COLLEGE OF HEALTH SCIENCESCHOOL OF PUBLIC HEALTH

Assessment of prevalence of unintended pregnancy and understanding the reasons in preventing unintended pregnancy among youth in Ethiopia, 2019.

By- Tirfe Emshaw (B.Sc.)

A research to be submitted to Addis Ababa University, School of Public Health in partial fulfillment for the requirement for master of Public Health

Addis Ababa, Ethiopia

November, 2019

ADDIS ABABA UNIVERSITY COLLEGE OF HEALTH SCIENCESCHOOL OF PUBLIC HEALTH

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The thesis by, entitled "Assessment of prevalence of unintended pregnancy and understanding the barriers in preventing unintended pregnancy among youth in Ethiopia, 2019." is accepted in its present form by the board of examiners as fulfilling thesis requirements for the degree of master's in General Public Health.

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Acknowledgement

My deepest gratitude goes to my advisors Meselech Assegid andAbiy Seifu for their support during this thesis preparation.

I would like to thank Addis Ababa University College of Health Science for giving me this opportunity and also my heartfelt gratitude goes to Swedish International Development corporation Agency for supporting financially the female scholarship program in Addis Ababa University.

I would also like to thank all the staffs and administrative bodies of Batu health center for their unreserved help during my data collection. My gratitude goes to all of the study participants for their willingness and participation in the interview.

I would like to express my heart-felt gratitude to my families and friends for their all rounded-support during my entire study.

Abbreviations and Acronyms

ANC- Ante Natal Care

AOR- Adjusted Odds Ratio

CAC – Comprehensive Abortion Care

CI- Confidence Interval

COR- Crude Odds Ratio

CSA- Central Statistical Agency

DHS- Demographic and Health Survey

EAs – Enumeration Areas

EDHS- Ethiopian Demographic and Health Survey

HEWs – Health Extension Workers

ICF- Strategic Consulting and Communication for a Digital World

MoH- Ministry of Health

USA- United States of America

SAF – Safe Abortion Care

SDGs – Sustainable Development Goals

SNNPR- Southern Nation, Nationalities Peoples Region

VIF- Variance Inflation Factor

WHO- World Health Organization

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Abstract

Background**:** Globally every day 830 women die from preventable causes related to pregnancy and childbirth and 99% of maternal deaths occur in developing countries. Young people and adolescents face higher risk of complication. Unintended pregnancy among young people increases risk of maternal morbidity and mortality.

Objectives**:** The objectives of this study are to estimate the prevalence of unintended pregnancy among youth in Ethiopia and to explore the factors associated with the unintended pregnancy.

Methods: We employed mixed methods. The quantitative part applied cross sectional study design using data from Ethiopian Demographic and Health Survey (EDHS) 2016. The dataset was accessed online www.measuredhs.com. The qualitative method applied in- depth interview of purposively selected 15-24 years old female who visited health facilities for antenatal or abortion care service. Quantitative data was analyzed using STATA version 14 software. Descriptive and binary logistical regression analysis techniques were used to estimate the prevalence unintended pregnancy and identify factors associated with unintended pregnancy. Qualitative data was analyzed by open code version 4.02 using content analysis method.

Result: Four hundred youths (6.5%) were found to be pregnant from a total of 6,143 (weighted) youths who participated in the 2016 EDHS. Among the pregnant youths 141(35.3%) had no education, 197(49.3%) attended primary school, 372 (93%) were married, 235(58.8%) were unemployed, and 343(85.7%) live in rural area. The prevalence of unintended pregnancy among pregnant youth was 25%. In-depth interview data analysis showed contraceptive failure, not using any modern contraceptive, low risk prediction, lack of support by family, partner disagreement and desire to continue education were found to be the main reasons for having unintended pregnancy.

Conclusion and Recommendation: The prevalence of unintended pregnancy among youth in Ethiopia is high. Effort should focus on empowering women to make them psychological and economic independent to enable them decide about their pregnancy. Changing the wrong belief and perception on modern contraception in the community is important to improve utilization of those methods by young women.

1. Introduction

1.1. Background

There is no universally accepted definition for adolescent and youth. United Nation gives adolescents to be age 10 –19 and youth from 15-24 for common use by the member states. Adolescent and youths accounts for more than 1.8 billion of world's population (1).In Ethiopia youth accounts for 20.11% from the total population(1). Considering their number reducing maternal morbidity and mortality from pregnancy and childbirth related death should still be strengthened. Generally this age range is taken to be the healthiest time but the death of adolescent and youth is high specially in developing countries(1, 2).

Unintended pregnancy is defined as a pregnancy that is either mistimed or unwanted(3, 4).It's called mistimed when the pregnancy occurs before the expected time and unwanted if the pregnancy is not wanted at the time of conception (3-5).

Globally maternal mortality is still very high. Every day 830 women die of preventable cause related to pregnancy and childbirth and 99% of maternal death occur in developing countries and young adolescents face higher risk of complication and death than other women(6).Annually 45 million unintended pregnancies end up with abortion of which 19 million are unsafe. About 40% of this abortion is done in women less than 25 years old. Consequently, close to 80,000 women die every year from complication of unsafe abortion (4, 7).According to WHO estimates African women have 5.5 million unsafe abortion yearly. Of these women around 36, 000 women die as a result of complication from the procedure(6).

Worldwide the maternal mortality ratio is dropped by about 44% since 1990 and 2015. And currently the United Nation members states works in Sustainable Development Goals putting a target to reduce preventable maternal mortality to less than 70 per 100,000 live births by 2030,in SDG3 target 3.1(8). There are trials in providing affordable and accessible interventions, providing contraception and safe abortion, antenatal and postnatal care in order to prevent unintended pregnancy and consequence associated with it but still maternal morbidity and mortality is high in developing countries.

