግልጽ ባልሆኑ ነገሮች ላይ ጥያቄዎችን የመጠየቅ እድል ተሰጥቶኛል ። በማንኛውም ጊዜ ከጥናቱ የመሳተፍ ወይም የማልፈልገውን ማንኛውንም መልስ ለመስጠት የማልችል መብት እንዳለኝ ተነግሮኛል ። ስለዚህ; ከዚህ በታች እንደተመለከተው ከአፈሴላዊ (ፊርማዬ) ጋር በዚህ ጥናት ውስጥ ለመሳተፍ በፍቃደኝነት ፈቃደኝነቴን አውጃለሁ ።

የተሳታፊው ስም እና ፊርማ- _____ Date _____

የመረጃ ሰብሳቢው ስም እና ፊርማ _____ ቀን _____

ማስታወሻ: - ይህ መረጃ በሚሰበስበው ሰው ፊት ፊት መፈረም እና ቅጂው ለተሳታፊው ይሰጣል

9.4. Annex H: Participant information sheet and informed voluntary consent form for female teenagers >18 years (Afaan Oromo version)

Maqaan koo _____ An kaniin hojjachaa jiruu qoranno ulfa umrii malee shamarranii qorachuu irrattii dha. Waraqaan qorannoo kun yuunivarsiitii Haramayaa kolleejjii saayinsii fayyaatti hawaasaatiin Digrii lammaffaa ittiin eebbifamuuf Mawerdi Adem gaggeeffammaa jira. Anis qoranno kanaafiin odeeffannoo yeroo walitii qabachuutti jira. Kanaaf atiis hirmaataa qorannoo kanaa taatee waan filatamteef gaaffilee qorannoo dhihessuu kotiin dura haala fi maaluummaa qorannichaa akka armaan gadiitti ibsuufiin yaala.

Mata duree Qorannichaa:- Ulfa Umrii malee shamarranni fi isaa wajjin walqabate mana barumsa sadarkaa lammaffa Dirree Dhawaa baratan maal akka fakkatu qorachuu dha.

Kaayyoo Qorannichaa:- Kaayyoon qorannoo kanaa inni guddaan Fayyaa Hawaasaatiin Digrii 2^{ffaa} argachuu yoo ta'u, bu'ura qorannoo kanaa kan tahee ulfa umrii malee shamarranii maal akka fakkattu qorachufi rakkoowwan dhufaanin wal qabattu addan basuun karoora fuula duraaf bu'ura ka'uudha.

Adeemsa qorannichaafi yeroo innii fudhatu. Qorannoon kun kan adeemsifamu Haramayaa Yunivarsiiti keessatti yoo ta'u gaaffileen qorannoo kanaa irra caalattii mata durewwaan armaan gadii kanin siif dhihessuu irrattii xiyyeefata.kunis haala waligalaa hawasumma, haala haala walqunnamtii saalaa fii fayyaa wal hormaataat qabatanidha.kanaaf gaaffiilee kanaaf deebii nu kennun daqiiqaa 30 tilmamaan waan fudhatuuf kabajaan akka nu wajjin turtan isiin gaffanna.

Bu'aa fi miidhaa Qorannoon kun fiduu daanda'u Qorannoo kana keessatti hirmaachuu fi odeeffannoo keennuun midhaa tokkollee waan isinirraan ga'u hin qabu. Garuu qoraannoo kun yeroo kessan irraa hanga tokko isin jaalaa fudhata. Qorannoo kana irratti hirmaachuun wanti kafalamu ykn kennamuu humaatuu hin jiru. Garuu bu'aan qorannoo kanaa odeeffannoo waltawaa qaamolee motummaas ta'ee miti motummaa roga kanarratti hojjetaniif argamsisuun karoora fula duraaf bu'ura kaa'uu danda'a.

Iccitti Odeeffaniichaa

Odeeffannoon qorannoo kanaaf funaanama jiruu hunduu iccittiin isaa kan eegamedha. Namoonni odeeffannoo kana yammuu kennan maqaan isaanii hin barreeffamu, garuu odeffannoon isaanii mallattoo addaan gargar baafamee taa'a. Itti dabaluu odeeffannoo kana nama qoranna

adeemsisuun ala namni kamiyyuu akka hin-arginettii taa'a. akkasumaas odefannon kun dhimma barbadameef qofaaf ola.

Mirrga qorannoo irratti hirmaachuufi hirmachuu dhisuu

Qorannoo kana irratti hirmachuufi hirmaachu dhisuun guutumaa gututtii fedhii irratti waan hundaa'eef gaaffii debiisuu hin barbaannee irra taruu dandessuu akkasumaas yeroo feetanitti gafficha addaan kutanii bahuun ni dandaa'ama.

Tessoo: Waa'ee qoraanno kana ilaalchisee gaafiis ta'ee yaada yoo qabaattan teessoo armaan gadii kanaan nu argachuu dandessuu.

Maqaa qorataa:- Mawerdi Adem

Tessoo: - **Harar/Haramaya Yuniversitii**

Bilbila: - **0910563758**

Email: - mawerdiadem143@gmail.com

Institutional research ethics review committee (IHRERC): lakk.Bilbilaa: 0254662011

Lakk.Sanduuqaa postaa: 235, Harar

Koree J/Galeessa Qorannoofi Qoranaa

- Yuunivarsistii Haramayaa (LSP 235) Bilbila 025-666/899

Yuniversitii Haramaya Kollejii Saayinsii Fayyaa

Hayyamamoota'uu hirmaattoota mirkaneessu

Unkaa hirmaattotaa sirriitti hubadheen jira. Akkasumaas kaayyoo adeemsaa, iccittii, mirgaa fi bu;aa qorannoo kana sirriitti hubadheen jira.wantoota naaf hin galiin gaafachuufiis carraan naaf kennamera.kanaaf odefannoo armaan olittii kenname kana bu'uura godhachuun qoranno kana irrattii hirmachuuf fedhii kotiin akka armaan gadii kanatii mallattoo kiyyaaniin mirkanessa

Mallattoo hirmaataa _____ Guyyaa _____

Mallattoo odefannoo funaanaa _____ guyyaa _____

9.5. Annex I: Participant information sheet and informed voluntary consent form for female teenagers >18 years (Af Somali version)

Xaashida macluumaadka ka-qaybgalaha iyo foomka oggolaanshaha ee ikhtiyaariga ah ee tabaruca loogu talagalay dhallinta da'da > 18 sano

Magaceygu waa _____, waxaan u shaqeeyaa sidii xog aruurinta cilmibaadhista lagu sameynayo dugsigaan ee mawerdi adem oo wax ka barata saygeeda xagga caafimaadka taranka ee jaamacadda Haramaya, Kuliyadda Caafimaadka iyo Sayniska Caafimaadka.

Waxaan si xushmad leh uga codsanayaa inaad i siiso fiiradaada si aan kuugu sharxo waxa ku saabsan daraasadda oo laguugu doortay ka-qaybgalaha daraasadda.

1. Cinwaanka daraasadda: baahinta iyo go'aaminta uureysiga da 'yarta ee ardayda dugsiga sare ee Dire Dawa, Bariga Ethiopia

2. Ujeedada daraasadda: Natiijooyinka daraasaddan waxay muhiim u noqon karaan xafiiska caafimaadka da dawa si loogu qorsheeyo barnaamijka ka-hortagga uurka dhalinta iyadoo la aqoonsanayo aagagga waaweyn ee mas'uul ka ah uurrada dhalinta yar; halkaas oo lagu hagaajiyo caafimaadka guud ee dhalinyarada. Intaa waxaa dheer ujeedada daraasadani waa in loo qoro muuqaal ahaan qayb ahaan shuruud u ah buuxinta mastarka Caafimaadka Caafimaadka Taranka.

3. Habsocodka iyo muddada: Waxaan u maareyn doonaa suaalo-weydiin gabdhaha da 'yarta ah si ay iiga siiyaan xog muhiim ah oo waxtar u leh daraasadda. Waxaa jira _____ jawaabood oo looga jawaabayo ardayduna waxay buuxin doonaan foomka su'aalaha. Su'aashu waxay qaadan doontaa 20 daqiiqo.

4. Khatar iyo faa iido: daraasaddan aad bay u yartahay .waxay qaadanaysaa kaliya daqiiqado waqtigaaga. Ma jiri doonto lacag bixin toos ah oo loogu talagalay kaqaybqaadashada daraasaddan. Laakiin ka soo helista daraasaddan ayaa daaha ka qaadi doonta macluumaad muhiim u ah xafiiska caafimaadka ee gobolka iyo hay'ad kale oo danaynaysa arrimaha ku saabsan daraasadda.

5. Qarsoodinimada: Macluumaadka la bixin doono waxay noqon doontaa qarsoodi. Ma jiri doono macluumaad si gaar ah u aqoonsan doona kaqeybgalayaasha. Natiijooyinka ka soo baxa daraasadda ayaa guud ahaan u noqon doona dugsiga daraasadda mana muujinayaan wax gaar ah oo shakhsiyaad gaar ah leh. Foomka su'aalaha waxaa loo codeyn doonaa si looga reebo in la muujiyo magacyada. Lama tixraacin doono warbixinno qoraal ama qoraal ah oo kuxiran kaqeybgalayaasha baaritaanka

6. Xuquuqda: kaqeybgalka daraasaddan waa mid ikhtiyaari ah. Waxaad xaq u leedahay inaad cadeeyso inaad kaqaybqaadaneysa ama aadan ku jirin daraasadan. Haddii aad go'aansato inaad kaqeybqaadatid, waxaad xaq u leedahay inaad ka baxdo daraasadda waqti kasta oo tan laguuguma qori doono wax khasaare ah oo aad xaq u leedahay haddii kale. Khasab kuguma aha inaad ka jawaabto su'aal kasta oo aadan rabin inaad ka jawaabto.

7. Cinwaanka lala xiriirayo: haddii ay jiraan wax su'aalo ah ama wax kasta oo la weydiinayo waqti kasta oo ku saabsan daraasadda ama habraacyada, fadlan la xiriir: telefoonka baaraha: +251910563758 (Mawerdi Adem) Cinwaanka emaylka baaraha: mawerdiadem143@gmail.com akhlaaqda cilmi-baarista hay'adda gudiga (IHRERC) Jaamacada Haramaya: Telefoonka xafiiska: (0254662011) PO BOX: 235, Harar.

8. Bayaanka ogolaanshaha ikhtiyaariga ah ee la oggol yahay ee oggolaanshaha: Waan akhriyey / la ii akhriyey xaashida macluumaadka ka-qaybgalaha. Waxaan si cad u fahamsanahay ujeedada cilmi baarista, nidaamka, halista iyo faa'iidooyinka, arrimaha qarsoodiga, xuquuqaha kaqeybgalka iyo cinwaanka cinwaanka wixii weydiin ah. Waxaa la i siiyay fursad aan ku waydiiyo su'aalo waxyaabaha aan caddayn. Waxaa la ii sheegay in aan xaq u leeyahay in aan wax ka sawiro daraasadda wakhti kasta ama in aanan ka jawaabin su'aal kasta oo aanan rabin. Sidaa darteed; Waxaan cadeynayaa oggolaanshahayga ikhtiyaariga ah ee ah in aan kaqaybqaado daraasaddan iyada oo ay weheliyaasheegtayda (saxeexan) sida ku xusan hoosta.

Magaca iyo saxeexa kaqeybgalaha: _____ Date _____

Magaca iyo saxeexa xog aruuriyaha _____ Taarikhda _____

N.B: Tan waxaa loo sixiixayaa waji ka waji marka la joogo xog aruuriyaha nuqulna waxaa lasiinayaa ka qeybgalaha.

9.6. Annex J: English Version Questionnaire

This is questionnaire to assess prevalence and associated factors of teenage pregnancy among secondary school students in Dire Dawa city, Eastern Ethiopia

Section A: Respondents Socio demographic characteristics				
S.No.		Responses and coding	Skip to	
Q01	What is your age at your last birth?	In YEARS= _____		
Q02	Where do you live?	1=Rural 2=Urban		
Q03	What is your religion?	1=Orthodox 2=Muslim 3=Protestant 4=Others		
Q04	What is your ethnicity?	1=Amhara 2=Oromo 3=Somali 4=others		
Q05	What is your Marital status?	1=single 2=In relation ship 3=Married 4=Divorced 5=Widowed	If single skip to Q N ^o 09	
Q06	What was your age at marriage?	In Years _____		
Q07	What was the age of your husband at marriage?	In Years _____		
Q08	Educational status of your husband	1=un able to read and write 2=able to read and write 3=primary 4=secondary 5=College and above		
Q09	What is your level of education	1=Grade 9 2=Grade=10 3=Grade 11 4=Grade 12		
Q10	With whom do you live currently?	1=both parents 2=father only 3=mother only 4=guardians/adoptive parents 5 husband 6=not living with parents		

Q11	If not living with both parents why?	1=both parents dead 2=both parents working far away 3=mother working far away 4=father working far away 5=one parent dead (specify)..... 6=Divorced 7=already married		
Q12	What is educational status of your father?	1=unable to write and read 2=able to write and read 3=primary 4=secondary 5=college and above		
Q13	What is educational status of your mother?	1=unable to write and read 2=able to read and write 3=primary 4=secondary 5=college and above		
Q14	What work does your father do?	1=farmer 2=daily labourer 3=Government employee 4=merchant 5=other (specify)_____		
Q15	What work does your mother do?	1=farmer 2=housewife 3=Government employee 4=merchant 5=other (specify)_____		
Q16	Do you read a news paper or magazine?	1. At least once a week 2. Less than once a week 3. Not at all		
Q17	Do you listen to the radio?	1. At least once a week 2. Less than once a week 3. Not at all		

Q18	Do you watch a television	1. At least once a week 2. Less than once week 3. Not at all		
Q19	Do you own a mobile telephone?	1. Yes 2. No		
Q20	Have you ever used the internet?	1. Yes 2. No	If no skip to Q N22	
Q21	In the last 13 months have you used the internet from any location or any device?	1. Yes 2. No		
Q22	Current household wealth			
	A...Does your household have a Electricity?	1. Yes 2. No		
	B... Television	1. Yes 2. No		
	C...Radio	1. Yes 2. No		
	D...Mobile Phone	1. Yes 2. No		
	E...Refrigerator	1. Yes 2. No		
	F... Washing machine	1. Yes 2. No		
	G...Own living house	1. Yes 2. No		
	H...agricultural land	1. Yes 2. No		
	I... if yes how many hectare?	_____		
	J... Domestic animals	1. Yes 2. No		
	K...if yes what type of domestic animals	1. Cattle 2. Milk cow 3. Goat 4. Sheep 5. Chicken 6. Other specify _____		
	L...Own vehicle	1. Yes 2. No		
	M...Type of vehicle	1. Bajaj 2. Motor 3. Car		
	N...Type of fuel using for cooking	1. Wood 2. Electricity		
	O...Water source	1. Pipe in compound 2. Non-pipe in compound 3. Non-pipe out of compound 4. Pipe out of compound		

	P...Type of floor	1. Cement 2. Soil/mud 3. Ceramic		
	Q...Type of wall	1. Cement 2. Mud 3. Other (specify)_____		
	R...Type of roof	1. Textile 2. Concrete 3. Iron sheet 4. Other (specify)_____		
	S... Toilet facility	1. Sanitary/improved pit latrine 2. Unsanitary/traditional latrine		
	T... Share this facility with other household	1. Yes 2. No		

Section B:Parenting and related factors

Q23	Do your parents follow you where and with whom you stay when you are out of home?	1. Yes 2. No		
Q24	Have you ever had sexual partners	1. Yes 2. No		
Q25	Do your parents know about your love and sexual partner?	1. Yes 2. No		
Q26	Do your parents like your love and sexual relationship with a boy friend?	1. Yes 2. No		
Q27	Do your parents communicate with you on issues related to sexuality, love and friendship openly?	1. Yes 2. No		