In Ethiopia the reproductive health problems of young people are gradually gaining more attention. The Adolescent and Youth Strategy 2016-2020 envisions to improve adolescent and youth reproductive health in Ethiopia by providing quality and need based services. However, there is a gap in addressing the young people health needs and reducing their reproductive health problems. Youth friendly reproductive health services provision was part of the adolescent and youth strategy planned as solution by the government (9). In 2005 Ethiopia liberalized its penal code to Provide Safe Abortion care. With the revised criteria now more women including adolescents and youths get access to safe abortion care services (10). Regardless of the effort done by the government and civic society organizations the maternal mortality ratio remains high at 412 deaths per 100,000 live births (11).

1.2 Statement of the problem

Unintended pregnancy among adolescent and youth has very serious consequences for both the mother and fetus. Peri-natal deaths among mothers aged less than 20 years is 50% higher than among mothers aged 20-29 (12). Unintended pregnancy leads to increased maternal and infantile morbidity and mortality, loss of self-esteem, depression, anxiety, familial conflicts, dropping out of school, interruption of life projects, premature incorporation into the labor force and maintenance of poverty cycle(13). In addition teens tend to recognize their pregnancy status later than adult women which will lead them to take part in harmful behaviors including drinking and smoking in their early stage of their pregnancies that will harm themselves and the infant(13).

Globally every year 210 million pregnancies occur out of which 38% are unplanned and 22% of those pregnancies end up in an abortion (5). In Sub Saharan countries an estimated 14 million unintended pregnancy occur each year mostly because of wrong use of short term contraceptives (5). Ethiopia has one of the highest number of maternal deaths in the world: One in 27 women die from complications of pregnancy or childbirth annually(6). In Ethiopia prevalence of unintended pregnancy is higher in the national survey data analysis among the three regions in the country which is Oromiya, Amhara and SNNRP (14, 15). The prevalence of unintended pregnancy is variable in different part of the country ranging from 13.7 to 41.5(3, 14-20).

Increasing the contraceptive prevalence will definably help reduce maternal and child mortality by preventing unintended pregnancy. Contraceptive prevalence rate is 36% nationally. The highest contraceptive prevalence is reported for Addis Ababa 50% followed by Amhara region 47%(11). The national level unmet need for contraceptive is 4.7 for adolescents aged 15-19 and 12.3 for youth 20-24. The demand for contraceptive is 12.2 and 38.7 for adolescent and youth, respectively (11). In addition in most urban part the country which is thought to be easier to get information regarding reproductive health SA is above the estimated level of safe abortion for Africa and East Africa. Interventions that were conducted in order to decrease this problem were not effective (21). Interventions that were planned to serve youth were not reaching the target group especially young women who are out of school, married and in need of those services (22). Induced abortions are much more common in urban regions, where fertility rates are low, suggesting that induced abortion is being used by younger women who want to space births, rather than by older women who have already had all the children they want (6).This indicates

that there is a need to make specific in making interventions more effective in decreasing such problems.

Previous studies reported several factors contributing to unintended pregnancy. These include marital status, living arrangement at the time of interview and availability of mass media at home indicating that information gap has a major part in causing of the problem(16). The other studies showed that coerced sex, cohabitance, boyfriend being the primary money spender, not having casual sex partner in the past year, not knowing where to get contraceptive methods, not using any contraceptive methods were influencing having unintended pregnancy, fear of provider discrimination and mistreatment, health facilities stock-out of contraceptive commodities, using contraceptive with high failure rate, inappropriate use of contraceptive, rape and incest were found to influence having unintended pregnancy(23-27). Previous studies showed that the most affected group with unintended pregnancy were young and unmarried people but most studies do not focus on youth who face major complications arise from unintended pregnancy and the barriers in preventing unintended pregnancy from the client's perspective. So with this facility accessibility and service delivery there is a need to see the barriers for youth to prevent unintended pregnancy from their own side for providing targeted and effective strategy for all and that is what this study will try to address.

1.3. Significance of the study

It is a fact that adolescents and youths are the future assets of the country. Therefore, it is essential to protect and fulfill the health needs of this part of the community so that they would have better future and will be able to contribute to the community they live in. To do so it is important to see magnitude of the problem and their need from their own perspective and in turn this also helps to make our intervention to be targeted and effective. Unintended pregnancy is very concerning public health problem. Studies on the magnitude and factors contributing to unintended pregnancy are mostly quantitative and do not address the problem from the participants perspective. The factors contributing for the occurrence of unintended pregnancy were contextual so it important to address the factors from participants side who face this problem and have up to date data on the magnitude of the problem. This study will generate evidence for the current adolescent and youth national policy by showing what factors contributed for having unplanned pregnancy for policy makers and programmers and this also help to addressing health consequence of unplanned pregnancy in young people in Ethiopia.

2. Literature review

2.1. Magnitude of unintended pregnancy

The unintended pregnancy in USA was 41.4 % of which 31.1% were mistimed and 10.3% were unwanted and unintended pregnancy were more prevalent in women who completed 12 or less and unmarried(28).

The Prevalence of unintended pregnancy were 30.2% in Sudan, Riyadh and Alshekh Elfadni ,urban and rural locality of Khartoum state and reason for the unintededness of the pregnancy were too soon after last pregnancy and being too young ,and education interruption, magnitude of unintended pregnancy increases as education level increases(4).A secondary data analysis from 2011 EDHS shows that the prevalence of unintended pregnancy in Ethiopia was found to be 30.2% and the burden of this unintended pregnancy fall on young, unmarried, higher wealth, higher parity, ethnic majority and high family size and with less education level(15).Another analysis result from EDHS 2011 showed the prevalence of unintended pregnancy was 24% out of which 17.1% being mistimed and 6.9% being unwanted (14).The prevalence of unintended pregnancy were 13.7% and 15.3% in Belessa and Bahir Dar respectively which is relatively low(16, 20). The prevalence of unintended pregnancy were 20.6% in Gondar, Ethiopia(5).

The prevalence of unintended pregnancy in Gelemso, Ethiopia, was 27.1 % (21.9% mistimed and 5.2% unwanted) and single, widowed/divorced marital status and having more than 2 children and having no awareness on contraceptive were the factors associated with unintended pregnancy (17).In Eastern Ethiopia the magnitude of unintended pregnancy was 33.3% and the higher burden of unintended pregnancy fall on teenagers, those who got married before the age of 20 and who are currently unmarried (19). The other study in Arsi Negele showed that the prevalence of unintended pregnancy is 41.5% and factors identified associated with having unintended pregnancy were age above 35, single marital status, parity above 2, having health professional visit, having the autonomy to use contraceptive and having history of abortion (18).

2.2. Reason for unintended pregnancy

The study done in USA to assess the factors that predispose adolescent aged 15-21 for unplanned pregnancy identified coerced sex by their boyfriend because they are younger by age, cohabitance, boyfriend being the primary source of spending money as the main reason(23). For the cause of unintended pregnancy factors identified by teenage respondents were misuse of contraceptives and not knowing contraceptives options available(29).

A community based cross sectional study done Mwanza region of Tanzania aiming to identify risk factors for unplanned pregnancy among young women increasing age, lower level of education, not being currently married and occupation with higher among business and lowest among students were identified as a main factors for unplanned pregnancy among young women and also not having casual sexual partner in the past year, knowledge of where to access modern contraceptive and not using any modern contraceptive method contributes for young to have unplanned pregnancy(24). The study done in Kenya identified that the primary reason for women to seek abortion lack of opportunities and stigma for women with unplanned pregnancy. The other reasons were lack of knowledge and access to contraceptive methods, contraceptive failure, fear of provider discrimination and mistreatment, health facilities stock-out of contraceptive commodities and lack of available options of contraception, lack of knowledge on sexual and reproductive rights and gender based violence(30).A study done in Nigeria shows that the main reason for not wanting pregnancy in rural area were not wanting to be seen unwed single mother and for urban area were high cost of raising children, short birth interval or poor timing of pregnancies, desire to continue with education and having completed family size and the abortion in this study was 33.5%for the state and 34.8% and 29.4% in urban and rural areas of Ogun state respectively(26).Another facility based cross sectional study done in Kenya shows that youth that live in urban area were most likely to report previous induced abortion than youth that live in rural area (40%), and also youth who completed high school and above were less likely to report previous abortion. Youth that report previous induced abortion were using contraceptive methods that have high failure rate (emergency contraceptive, withdrawal and rhythm methods)(25).Another study conducted in Kenya with the aim of identifying the factors associated with repeated abortion women who seek care after repeated abortion were on traditional contraceptive methods 43%, short acting 22% and long acting 7% methods(31).

A study done in Ethiopia, Wolayita Sodo University, the abortion rate were 65 per 1000 which is much higher than the country's whole abortion rate (23 per 1000)and 9.4% were recurrence abortion. From the reported pregnancies for the last 12 months from the study date was (7.7%), 85.3% were unplanned pregnancies and the reason for not wanting the pregnancy was education and reason for getting pregnant was low risk prediction, contraceptive failure and inappropriate use of contraceptive, rape and incest(27).In a facility based study conducted in Gurage zone, southern Ethiopia with the aim of assessing induced abortion and associated factors in health facilities of Gurage zone 51.8% of the respondents have history of pregnancy that ended up in an abortion including the current pregnancy and the majority 46.5% have no history of delivery, the reason for having current unwanted pregnancy was negligence in using contraceptives properly and partner pressure, factors associated with induced abortion were pregnancy being unwanted and having more than four pregnancies, those in primary school and aged 30-34 are less likely to have an abortion(32). Another community based cross sectional study done in Ethiopia Debre Birhan town showed that the prevalence of unintended pregnancy was found to be 23.5% and from this 12.9% was mistimed pregnancies, the reason for not being able to prevent unwanted pregnancies was contraceptive failure and for mistimed pregnancy not using family planning method and the other reasons were walk to health center >80 min, gravidity >5, parity 1-2, and partner disagreement(3).

2.3. Research question

1. What is the prevalence of unintended pregnancy among youth in Ethiopia?
2. Why youths are not able to prevent unintended pregnancy in Zuway?