Section C:Knowledge and SRH related factors

Q28	Have you had your menstrual period?	1. Yes 2. No		
Q29	How old were you when you had the first menstrual period?	In years _____		
Q30	Have you seen your menses last month	1. Yes 2. No	If No skip to Q33	
Q31	If yes do you remember the day	1. Yes 2. No		

	at last your last normal menstrual period?			
Q32	If yes when was your last menstrual period?	Date/month _____		
Q33	When is woman likely to get pregnant?			
	a. 14 days before menstruation within 4 days	1. Yes 2. No		
	b. 14 days after menstruation within 4 days	1. Yes 2. No		
	c. During menstruation d. Any time	1. Yes 2. No		
Q34	Have you ever had sexual partner?	1. Yes 2. No		
Q35	Have you ever had sexual intercourse?	1. Yes 2. No	If no skip to N° 38	
Q36	At what age were you first sexual intercourse?	Age in years.....		
Q37	Thinking about first time you had sexual intercourse What led you to have sexual intercourse?			
	a. Self desire	1. Yes 2. No		
	b. Peer pressure	1. Yes 2. No		
	c. Parent pressure	1. Yes 2. No		
	d. Forced by partner	1. Yes 2. No		
	e. Exchange of sex for money, food, clothing or gift	1. Yes 2. No		
	f. Rape	2. Yes 2. No		
	g. Other (specify)	_____		
Q38	Have you ever had sexual intercourse when somebody was physically			
	1. Forcing you	1. Yes 2. No		
	2. Hurting you	1. Yes 2. No		

	3. Threatening you?	1. Yes 2. No		
Q39	Have you ever been pregnant?	1. Yes 2. No	If no skip to N° 44	
Q40	If yes, how old were you at your first pregnancy?	In years _____		
Q41	Was that a planned pregnancy?	1. Yes 2. No		
Q42	Are you currently pregnant?	1. Yes 2. No		
Q43	Is this pregnancy planned?	1. Yes 2. No		
Q44	Have you been heard about contraceptive methods?	1. Yes 2. No	If no skip to N° 52	
Q45	If yes mention some of the methods that you know			
	a. IUD	1. Yes 2. No		
	b. Inject able	1. Yes 2. No		
	c. Implant	1. Yes 2. No		
	d. Pills	1. Yes 2. No		
	e. Condoms	1. Yes 2. No		
	f. Emergency contraceptive	1. Yes 2. No		
g. Others (specify) _____				
Q46	Have you or your partner ever been used any contraceptive methods?	1. Yes 2. No	If no skip to Q52	
Q47	Type of contraceptive you or your partner you ever used			
	a. Pills	1. Yes 2. No		
	b. Injectables	1. Yes 2. No		
	c. Condoms	1. Yes 2. No		
	d. Implant	1. Yes 2. No		
	e. IUCD	1. Yes 2. No		
	f. ECP	1. Yes 2. No		
g. Traditional method	1. Yes 2. No			
Q48	Are you or your partner currently using	1. Yes 2. No		

	contraceptives?			
Q49	Which method did you use?			
	a. Pills	1. Yes 2. No		
	b. Inject able	1. Yes 2. No		
	c. Implants	1. Yes 2. No		
	d. IUCD	1. Yes 2. No		
	e. ECP	1. Yes 2. No		
	f. Condoms	1. Yes 2. No		
	g. Traditional	1. Yes 2. No		
	h. Other (specify)	_____		
Q50	Did you or your partner use a condom the last time you had sexual intercourse?	1. Yes 2. No		
Q51	With what frequency did you and your partner use condom?			
	a. Every time	1. Yes 2. No		
	b. Almost every time	1. Yes 2. No		
	c. Some times	1. Yes 2. No		
Q52	Did you or your partner use alcohol/chat/cigarette?	1. Yes 2. No		

Thank you

9.7. Annex K: Amharic version questionnaire

ክፍል ሀ-ተጠሪዎች የሶሻሎ ስነ - ህዝብ ባህሪዎች				
S.No .		ምላሾች እና ኮድ መስጠት	ዝላል ወደ	
ጥያቄ 01	ባለፈው ልደትዎ ዕድሜዎ ስንት ነው?	በ አመታት = _____		
Q02	የት ትኖራለሽ?	1 = ገጠር 2 = ከተማ		
Q03	ሃይማኖትዎ ምንድን ነው?	1 = ኦርቶዶክስ 2 = ሙስሊም 3 = ፕሮቴስታንት 4 = ሌሎች		
ጥያቄ 04	ጎሳሽ ምንድን ነው?	1 = አማራ		

		2 = አሮሞ 3 = ሶማሊኛ 4 = ሌሎች		
ጥያቄ 05	የጋብቻ ሁኔታዎ ምንድን ነው?	1 = አግብተው የማያቁ 2 = ፍቀረኛ ያላት 2 = ያገባች 3 = የፈታች 4 = ባል የሞተባት	አግብተው የማያቁ ከሆነ ወደ ጥቀ ቁ°09 ይዝለሉ	
ጥያቄ 06	በትዳር ዕድሜዎ ስንት ነበር?	በአመታት		
Q07	በትዳር ውስጥ የባልሽ ዕድሜ ስንት ነበር?	በአመታት ውስጥ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
ጥያቄ 08	የባልዎ የትምህርት ሁኔታ	1 = ማንበብ እና መጻፍ የማይችል 2 = ማንበብ እና መጻፍ መቻል 3 = የመጀመሪያ 4 = ሁለተኛ 5 = ኮሌጅ እና ከዚያ በላይ		
Q09	የትምህርት ደረጃዎ ምንድን ነው?	1 = 9 ኛ ክፍል 2 = 10 ኛ = ክፍል 3 = 11 ኛ ክፍል 4 = 12 ኛ ክፍል		
ጥያቄ 10	በአሁኑ ጊዜ ከማን ጋር ነው የሚኖሩት?	1 = ሁለቱም ወላጆች 2 = አባት ብቻ 3 = እናት ብቻ 4 = አሳዳጊዎች / አሳዳጊ ወላጆች 5 = ከባለቤቴ ጋር 6 = ብቻዬን		
ጥያቄ 11	ከሁለቱም ወላጆች ጋር የማይኖሩ ከሆነ ለምን?	1 = ሁለቱም ወላጆች ሞተዋል 2 = ሁለቱም ወላጆች ርቀው የሚሰሩ 3 = እናት ሩቅ ስለምትሰሩ 4 = አባት ሩቅ ስለሚሰሩ 5 = አንድ ወላጅ ሞቷል (ይግለጹ) 6 = ተፋቷል 7 = ስላገባሁ		
ጥያቄ 12	የአባትዎ የትምህርት ሁኔታ ምንድን ነው?	1 = መፃፍና ማንበብ የማይችሉ 2 = መጻፍ እና ማንበብ የሚችሉ		

		3 = መጀመሪያ ደረጃ 4 = ሁለተኛ ደረጃ 5 = ኮሌጅ እና ከዚያ በላይ		
ጥያቄ 13	የእናትዎ የትምህርት ሁኔታ ምንድነው?	1 = መፃፍና ማንበብ የማይችሉ 2 = ማንበብ እና መጻፍ የሚችሉ 3 = የመጀመሪያ ደረጃ 4 = ሁለተኛ ደረጃ 5 = ኮሌጅ እና ከዚያ በላይ		
Q14	አባትዎ ምን ሥራ ይሠራል?	1 = ገበሬ 2 = የቀን ሰራተኛ 3 = የመንግስት ሰራተኛ 4 = ነጋዴ 5 = ሌላ (ይግለጹ) _____		
Q15	እናትህዎ ምን ሥራ ትሠራለች?	1 = ገበሬ 2 = የቤት እመቤት 3 = የመንግስት ሰራተኛ 4 = ነጋዴ 5 = ሌላ (ይግለጹ) _____		
ጥያቄ 16	የዜና ወረቀት ወይም መጽሔት ታነባለሽ?	1. ቢያንስ በሳምንት አንድ ጊዜ 2. በሳምንት ከአንድ ጊዜ ያነሰ 3. በጭራሽ		
ጥያቄ 17	ሬዲዮን ያዳምጣሉ?	1. ቢያንስ በሳምንት አንድ ጊዜ 2. በሳምንት ከአንድ ጊዜ ያነሰ 3. በጭራሽ		
ጥ 18	ቴሌቪዥን ይመለከታሉ	1. ቢያንስ በሳምንት አንድ ጊዜ 2. በሳምንት ከአንድ ጊዜ ያነሰ 3. በጭራሽ		
ጥ 19	የእጅ/ሞባይል ስልክ አለሽ?	1. አዎ 2. አይደለም		
ጥያቄ 20	ንተርኔት ተጠቅመው ያውቃሉ?	1. አዎ 2. አይደለም	አይደለም ከሆነ ወደ ጥ N22 ዝለል	