3. Conceptual framework

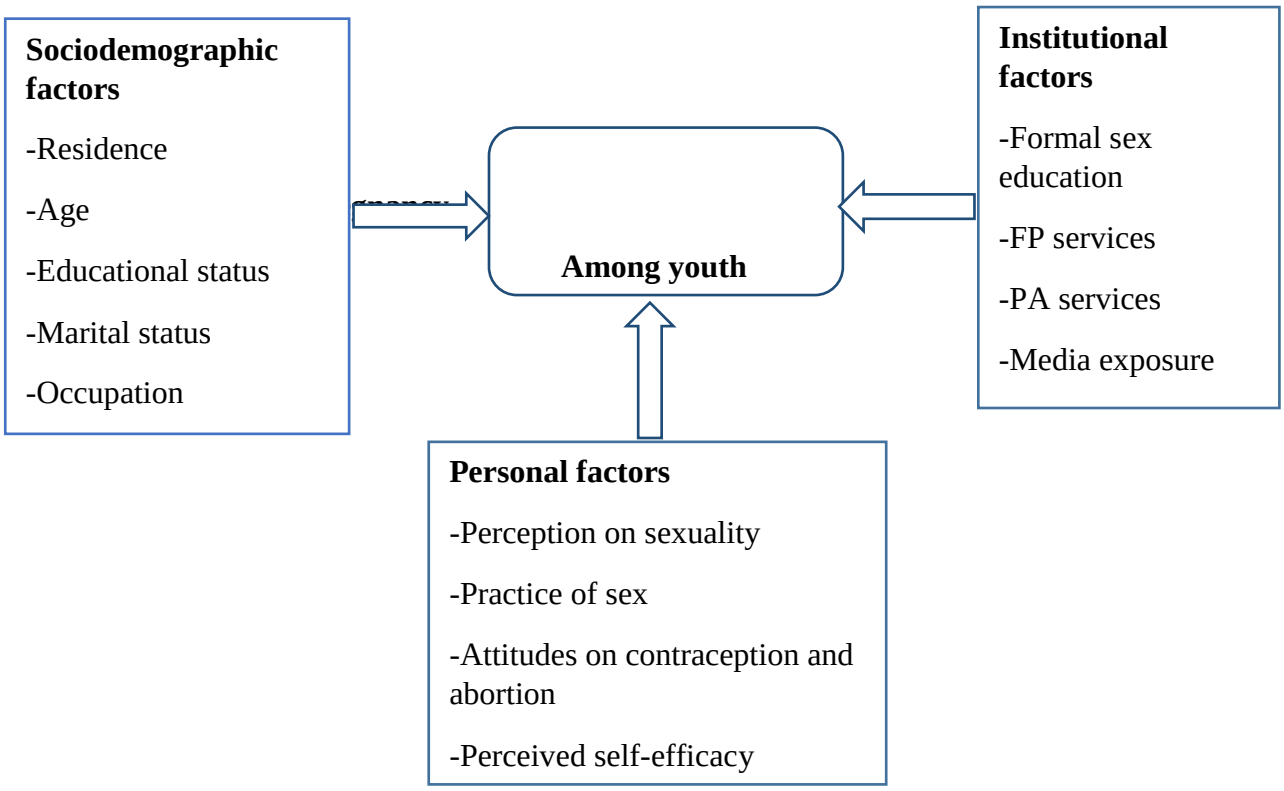

Figure 1: Conceptual framework for the assessment of prevalence of unintended pregnancy and understanding reasons in preventing unintended pregnancy among youth in Ethiopia, 2019.

4. Objectives

4.1. General objective

4.1.1. To assess Prevalence of unintended pregnancy and understanding the reasons in preventing unintended pregnancy among youth in Ethiopia, 2019.

4.2. Specific objectives

4.2.1. To estimate the prevalence of unintended pregnancy among youth in Ethiopia, 2019.

4.2.2. To explore the reasons for the occurrence of unintended pregnancy among youth in Zuway, 2019.

5. Method

5.1. Study Design

5.1.1. For quantitative

Cross sectional study design was used and the data was drawn from a nationally representative sample Ethiopian Demographic Health Survey 2016. This survey is conducted by CSA every five years with the primary objective of getting up-to-date estimates of key demographic and health indicators by Ministry of Health (MoH) request and this is the fourth round. The survey is conducted by ICF technical assistance.

5.1.2. For qualitative

Qualitative content analysis was conducted to assess the experience of youth with unintended pregnancy to get deep understanding of the reasons in preventing unintended pregnancy among youth.

5.2. Study Area and period

5.1.1. For quantitative

The study area of 2016 EDHS covers the whole country with nationwide representative sample. Ethiopia is found in the horn of Africa which is divided in 9 regions (Oromiya, Amhara, SNNPR, Benishangul-Gumuz, Tigray, Afar, Somali, Gambela and Harari) and 2 city administrations (Addis Ababa and Dire Dawa) then also divided into zonal administration then into Woreda for administrative purpose. The Woreda is also divided into kebele which is the smallest administrative body. The country has a total population of about 100,000,000 with 1,100,000 square kilometers area in 2018 based on United Nation latest estimates making the country the second populous country in Africa. The data collection was conducted from January 18, 2016 to June 27, 2016.

5.1.2. For qualitative

The qualitative study was conducted from May, 2019 to June, 2019 in Batu health center of Zuway one of the city with in Adami- Tullu- Jido- Kombolcha Woreda in the East Shewa Zone of Oromiya regional state. The Woreda is divided into 48 kebele with a population of 1000 to 5000 and also have one non- governmental organizational hospital, 9 health centers and 43 health posts staffed with 2 HEWs each per kebele.

5.4. Population

5.4.1 Source population

5.4.1.1. For quantitative
All youths in aged 15-24.

5.4.1.2. For qualitative
All women of 15-24 years old who were pregnant at the time of data collection in the selected health facility.

5.4.2. Study population

5.4.2.1. For quantitative
All pregnant youths included in the study for in EDHS 2016.

5.4.2.2. For qualitative
Women aged 15-24 in the selected study area found to have unintended (unwanted or mistimed) pregnancy and who are volunteer to participate in the study.

5.4.3. Inclusion criteria

5.4.3.1. For qualitative
Pregnant women aged 15-24 who reported to have unintended pregnancy.

5.4.4. Exclusion criteria

5.4.4.1.For qualitative
Young clients who have difficulties of talking (unable to hear or mentally ill) or who are in severe pain will not be included.

5.5. Sample size

5.5.1. For quantitative
The total sample size of EDHS 2016 was 16,583 women aged 15-49. The total youth included in this survey were 6143(weighted) and total pregnant youth were 400(weighted).A total of 400 pregnant youth were the sample size for this study.

5.5.2. For qualitative
For the qualitative study the interview was held until saturation level was achieved.

5.6. Sampling procedure

5.6.1. For quantitative

The 2016 EDHS used 2007 Ethiopian population and Housing Census conducted by CSA including 84,915 EAs. The samples were stratified and selected in two stages. Ethiopia has 11 regions (9 regions and 2 administrative cities) which were divided into rural and urban areas giving 21 strata. From each stratum 645 EAs were selected independently depending on their size. The household list in those 645 EAs (202 urban and 443 rural) was done to get sampling frame and 28 household per cluster was selected by simple random sampling and 15-49 aged women and men aged 15-59 who were permanent resident or guests who stayed the night before the survey were eligible for the interview.

5.6.2. For qualitative

For qualitative study the study site were selected randomly. Participants who found to have unintended pregnancy who came for ANC service or Safe Abortion service were selected from the selected health facility purposively for the interview.

5.7. Data collection procedure

5.7.1. For quantitative

The EDHS 2016 used five questionnaires (household, woman's, man's, biomarker and health facility questionnaire) which were adapted from the DHS program, standard Demographic and health survey questionnaire pretested and modified to reflect the population and health issues relevant to Ethiopia. This study used dataset collected using woman's questionnaire. The data were collected by trained data collectors. The data set was obtained after registration on the website www.measuredhs.com.

5.7.2. For qualitative

The qualitative data was collected using unstructured guiding questions by the primary investigator with in-depth interview. After selecting the participants from eligible group the interview was held in separate room so that the respondent will talk freely. Each interview was audio recorded.

5.8. Data Analysis procedure

5.8.1. For quantitative

Descriptive analysis from the data set EDHS 2016 woman's questionnaire (Socio demographic, Obstetric History and on Reproduction) was done using STATA version 14 software.

Descriptive result of this study is based on weighted frequency. Bivariate logistic regression was done for each predictor variable and outcome variable. Multiple logistic regressions was done and statistical significance p-value less than 0.05 was taken as determinant factor.

5.8.2. For qualitative

The qualitative data collected was transcribed in to text, translated into English and then imported to open code version 4.02 for coding. After coding the same codes were merged to similar themes and were analyzed using content analysis.

5.8. Data quality assurance

5.9.1. For quantitative

Pretest was done before the actual data collection for the qualitative study to understand the local context and familiarize the data collector with the issue of interest.

5.9.2. For qualitative

For the qualitative data after data collection and before transcribing the audio it was listened repeatedly to not miss any component and understand thoroughly. Each interview was transcribed and coded on daily basis. Only one interview was conducted in a day.

5.9. Variables

5.10.1. Dependent variable

The dependent variable for this study is unintended pregnancy.

5.10.2. Independent variable

The independent variables from Socio demographic characteristics included for this study were age, religion, educational status, marital status, occupation and wealth index. From the obstetric history parity, history of ever having terminated pregnancy, current pregnant and current pregnancy wanted. From maternal reproductive health service utilization knowledge of any contraceptive method, visit health facility in the past 12 months, told about family planning at the health facility, attended Ante natal care service, Pattern of Contraceptive use and unmet need. From women empowerment variables, beating were justified if wife goes out without telling husband, beating were justified if wife neglects the children, beating were justified if wife argues with husband, beating were justified if wife refuse to have sex with husband and beating were justified if wife burns food.

5.10. Ethical issue

Ethical clearance and support letter were obtained from Addis Ababa University College of Health Science Institution of Review Board and was submitted to selected health facility officials (Batu Health Center) to conduct the study.

Verbal informed consent was obtained from respondents after explanation is given on the objective, procedure, potential risks and benefits of participating in the study and the right to withdraw from the study at any time throughout their interview.

This study will helps policy makers, programmers and researchers to give appropriate attention on issues of youth unintended pregnancy experience and associated factor in Ethiopia. The participants were informed that there will be no direct benefit in participating in this study.

During data collection the interviewer was reducing the emotional harm that was caused when sensitive questions was being raised by stopping the interview for a moment and letting the respondent to cool down and also providing counseling.

Study participants were assured their response confidentiality by removing personal identifications instead using codes and not sharing their information to anyone other than the study team. The interview was held with strict privacy by conducting in a separate room. Participants were re assured on the confidentiality whenever necessary.

6. Result

6.1. Quantitative result

6.1. 1. Socio demographic result of the participant

The total women interviewed in EDHS 2016 were 15,683 from 16,583 total sample size yielding 95% response rate. From these the youth were 6,401(weighted=6, 143, 3381=15-19, 2762=20-24 years old). Majority of the youth were 15-19 years old (55%), attending primary school (54.3%), Orthodox Christians (43.0%), live in rural area (76.1%), currently unmarried (62.6%), and not working (56.2%).

Among all youths interviewed in the 2016 EDHS 400 (6.5%) were pregnant, 101(25.3%) were 15-19 years old and the rest 299(74.7%) were 20-24. The mean age of the pregnant youth was 19.09, (SD ± 2.8 years). Among the pregnant youths for 100 (25%) of them the pregnancy was unintended.

About one-third (35.3%) of the pregnant youths did not attend any formal education (35.3% and 35.0% of youth who reported intended and unintended pregnancy, respectively) while 197 (49.3%) of them attended primary education (48.3% and 52% of youths who reported intended and unintended pregnancy, respectively).From 44.7% of respondents Muslim religion followers 43.3% and 49%of youths reported intended and unintended pregnancy respectively. The other 28.5% follow Orthodox religion out of which 29% and 27% of them reported intended and unintended pregnancy respectively. From 85.5% of respondents who resides in rural area 86% and 85% of the youths reported intended and unintended pregnancy respectively. Married respondent accounts 93% out of which 97.3% and 80% of the youths reported intended and unintended pregnancy respectively. Respondents who were not currently working accounts for 41.2% out of which 38.3% and 50% of them reported to have intended and unintended pregnancy respectively. Around one-fourth (24%) of youth were from poorest wealth index (77% and 23% of the youths reported intended and unintended pregnancy respectively). Close to one –third (27%) of the youths were from poorer wealth index out of which 71.3% and 28.7% of them reported intended and unintended pregnancy respectively (Table 1).