Q21	ባለፉት 13 ወር ውስጥ ስርዓት እርስዎ በማንኛውም ቦታ ወይም ከማንኛውም መሳሪያ ኢንተርኔት ተጠቅመዋል?	1. አዎ 2. አይደለም		
Q22	የአሁኑ የቤት ሀብት			
	ሀ... ቤተሰቦችዎ ኤሌክትሪክ አላቸው?	1. አዎ 2. አይደለም		
	ቢ... ቴሌቪዥን	1. አዎ 2. አይደለም		
	ሲ... ሬዲዮ	1. አዎ 2. አይደለም		
	ዲ... ሞባይል ስልክ	1. አዎ 2. አይደለም		
	ኢ... ማቀዝቀዣ	1. አዎ 2. አይደለም		
	ፍ... የልብስ ማጠባበቅ ማሽን	1. አዎ 2. አይደለም		
	ጁ... የራሱ መኖሪያ ቤት	1. አዎ 2. አይደለም		
	ሸ... የእርሻ መሬት	1. አዎ 2. አይደለም		
	እኔ ... አዎ ስንት ሄክታር?	_____		
	ጆ ... የቤት እንስሳት	1. አዎ 2. አይደለም		
	ኬ ... አዎ ከሆነ ምን ዓይነት የቤት እንስሳት	1. ከብቶች 2. የወተት ላም 3. ፍየል 4. በግ 5. ዶሮ 6. ሌሎች ይግለጹ _____		
	ሊ... የራሱ ተሽከርካሪ	1. አዎ 2. አይደለም		
	ሙ... የተሽከርካሪ ዓይነት	1. ባጃጅ 2. ሞተር 3. መኪና		
	ኑ... ለማብሰያ የሚጠቀሙበት የነዳጅ ዓይነት	1. እንጨት 2. ኤሌክትሪክ		
	አ ... የውሃ ምንጭ	1. ቧንቧው በግቢው ውስጥ 2. በግቢው ውስጥ ቧንቧ ያልሆነ 3. ቧንቧ ያልሆነ ከግቢ ውጭ 4. ቧንቧ ከግቢ ውጭ		
	ፑ... የወለሉ ዓይነት	1. ሲሚንት 2. አፈር / ጭቃ 3. ሴራሚክ		
	ጥ ... የግድግዳ ዓይነት	1. ሲሚንት 2. ጭቃ 3. ሌላ (ይግለጹ) _____		
	ፋ... የጣሪያ ዓይነት	1. የጨርቃ ጨርቅ		

		2. ኮንክሪት 3. ቆርቆሮ 4. ሌላ (ይግለጹ)		
	S... የመጻዳጃ ቤት አይነት	1. የንፅህና / የተሻሻለ የሽንት ቤት መጻዳጃ ቤት 2. ንፅህና / ባህላዊ መጻዳጃ ቤት		
	T... ይህንን መጻዳጃ ከሌሎች ቤተሰቦች ያጋራሉ	1. አዎ 2. አይደለም		

ክፍል ቢ - አስተዳደግ እና ተያያዥ ምክንያቶች

Q23	ከቤት ሲወጡ ወላጆችዎ የት እና ከማን ጋር እንደሚቆዩ ይከተሉዎታል?	1. አዎ 2. አይደለም		
Q24	ወሲባዊ አጋር ኖሮሽ ያውቃል	1. አዎ 2. አይደለም		
Q25	ወላጆችዎ ስለፍቅር እና ስለ ወሲባዊ ጓደኛዎ ያውቃሉ?	1. አዎ 2. አይደለም		
Q26	ከጓደኛዎ ጋር ያለዎትን ፍቅር እና ወሲባዊ ግንኙነት ወላጆችዎ ይወዳሉ?	1. አዎ 2. አይደለም		
Q27	ከወሲባዊነት ፣ ከፍቅር እና ከጓደኝነት ጋር በተያያዙ ጉዳዮች ላይ ወላጆችዎ ከእርስዎ ጋር ይወደያሉ?	1. አዎ 2. አይደለም		

ክፍል ሐ ዕውቀት እና ከ ኤስ አር ኤች ጋር የተያያዙ ምክንያቶች

Q28	የወር አበባ አይተዉ ያውቃሉ?T	1. አዎ 2. አይደለም		
ጥያቄ 29	የመጀመሪያውን የወር አበባ ሲያዩ እድሜሽ ስንት ነበር?	ዓመታት ውስጥ _____		
Q30	ባለፈው ወር የወር አበባዎን አይተዋል	1. አዎ 2. አይደለም	የለም ከሆነ ወደ Q33 ይዝለሉ	
ጥያቄ 31	አዎ ከሆነ በመጨረሻው መደበኛ የወር አበባዎ ያዩበትን ቀን ያስታውሳሉ?	1. አዎ 2. አይደለም		
Q32	አዎ ከሆነ የመጨረሻው የወር አበባዎ መቼ ነበር?	ቀን / ወር _____		
Q33	ቤት መቼ ልታረግዝ ትችላላች?			
	a. በ 4 ቀናት ውስጥ 14 ቀን ከወር አበባ በፊት	1. አዎ 2. አይደለም		

	b. በ4 ቀናት ውስጥ 14 ቀን ከወር አበባ በኋላ	1. አዎ 2. አይደለም		
	c. በወር አበባ ወቅት	1. አዎ 2. አይደለም		
	d. በማንኛውም ጊዜ			
ጥያቄ 34	ጉዋደኛ/ፍቅረኛ ፍሮስ ያውቃል?	1. አዎ 2. አይደለም		
Q35	የግብረ ሥጋ ግንኙነት ፈጽመው ያውቃሉ?	1. አዎ 2. አይደለም	አይደለም ከሆነ ወደ ጥያቄ °38 ይዝለሉ	
Q36	በመጀመሪያ የግብረ ሥጋ ግንኙነት የጀመሩት በየትኛው ዕድሜ ላይ ነበር?	ዕድሜ በአመታት		
ጥያቄ 37	ለመጀመሪያ ጊዜ የግብረ ሥጋ ግንኙነት ስትፈጽሙ አስበው የግብረ ሥጋ ግንኙነት እንድትፈጽሙ ያነሳሳሽ ምንድን ነው?			
	a. የራስ ፍላጎት	1. አዎ 2. አይደለም		
	b. የጓደኛ ግፊት	1. አዎ 2. አይደለም		
	c. የወላጅ ግፊት	1. አዎ 2. አይደለም		
	d. በፍቅረኛ ተገደጄ	1. አዎ 2. አይደለም		
	e. (ገንዘብ ፣ ምግብ ፣ ልብስ ፣ ስጦታ) ፍላጋ	1. አዎ 2. አይደለም		
	f. አስገድዶ መድፈር	2. አዎ 2. አይደለም		
	g. ሌላ (ይግለጹ)	_____		
ጥያቄ 38	የሆነ ሰው በሃይል ስለስገደደሽ; አካላዊ ጉዳት ስላደረሰብሽ ወይም ስላስፈራራሽ የግብረ ስጋ ግንኙነት ፈጽመው ያውቃሉ			
	1. በማስገደድ ወይም ጫና በማደረግ የግብረ ስጋ ግንኙነት እንድያደርጉ አስገድዶት	1. አዎ 2. አይደለም		