Table 1: Socio-demographic characteristics of pregnant youth aged 15-24 included in the Ethiopian Demographic and Health Survey 2016.

Variables	Intended pregnancy frequency (%)	Unintended pregnancy frequency (%)	Pregnant youth Frequency (%)
Age			
15-19	76 (25.3)	25 (25)	101 (25.3)
20-24	224 (74.7)	75 (75)	299 (74.7)
Educational level			
No education	106 (35.3)	35 (35)	141 (35.3)
Primary	145(48.3)	52 (52)	197 (49.3)
Secondary	44 (14.7)	13 (13)	57 (14.3)
Higher	6(2)	0	6 (1.5)
Religion			
Orthodox	87 (29)	27 (27)	114 (28.5)
Catholic	2(0.7)	0	2 (0.5)
Protestant	68 (22.7)	19 (19)	87 (21.7)
Muslim	130 (43.3)	49 (49)	179 (44.7)
Traditional	12 (4)	0	12 (3)
Other	1 (0.3)	4 (4)	5 (1.2)
Place of residence			
Urban	42 (14)	15 (15)	57 (14.3)
Rural	258 (86)	85 (85)	343 (85.7)
Current marital status			
Currently married	292(97.3)	80(80)	372(93)
Not currently married	8(2.7)	20(20)	28(7)
Occupation			
Not working	185 (61.7)	50 (50)	235(58.8)

Currently working	115(38.3)	50(50)	166(41.2)
Wealth index			
Poorest	73(77.0)	23(23.0)	96(24)
Poorer	77(71.3)	31(28.7)	108(27)
Middle	53(80.3)	13(19.7)	66(16.5)
Richer	44(72.1)	17(27.9)	61(15.3)
Richest	53(75.7)	17(24.3)	70(17.5)
Total			
	300 (75)	100 (25)	400(100)

Respondents who resides in Oromiya region had 30.9% of unintended pregnancy followed by SNNRP region with 26.4% unintended pregnancy and Amhara region with 24.2% of unintended pregnancy prevalence (Figure 2).

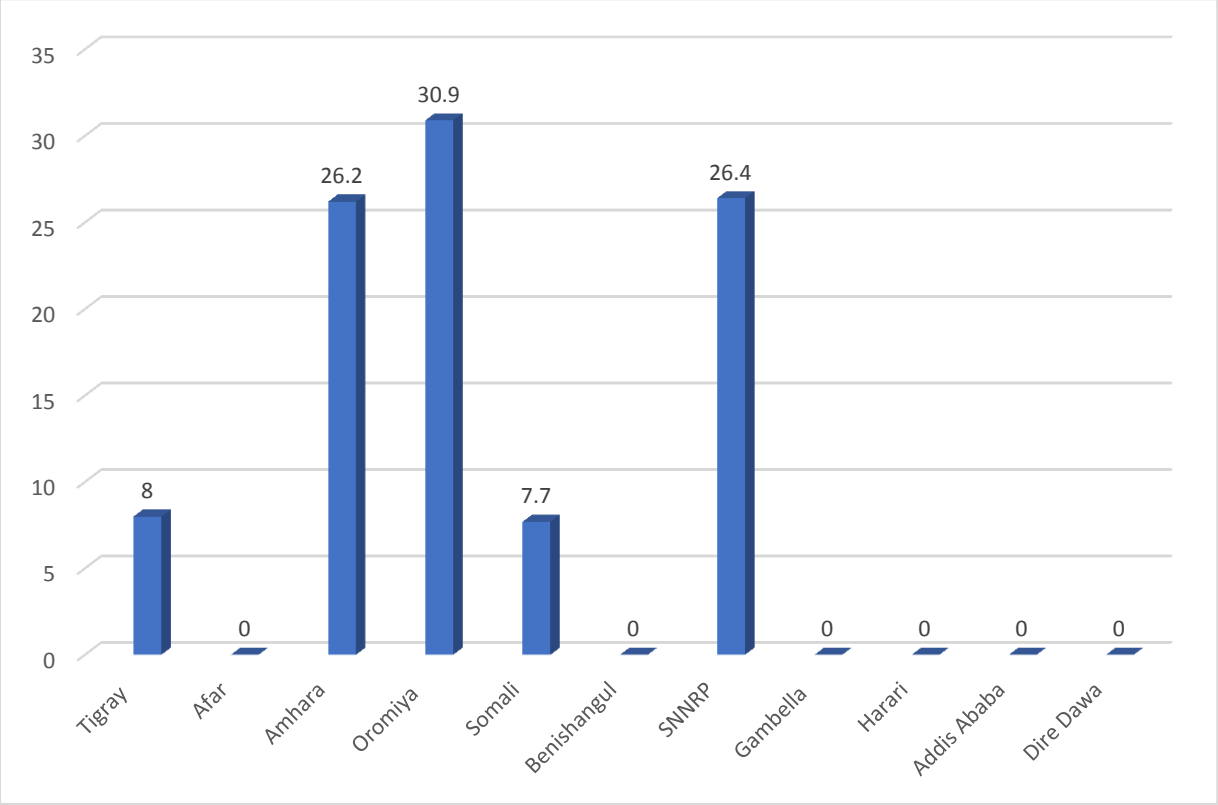

Figure 2: Prevalence of unintended pregnancy among youth in Ethiopian Demographic and health Survey 2016 by region**.**

From those youths who reported their pregnancy to be unintended 80% of had mistimed that means they did not want the pregnancy to happen at the time of conception but later. The rest 20% of them had unwanted pregnancy that was not wanted neither at the time of conception nor later (Figure 4).