	ያውቃል			
	2. አካላዊ ጉዳት በማድረስ	1. አዎ 2. አይደለም		
	3. በማስፈራራት	1. አዎ 2. አይደለም		
ጥያቄ 39	በህወት ዘመንዎ አርግዘው ያውቃሉ?	1. አዎ 2. አይደለም	. አይደለም ከሆነ ወደ ጥ ° 44 ይዝለሉ	
Q40	አዎ ከሆነ በመጀመሪያ እርግዝናዎ ዕድሜዎ ስንት ነበር?	ዓመታት ውስጥ _____		
Q41	ያ የታቀደ እርግዝና ነበር?	1. አዎ 2. አይደለም		
Q42	በአሁኑ ጊዜ እርጉዝ ነዎት?	1. አዎ 2. አይደለም		
Q43	ይህ እርግዝና የታቀደ ነው?	1. አዎ 2. አይደለም		
ጥያቄ 44	ስለ የወሊድ መከላከያ ዘዴዎች ሰምተው ያውቃሉ	1. አዎ 2. አይደለም	አይደለም ከሆነ ወደ ወደ ጥ ° 52 ይዝለሉ	
ጥያቄ 45	አዎ ከሆነ እርስዎ የሚያውቁቸውን አንዳንድ ዘዴዎችን ይጥቀሱ			
	a. ሉፕ.	1. አዎ 2. አይደለም		
	b. በመርፌ	1. አዎ 2. አይደለም		
	c. በክንድ ስር የሚቀበር	1. አዎ 2. አይደለም		
	d. ክኒኖች	1. አዎ 2. አይደለም		
	e. ኮንዶም	1. አዎ 2. አይደለም		
	f. ድንገተኛ የእርግዝና መከላከያ	1. አዎ 2. አይደለም		
g. ሌሎች (ይግለጹ)	_____			
ጥያቄ 46	እርስዎ /ጉዋደኛዎ ወይም የትዳር አጋርዎ ማንኛውንም የእርግዝና መከላከያ ዘዴዎችን ተጠቅመው ያውቃሉ?	1. አዎ 2. አይደለም	አይደለም ከሆነ ወደ ወደ ጥ ° 52 ይዝለሉ	
ጠያቄ 47	አዉ ከሆነ ዬትኛዉን ዘዴ ተጠቀሙ	1. አዉ 2. አይደለም		
	a. ክኒኖች	1. አዉ 2. አይደለም		
	b. መርፌ	1. አዉ 2. አይደለም		

	c. ኮንዶም	1. አዉ 2. አይደለም		
	d. በክንድ ስር የሚቀበር	1. አዉ 2. አይደለም		
	e. ሉፕ	1. አዉ 2. አይደለም		
	f. ድንገተኛ የእርግዝና መከላከያ	1. አዉ 2. አይደለም		
	g. ባህላዊ	1. አዉ 2. አይደለም		
	h. ሌላ (ይግለጹ) ----- -----			
ጥያቄ 48	እርስዎ ወይም አጋርዎ በአሁኑ ጊዜ የእርግዝና መከላከያዎችን እየተጠቀሙ ነው?	1. አዎ 2. አይደለም		
ጥያቄ 49	የትኛውን ዘዴ ተጠቀሙ?			
	a. ክኒኖች	1. አዎ 2. አይደለም		
	b. በመርፌ	1. አዎ 2. አይደለም		
	c. ባህላዊ	1. አዎ 2. አይደለም		
	d. ኮንዶም	1. አዎ 2. አይደለም		
e. ሌላ (ይግለጹ)			
ጥያቄ 50	ለመጨረሻ ጊዜ የግብረ ሥጋ ግንኙነት ሲፈጽሙ እርስዎ ወይም አጋርዎ ኮንዶም ይጠቀሙ ነበር?	1. አዎ 2. አይደለም		
ጥ 51	እርስዎ እና አጋርዎ በምን ዓይነት ድግግሞሽ ኮንዶምን ተጠቀሙ?			
	a. ሁል ጊዜ	1. አዎ 2. አይደለም		
	b. ሁል ጊዜ ማለት ይቻላል	1. አዎ 2. አይደለም		
c. አንዳንድ ጊዜ	1. አዎ 2. አይደለም			
ጥያቄ 52	እርስዎ ወይም የትዳር አጋርዎ አልኮል / ቻት / ሲጋራ ተጠቀሙዎታል ይታያል?	1. አዎ 2. አይደለም		

9.8. Annex L: Afan Oromo version questionnaire

Section A: Socio demographic information				
S.No.		Responses and coding	Darbi gara	
G01	Umriin kee meeqa (waggaa	waggaadhaan=		

	guutuun)?	
G02	Eessa jiraatta?	1=Baadiyyaa 2=Magaalaa	
G03	Amantaan kee maali?	1=Ortoodoksii 2=Muslima 3=Protistaantii 4=kan biroo (Ibsi)_____	
G04	Sabni kee maali?	1=Amaara 2=Oromoo 3=Soomaalii 4=Kan biroo (Ibsi)_____	
G05	Haalli fuudhaa fii heeruma keetii ammaa maali?	1=kan hin heerumin 2=jaalallee kan qabdu 3=kan heerumte 4=kan hiikte 5=kan Jaarsi irraa du'e	Kan hin herumin lakk...09tti darbi
G06	Gaafa herumte umriin kee meeqa?	Waggaadhaan	
G07	Gaafa herumtu umriin abba manaa keetii meeqa?	Waggaadhaan	
G08	Sadarkaan barnootaa abba manaa keetii maali	1=barreessuu fii dubbisuu kan hin dandeenye 2=barreessufi dubbisuu kan danda'u 2=sadarkaa tokkoffaa 3=sadarkaa lammaffaa 6=Coolleeggii fii isaa ol	
G09	Sadarkaan barnoota keetii mali?	1=kutaa 9 2=Kuta 10 3=Kutaa 11 4=kutaa=12	
G10	Amma eenyuu waliin jiraatta?	1=haadha fii abbaakoo waliin 2=abbaa koo qofa waliin 3=haadha koo qofa waliin 4=warra na guddisee waliin 5=abba manaa waliin 6=qofaa koo	
G11	Yoo maatii lameenu waliin hin jiraanne maliifi?	1=maatiin lameenuu du'an 2=maatiin lameenu iddoo fagoo hojjatu 3=haati koo iddoo fagoo hojjatti 4=abbaan koo iddoo fagoo hojjeta 5=maatiin tokko du'an (Ibsi)_____ 6=maatiin koo wal hiikan 7= waaniin heerumeef	
G12	Sadarkaan barnootaa abbaa keetii	1=barreessuufii dubbisuu kan hin	

	maali?	dandeenye 2=bareessuufii dubbisuu kan danda'an 3=sadarkaa tokkoffaa 4=sadarkaa lammaffaa 5=coolleeggii fii isaa ol		
G13	Sadarkaan barnoota haadha keetii maali?	1=barreesuu fii dubbisuu kan hin dandeenye 2=Barreessuufii dubbisuu kan danda'an 3=sadarkaa tokkoffaa 4=sadarkaa lammaffaa 5=coolleeggii fii isaa ol		
G14	Abbaan kee hojii maal hojjeta?	1=qotee bulaa 2=hojjataa guyyaa 3=hojjetaa mootummaa 4=naggaadee 5=kan biroo (ibsi)_____		
G15	Haati kee hojii maal hojjetti?	1=qotee bulaa 2= haadha manaa 3=hojjattuu mootummaa 4=naggaadee 5=kan biroo (ibsi)_____		
G16	Xalayaa oduu ni dubbistaa?	1. Torbeetti al-tokko 2. Torbeetti al-tokkoo gadi 3. Lakki		
G17	Raadiyoo ni dhageeffatta?	1. Torbeetti al-tokko 2. Torbeetti al-tokkoo gadi 3. Lakki		
G18	Televijiinii ni daawwatta?	1. Torbeetti al-tokko 2. Torbeetti al-tokkoo gadi 3. Lakki		
G19	Bilbila harkaa/mobaayilii ni qabdaa?	1. Eeyye 2. Lakki		
G20	Interneetii fayyadamtee beettaa?	1. Eeyye 2. Lakki	Lakki yoo jatte gara G22 darbi	
G21	Ji/oottan 13'n darban keessaa interneetii madda fii meeshaa kamiinuu fayyadamtee beettaa?	1. Eeyye 2. Lakki		
G22	Maatiin kee kanneen arman gadii qabaa?			
	A...Ibsaa electrikaa	1. Eeyye 2. Lakki		
	B... televijiinii	1. Eeyye 2. Miti		