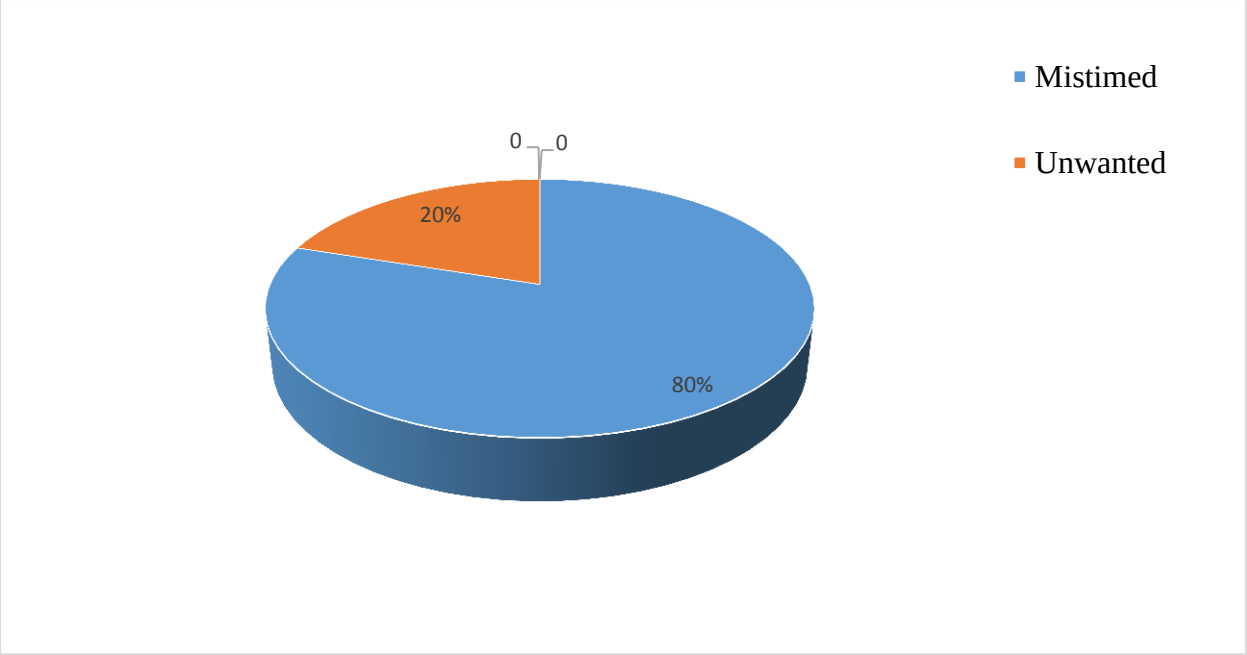

Figure 3: Mistimed and unwanted pregnancy among youths in Ethiopian Demographic and Health Survey 2016.

6.1.2. Obstetric history and knowledge on modern contraceptive of the respondents

Regarding the obstetric history of the pregnant youth 187(46.8%) of them did not have any living child, 126(31.5%) of them have one living child, 57(14.5%) of them have two living children and 27(6.8%) and 3(0.8%) of them have three and four living children respectively. From the currently pregnant youths 372(93%) of them have no history of terminated pregnancy. From those having unintended pregnancy 7(7%) have previous history of terminated pregnancy.

When we see respondents knowledge on ovulatory cycle that will influence the ability to predict risk of pregnancy from the currently pregnant youths 4.5% of them have knowledge of ovulatory

cycle during her period, 31.8% of them after period ended, 24.5% of them in the middle of the cycle, 5% of them before period begins, 16.3% of them at any time and 18.5% of them do not have knowledge on ovulatory cycle. Forty three of the respondents with unintended pregnancy think that a woman can get pregnant after birth and before period. Regarding knowledge on modern contraceptive fifteen of the respondents with intended pregnancy knows no method of contraceptive and 285 of them knows modern method and all of the respondents with unintended pregnancy know modern method. Majority of the respondents with unintended pregnancy 61(61%) never used anything to delay or avoid getting pregnant.

6.1.3. Reproductive health service utilization by pregnant youths

From a total of 300(75.0%) respondents with intended pregnancy 141(47.0%) of them did not visit health facility in the past 12 months and 37(37.0%) of the respondents with unintended pregnancy did not visit health facility in the last 12 months. From those who have intended pregnancy 90(55.9%) of them were not told about family planning at the health facility and from 58 respondents who have unintended pregnancy 15(36.8%) of them were not told about family planning at the health facility. From the total of 146 respondents with intended pregnancy 70(47.9) respondents had attended Ante natal care service and from a total of 65 respondents with unintended pregnancy 34(52.3%) of them did not have ANC service. From the respondents with unintended pregnancy 69(69%) of them have unmet need for spacing. From those with unintended pregnancy 61(61.0%) had never used contraceptive and 31(31%) of them used contraceptive since last birth. From 300 respondents with 193(64.3%) of them never used contraceptive and 101(33.7%) of them used contraceptive since last birth (Table 2).

Table 2: Reproductive health service utilization of pregnant youths aged 15-24 included in Ethiopian Demographic and Health Survey 2016.