	C...Raadiyoo	1. Eeyye 2. Lakki	
	D...Moobaayilii	1. Eeyye 2. Lakki	
	E...Firiigii	1. Eyyee 2. Miti	
	F...Maashinii huccu miiccu	1. Eyyee 2. Miti	
	G...Mana jireenya ofii	1. Eyyee 2. Miti	
	H...Lafa qonnaa	1. Eeyye 2. lakki	
	I...Eeyyen yoo jatte heektaara meeqa	_____	
	J...Bineeldota manaa	1. Eeyye 2. Lakki	
	K...Eeyyen yoo jatte gosa kam?	1. Gaala 2. Loon. 3. Re'ee 4. Hoolaa 5. Lukkuu 6. Kan biro_____	
	L...Konkolaata ofii	1. Eyyee 2. Miti	
	M...Gosa konkoolaataa	4. Baajaaj 5. Dogdoqqee 6. Makiinaa	
	N...gosa boba'aa nyaata bilcheeffachuuf fayyadamtan	3. Qoraan 4. Elektriikii	
	O...Madda bishaanii	1. Boombaa dallaa keessaa 2. Kan boombaa kan hin ta'in dallaa keessatti 3. Kan boombaa kan hin ta'in dallaa alatti 4. Kan bombaa dallaa alaa 5. Kan biroo (Ibsi)_____	
	P...Gosa uwwisa lafaa	4. Simintoo 5. Biyyee/dhoqqee 6. Seeraamikii	
	Q...Gosa gidaaraa	1. Simintoo 2. Dhoqqee 3. Kan biroo (Ibsi)_____	
	R...gosa uwwisa manaa	5. Carqii 6. Koncriitii 7. Qorqorroo 8. Kan biroo (Ibsi)_____	
	S... Mana fincaanii	1. Mana fincaanii fooyyaa'aa 2. Mana fincaanii aadaa/kan hin fooyya'in	
	T...Mana fincaanii maatii biro waliin fayyadamtuu?	1. Eyyee 2. Lakki	
Kutaa B, Haala guddisaa maatii fii isaa wajjin wal qabatan			
G23	Yeroo manarra ala baatu maatiin	1. Eeyye 2. Lakki	

	kee eessaafii eenyuu waliin akka deemtu si hordofuu?			
G24	Hiriyyaa/jaalalle qabaatte beettaa?	1. Eeyye 2. Lakki		
G25	Maatiin kee waa'ee jaallalee/hiriyya kee ni beekuu?	1. Eeyye 2. Lakki		
G26	Maatiin kee jaalala fii walqunnamtii jaallalee kee waliin qabdu ni jaallatuu?	1. Eeyye 2. Lakki		
G27	Wal-qunnamtii saalaa fii jaallalee/hiriyyaa wajjin wal qabatee maatiin kee siwaliin ni mari'atuu?	1. Eeyye 2. Lakki		
Kutaa C:Haala wal-qunnamtii saala fii fayya walhormaataa fi beekkumsa isaa				
G28	Marsaa lagu argitee beettaa?	2. Eyyee 2. Lakki		
G29	Lagu gaafa argitu umriin kee meeqa?	Waggaadhaan_____		
G30	Ji'a darbe lagu argitee	2. Eyyee 2. Lakki	Lakki... 33tti darbi	
G31	Yoo argite yeroo dhumaaf guyya kam akka argite ni yaadattaa?	2. Eyyee 2. lakki		
G32	Yoo yaadatte yeroo dhuma lagu yoom argite?	Guyyaa/ji'a _____		
G33	Dubartiin yoom ulfaa'uu dandeessi?			
	e. Lagu dura guyyaa 14 dura	2. Eyyee 2. Lakki		
	f. Lagu booda guyyaa 14 booda	2. Eyyee 2. Lakki		
	g. Yeroo laguun sitti jiru	1. Eyyee 2. Lakki		
	h. Yeroo hunda	1. Eeyye 2. Lakki		
G34	Jaallalee/hiriyya qabaatte beektaa?	1. Eeyye 2. Lakki		
G35	Wal qunnamtii saalaa raawwattee beektaa?	1. Eeyye 2. Lakki	Lakki...38tti darbi	
G36	Wal qunnamtii saalaa yeroo jalqabaatiif gaafa raawwattu umriin kee meeqa?	Waggaadhaan_____		
G37	Yeroo jalqabaatiif gaafa walqunnamtii saalaa raawwattu yaaduudhaan walqunnamtii saalaa akka raawwatu maaltu si kakaase?			

	h. Fedhii kootiin	4. Eyyee 2. Lakki		
	i. Dhiibba hiriyaatiin	2. Eyyee 2. Lakki		
	j. Dhiibbaa maatiitiin	2. Eyyee 2. Lakki		
	k. Jaalalleen/abbaa manaan dirqamuun	2. Eyyee 2. Lakki		
	l. maalaqa, nyaata, uffata, kennaa barbbacha	2. Eyyee 2. Lakki		
	m. gudeedamee	1. Eyyee 2. Lakki		
	n. Kan biroo (ibsi)	_____		
G38	Haala armaan gadiittiif wal qunnamtii saalaa raawwattee beektaa?			
	1. Si dirqisiisuun	1. Eyyee 2. Lakki		
	2. Si miidhuun	1. Eyyee 2. Lakki		
	3. Si sodaachisuun	1. Eyyee 2. Lakki		
G39	Jireenya kee keessatti ulfooftee beektaa?	2. Eyyeen 2. Lakki	Lakki... 44tti darbi	
G40	Yoo ulfoofte beekta ta'e yeroo jalqabaa gaafa ulfooftu umriin kee meeqa?	Waggaadhaan_____		
G41	Ulfi san kan karoorfame turee?	2. Eyyee 2. Lakki		
G42	Amma ulfa/garaa qabdaa?	2. Eyyee 2. Lakki		
G43	Ulfi kun kan karoorfamee?	2. Eyyee 2. Lakki		
G44	Waa'ee mala ulfa ittisuu dhageessee beektaa?	1. Eyyee 2. Lakki	Lakki...52tti darbi	
G45	Eyyee yoo ta'e maloota tokko tokko kan beektu fili			
	h. luuppaa	2. Eyyee 2. Lakki		
	i. Lilmoo	2. Eyyee 2. Lakki		
	j. Implaanitii	2. Eyyee 2. Lakki		
	k. kiniinii	2. Eyyee 2. Lakki		
	l. Coondomii	2. Eyyee 2. Lakki		
	m. Mala ulfa ittisuu yeroo hatattama	2. Eyyee 2. Lakki		
	n. Kan biroo (ibsi)	_____		
G46	Ati ykn abbaan manaa/jaallalleen kee mala ulfa ittisuuti fayyadamtanii beektuu?	1. Eyyee 2. Lakki	Lakki...52tti darbi	

G47	Eyyeen yoo ta'e mala kam fayyadamtee beekta?			
	a. Kininii	1. Eyye 2. Lakki		
	b. Lilmoo	1. Eyye 2. Lakki		
	c. Kondomii			
	d. Irree jalatti kan awwaallamu	1. Eyye 2. Lakki		
	e. Luuppii	1. Eyye 2. Lakki		
	f. Mala ulfa ittisuu yeroo hatattamaa	1. Eyye 2. Lakki		
	g. Mala aadaa			
G48	h. Kan biro (ibsi)_____	1. Eyye 2. Lakki		
	Ati tkn abbaan manaa/jaallalleen kee mala ulfa ittisuu amma fayyaadamaa jirtuu?	2. Eyyee 2. Lakki		
G49	Mala kam fayyadamaa jirtu?			
	i. Kiniinii	2. Eyyee 2. Lakki		
	j. Lilmoo	2. Eyyee 2. Lakki		
	k. Mala aada	2. Eyyee 2. Lakki		
	l. Condomii	2. Eyyee 2. Lakki		
G50	m. Kan biroo (ibsi)_____			
	Atiifii jaallalleen kee yeroo dhumaaf wal-qunnamtii saalaa gaafa raawwattan coondomii fayyadamtanii?	2. Eyyee 2. Lakki		
G51	Yeroo hagamaaif fayyadamtan?			
	d. Yeroo hundaa	2. Eyyeen 2. Lakki		
	e. Yeroo hunda jechuun ni danda'ama	2. Eyyee 2. Lakki		
G52	f. Yeroo tokko tokko	2. Eyyeen 2. Lakki		
	Atii ykn abbaa manaa/jaallalleen kee alkoolii/jimaa/sigaaraa fayyadamtanii bektuu?	2. Eyyee 2. Lakki		

Galatoomaa

9.9. Annex M: Af Somali version questionnaire

Qaybta A: Jawaab-bixiyeyaasha Astaamaha cilmiga bulshada			
S.No .		Jawaabaha iyo codeynta	U gudub
Q01	Sheeg da'daada dhalashadaada ugu dambeysa?	SANADOOD = _____	
Q02	Xagee dagantahay	1 = Reer Miyi 2 = Magaalo	
Q03	Diintaadu maxay tahay?	1 = Orthodox 3=Protestant 2 = Muslim 4=Qaarle	
Q04	Isirkaagu muxuu yahay?	1 = Amxaarada 3=Soomaali 2 = Oromo 4=Kuwa kale	
Q05	Waa maxay xaaladdaada Guur?	1 = kali 3=Xaasle 2 = Markabka la xiriira 4=Furiinka 5 = Carmal	Hadday u gudubto QN ° 09
Q06	Guurkaagu muxuu ahaa da'daada?	Sannadaha -----	
Q07	Muxuu ahaa da'da ninkaagu ku guursaday?	Sannadaha -----	
Q08	Xaaladda waxbarasho ee ninkaaga	1 = aan awoodin inuu wax akhriyo waxna qoro 2 = awood u leh akhriska iyo qorista 3= aasaasi ah 4 = dugsiga sare 5 = Kuleejo iyo wixii ka sareeya	
Q09	Waa maxay heerkaaga waxbarasho	1 = Fasalka 9aad 3=Fasalka 11 2 = Fasalka 10 4=Fasalka 12	
Q10a ad	Yaad la nooshahay wakhti xaadirkan?	1 = labada waalid 2 = aabe kaliya 3 = hooyo kaliya 4 = masuulada / waalidiinta korsanaya 5 nin 6 = inuusan waalid la noolaan	
Q11	Haddii uusan la noolaan waalidiinta maxaa sababay?	1 = labada waalidba waa dhinteen 2 = labada waalidba meel fog ayey ka shaqeeyaan 3 = hooyo meel fog ka shaqeysa 4 = aabe meel fog ka shaqeeya 5 = hal waalid dhintay (cadee) 6 = Furiinka 7 = horaa loo guursaday	
Q12	Waa maxay xaaladda waxbarasho ee aabbahaa?	1 = aan awoodin inuu qoro waxna akhriyo 2 = awood u leh qorista iyo akhriska 3 = aasaasi ah 4 = dugsiga sare 5 = kulleejo iyo wixii ka sareeya	

Q13	Waa maxay xaaladda waxbarasho ee hooyadaa?	1 = aan awoodin inuu qoro waxna akhriyo 2 = awood u leh akhriska iyo qorista 3 = aasaasi ah 4 = dugsiga sare 5 = kullejo iyo wixii ka sareeya		
Q14	Muxuu shaqeeyaa aabbahaa?	1 = beeraley 2 = shaqaale maalmeed 3 = Shaqaalaha dowlada 4 = ganacsade 5 = kale (cadee) _____		
Q15	Shaqo maxay qabataa hooyadaa?	1 = beeraley 2 = naagta guriga joogta 3 = Shaqaalaha dowlada 4 = ganacsade 5 = kale (cadee) _____		
S 16	Miyaad aqrisaa warqad wargeys ama joornaal?	1. Ugu yaraan hal mar usbuucii 2. In ka yar toddobaadkii hal mar 3. Maya		
S 17	Ma dhageysataa raadiyaha?	1. Ugu yaraan hal mar usbuucii 2. In ka yar toddobaadkii hal mar 3. Maya		
S 18	Ma daawataa telefishan	1. Ugu yaraan hal mar usbuucii 2. In ka yar usbuucii 3. Maya		
S 19	Ma leedahay taleefan gacmeed?	1. Haa 2. Maya		
S 20	Weligaa ma isticmaashay internetka?	1. Haa 2. Maya	Haddii aysan u dhaafin QN 22	
S 21	13kii bilood ee la soo dhaafay ma ka isticmaashay internetka meel kasta ama qalab kasta?	1. Haa 2. Maya		
S 22	Hantida qoyska ee hadda			
	A... Reerkaagu ma leeyihiin a Korontada?	1. Haa 2. Maya		
	B ... Telefishanka	1. Haa 2. Maya		
	C ... Raadiye	1. Haa 2. Maya		
	D ... Telefoonka gacanta	1. Haa 2. Maya		

E ... Qaboojiye	1. Haa 2. Maya		
F.. machine Mashiinka dharka lagu dhaqo	1. Haa 2. Maya		
G ... Guri uu isagu leeyahay	1. Haa 2. Maya		
H. .. dhul dhaqameed	1. Haa 2. Maya		
Aniga ... haddii haa imisa hektar?	_____		
J ... Xayawaanka guryaha ku jira	1. Haa 2. Maya		
K ... haddii ay haa tahay noocee ah xayawaanka guryaha	1. Lo '2. Lo' caano 3. Ri ah 4. Ido 5. Digaag 6. Mid kale sheeg _____		
L Gaar u gaar ah	1. Haa 2. Maya		
M ... Nooca gawaarida	1. Bajaaj 2. Gawaarida 3. Baabuur		
N ... Nooca shidaalka ee wax lagu karsado	1. Qoryo 2. Korontada		
O ... Isha biyaha	1. Tuubo isku dhex jirta 2. Biibiile aan ahayn isku dhafan 3. Biibiile ka baxsan xarunta 4. Tuubo ka baxsan xarunta		
P ... Nooca dabaqa	1. Sibidhka 2. Ciid / dhoobo 3. Dhoobada		
Q .. Nooca gidaarka	1. Sibidh 2. Mud 3. Mid kale (caddee) _____		
R ... Nooca saqafka	1. Dharka 2. La taaban karo 3. Xaashida birta ah 4. Mid kale (caddee) _____		
S ... Qalabka musqusha	1. Musqusha fayadhawrka / hagaajinta 2. Musqusha oo aan nadiif ahayn / dhaqameed		
T ... La wadaag xaruntan qoys kale	1. Haa 2. Maya		

Qaybta B : Waalidnimada iyo arrimaha la xiriira

S 23	Waalidiintaadu ma kuula socdaan meesha iyo cida aad la joogi doonto markaad ka maqantahay guriga?	1. Haa 2. Maya	
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S 24	Weligaa ma yeelatay lamaanayaal galmo	1. Haa 2. Maya	
Q25a ad	Waalidiintaadu ma ka ogyihiin jacaylkaaga iyo lamaanahaaga galmada?	1. Haa 2. Maya	
Q26a ad	Waalidiintaadu ma jeceshahay jacaylkaaga iyo xiriirka galmada ee aad la leedahay wiil saaxiib ah?	1. Haa 2. Maya	
Q27a ad	Waalidiintaadu makala xidhiidhaan arrimaha la xiriira galmada, jacaylka iyo saaxiibtinimada si furan?	1. Haa 2. Maya	
Qaybta C : Aqoonta iyo arrimaha la xiriira SRH			
Q2 8	Ma ku dhacday caadadaadii?	1. Haa 2. Maya	
Q2 9	Meeqa sano ayaad jirtay markii caadada kuugu horreysay kugu dhacday?	Sanadaha	
S 30	Ma aragtay caadadaada bishii hore	1. Haa 2. Maya	Hadday Maya u gudub Q33aad
S 31	Hadday haa tahay miyaad xusuusataa maalintii ugu dambaysay ee caadadaadii ugu dambaysay ee caadiga ahayd?	1. Haa 2. Maya	
S 32	Hadday haa tahay goorma ayay ahayd caadadaadii ugu dambaysay?	Taariikh / bishii	
S 33	Goorma ayey haweeneydu uur yeelan kartaa?		
	a. 14 maalmood kahor caadada 4 maalmood gudahood	1. Haa 2. Maya	
	b. 14 maalmood kadib caadada 4 maalmood gudahood	1. Haa 2. Maya	
	c. Xilliga caadada d. Waqti kasta	1. Haa 2. Maya	
S 34	Weligaa ma yeelatay lammaane galmo?	1. Haa 2. Maya	
Q35	Weligaa galmo ma sameysay?	1. Haa 2. Maya	Hadday maya u dhaafin

				N° 38
Q3 6	Da'dee ayaad ahayd markii ugu horreysay ee aad galmo sameysay?	Da 'sano _____.		
Q3 7	Ka fikirida markii ugu horeysay ee aad galmo sameysay Maxaa kugu kalifay inaad galmo sameyso?			
	a. Rabitaanka nafta	1. Haa 2. Maya		
	b. Cadaadiska asxaabta	1. Haa 2. Maya		
	c. Cadaadiska waalidka	1. Haa 2. Maya		
	d. Lamaanaha qasbay	1. Haa 2. Maya		
	e. Lagu qasbay (hel lacag, cunto, dhar, hadiyad	1. Haa 2. Maya		
	f. Kufsi	2. Haa 2. Maya		
	g. Mid kale (caddee)	_____		
Q3 8	Weligaa galmo ma sameysay markii qof jir ahaan jir ahaan jiray	1. Haa 2. Maya		
	1. Kuu qasbaya			
	1. Ku dhaawacay	1. Haa 2. Maya		
	2. Ma kuu hanjabayaa?	1. Haa 2. Maya		
Q3 9	Weligaa uur ma yeelatay?	1. Haa 2. Maya	Hadday maya u dhaafin N° 44	
S 40	Hadday haa tahay, immisa sano ayaad jirtay uurkaagii ugu horreeyay?	Sanado badan		
Q4 1	Taasi ma waxay ahayd uur qorshaysan?	1. Haa 2. Maya		
Q4 2	Hada uur ma leedahay?	1. Haa 2. Maya		
Q4 3	Uurkan ma loo qorsheeyay?	1. Haa 2. Maya		
Q44	Miyaa lagaa maqlay hababka ka hortagga uurka?	1. Haa 2. Maya	Hadaadan u boodin N° 52	

Q45	Hadday haa tahay sheeg qaar ka mid ah hababka aad ogtahay			
	a. Kii makanka ladhigo	1. Haa	2. Maya	
	b. Irbad	1. Haa	2. Maya	
	c. Galin	1. Haa	2. Maya	
	d. Kiniiniyada	1. Haa	2. Maya	
	e. Kondhomyada	1. Haa	2. Maya	
	f. Ka hortagga uurka degdega ah	1. Haa	2. Maya	
	g. Kuwa kale (cadee)			
Q46	Miyaad adiga ama lammaanahaagu weligiin isticmaalay habab ka hortag oo uur ah?	1. Haa	2. Maya	Haddii aysan u dhaafin Q52
Q47	Hadday haa tahay sheeg qaar ka mid ah hababka aad isticmaashen ka hortaga uurka			
	a. Kiniiniyada	1. Haa	2. Maya	
	b. Irbad	1. Haa	2. Maya	
	c. Kondhomyada			
	d. Galin	1. Haa	2. Maya	
	e. Kii makaanka la dhiga	1. Haa	2. Maya	
	f. Ka hortaga uurka degdega			
g. Dhaqameed	1. Haa	2. Maya		
Q48	Adiga ama lammaanahaagu hadda ma isticmaaleysaan ka hortagga uurka?	1. Haa	2. Maya	
Q49	Qaabkee ayaad adeegsatay?			
	a. Kiniiniyada	1. Haa	2. Maya	
	b. Irbad	1. Haa	2. Maya	
	c. Galin	1. Haa	2. Maya	
	d. Kii makanka la dhigo	1. Haa	2. Maya	
	e. K hortaga uurka degdega f. Kondhomyada g. Dhaqa meed			

Q50	Adiga ama lammaanahaagu ma isticmaashay kondhom markii ugu dambaysay ee aad galmo sameysay?	1. Haa	2. Maya		
Q51	Immisa jeer ayaad adiga iyo lammaanahaagu ku isticmaasheen cinjirka galmada?				
	a. Mar kasta	1. Haa	2. Maya		
	b. Ku dhowaad mar kasta	1. Haa	2. Maya		
	c. Mararka qaar	1. Haa	2. Maya		
Q52	Adiga ama lammaanahaagu ma isticmaashay aalkolo / sheeko / sigaar?	1. Haa	2. Maya		

Mahsanid

9.10. Annex N: Curriculum vitae

Personal information

Name Mawerdi Adem Hassen Date of Birth Oct, 1992
Place of Birth Eastern Harargie zone, eastern Ethiopia
Sex Female
Nationality Ethiopia
Contact Address Mobile number: +251-910-563-758/+251-915-736-364
E-mail: mawerdiadem143@gmail.com

Work experience

From Oct 2011 to April 2016 as a midwife and MCH and labor and Delivery ward in Ejersa Goro health center, East Harargie Zone, Eastern Ethiopia.

From May to June 2016 as a midwife in Haramaya Hospital, Eastern Harargie Zone, Eastern Ethiopia.

From July 2016 to 2018 assistance lecturer at Dire Dawa University

Language ability

S no	Language	Speaking	Reading	Writing
1	Afan Oromo	Excellent	Excellent	Excellent

2	English	Excellent	Excellent	Excellent
3	Amharic	Excellent	Excellent	Excellent
4	Somali	Very good	Very good	Very good

Education Qualification

Period	Type of qualification	Institution	Qualification
2008-2011	Midwifery	Hamlin Fistula Ethiopia, Hamlin College of Midwives	Bsc in Midwifery

Skills

- Computer and software
- Evaluating and monitoring skills
- Managing skills
- Teaching/lecturing

HOBBIES

- Reading
- Research activities
- Clinical activities
- Creativity
- Consultancy

Special training

- Long term family planning methods
- HMIS health management and information system
- prevention of Mother to child Transmission of HIV (PMTCT)
- Basic Emergency Obstetric and Newborn Care (BEmONC)
- Comprehensive Abortion Care (CAC)
- Participation different review meeting

- Effective teaching skill

References

- Hamlin college of midwife
- Sr mebkiyuTadesse, Hamlin midwife mentor, +251912033835
- Mrs Zelalem, dean of Hamlin College of Midwife
- Mrs legese abera head of midwifery department, Dire Dawa University

Finally I, the under signed, assure that the above piece of information are true and correct to the best of my knowledge

9.11. Annex O: Approval sheet

HARAMAYA UNIVERSITY

SCHOOL OF GRADUATE STUDIES

Prevalence and determinants of teenage pregnancy among high school students in Dira Dawa,
Eastern Ethiopia

Submitted by Mawerdi Adem

Name of student

Signature

Date

Approved by

1

Name of Major Advisor

Signature

Date

2

Name of Co-advisor

Signature

Date

3

Research Thematic Area Leader

Signature

Date

4

Chairman, DGC/SGS

Signature

Date

5

PGPD

Signature

Date