Variable	Intended pregnancy Frequency and %	Unintended pregnancy Frequency and %	Total
Visited health facility in the last 12 months			
Yes	159 (53.0)	63 (63.0)	222 (55.5)
No	141 (47.0)	37 (37.0)	178(44.5)
At the health facility, told about family planning			
	71 (44.1)	43 (63.2)	114(52.3)
Yes	90 (55.9)	15 (36.8)	105(47.7)
No			
Attended antenatal care service			
Yes	76 (52.1)	31 (47.7)	107(50.7)
No	70 (47.9)	34 (52.3)	104(49.3)
Un met need			
Unmet need for spacing	0	69 (69.0)	69(17.3%)
Spacing failure	3 (1)	8 (8.0)	11(2.4%)
No unmet need	289 (96.3)	4 (4.0)	293(73.3%)
Not married & no sex in last 30 days	8 (2.7)	20 (20)	28(7.0%)
Pattern of Contraceptive use			
Used since last birth	101 (33.7)	31 (31.0)	132 (33%)
Used before last birth	9 (3.0)	9 (9.0)	18 (4.5%)
Never used	193 (64.3)	61 (61.0)	254 (63.5%)

For 195 (48.8%) of pregnant youths beating were justified if wife goes out without telling husband out of which 51 (26.2%) were having unintended pregnancy. For 186 (46.5%) of pregnant youths beating were justified if wife neglects the children out of which 44 (24.7%) of them have unintended pregnancy. For 164 (41%) of pregnant youths beating were justified if wife argues with husband out of which 44 (26.8%) of them have unintended pregnancy. For 132(33%) of currently pregnant youths beating were justified if wife refuse to have sex with husband out of which 37 (28%) have unintended pregnancy. For 158 (39.5%) of pregnant youths beating were justified if wife burns food out of which 43 (27.2%) of them have unintended pregnancy (table 5).

Table 3: shows pregnant youth in relation with women empowerment variables in EDHS 2016.

No	Variable	Intended pregnancy frequency and (%)	Unintended pregnancy frequency and (%)	Total frequency and (%)
beating were justified if wife goes out without telling husband				
Yes		144(48)	51(51)	195(48.8)
No		156(52)	49(49)	205(51.2)
beating were justified if wife neglects the children				
Yes		140(46.7)	46(46)	186(46.5)
No		160(53.3)	54(54)	214(53.5)
beating were justified if wife argues with husband				
Yes		121(40.3)	43(43)	164(41)
No		179(59.7)	57(57)	236(59)
beating were justified if wife refuse to have sex with husband				
Yes		96(32)	36(36)	132(33)
No		204(68)	64(64)	268(77)
beating were justified if wife burns food				
Yes		115(38.3)	43(43)	157(39.3)
No		185(61.7)	57(57)	242(60.7)

6.1.4. Regression analysis result

Bivariate regression analysis of the dependent variable and each of the independent variables was done to assess the statistical association and select independent variables statistically significantly associated with the dependent variable to include in the multivariate logistic regression analysis model. Variables that had association with the outcome variable with p- value of < 0.02 and variables that were expected to have association with the outcome variable from the literature were selected for the final model. The variance inflation factor (VIF) was checked and ranged from 1.02-1.14 between the independent variables and there was no concern of multicollinearity.

Multivariable logistic regression analysis showed that respondents currently working were less likely to have unintended pregnancy compared to those who were not currently working (AORs=0.528, CI =0.29, 0.95); married women less likely to have unintended pregnancy compared to those who were not currently married (AORs=.122, CI=0.045, 0.33); respondents who have knowledge of contraceptive methods are less likely to have unintended pregnancy compared to respondents who do not know any method (AORs=0.096, CI=0.012, 0.75); and participants having 3-6 living children were more likely to have unintended pregnancy compared to those having 0-2 living children with (AORs=2.73, CI=1.11, 6.7) (Table 3).

Table 4: Multivariable logistic regression result of factors associated with unintended pregnancy among pregnant youths in Ethiopian Demographic and Health Survey of 2016.

Variables		Unintended pregnancy		COD(95% CI)	AOR(95%CI)
		Yes (%)	No (%)		
Age	15-19	18(28.6)	99(27.9)	1	1
	20-24	45(71.4)	256(72.1)	0.97(0.53, 1.75)	1.06(0.22, 5.198)
Educational level	No education and Primary	53(84.1)	297(83.7)	1.03(0.498, 2.15)	1.06(0.48, 2.44)
	Secondary and Higher	10(15.9)	58(16.3)	1	1
Current marital status	Currently married and living with partner	53(84.1)	344(96.9)	0.17(0.07, 0.42)***	0.12(0.04, 0.33)***
	Not married	10(15.9)	11(3.1)	1	1
Occupation	Not working	33(52.4)	118(33.2)	0.55 (0.32, 0.94) **	0.53(0.29, 0.95)**
	Currently working	30(47.6)	237(66.8)	1	1
Parity	0-2 children	55(87.3)	329(92.7)	1	1
	3-6 children	8(12.7)	26(7.3)	1.84(0.79, 4.27)	2.73(CI=1.11, 6.70)**
Knowledge of any method	Knows no method	1(1.6)	313(88.2)	0.12(0.02, 0.89)**	0.096(CI=0.01, 0.75)**
	Knows modern	62(96.1)	42(11.8)	1	1

	method				
Wealth index	Poorest/poorer	32(50.8)	189(53.2)	0.91(CI=0.53, 1.55)	1.88(CI=0.51, 6.91)
	Middle/richer/richest	31(49.2)	166(46.8)	1	1

1-Reference, ***P value <0.02, ** P value <0.05, COR: crude odds ratio, AOR: adjusted odds ratio

6.2. Qualitative result

The qualitative study was conducted in Zuway Batu health Center, we interviewed nine participants. The participants were recruited from abortion and ANC clinic.

6.2.1. Socio demographic and pregnancy history

When we see the Socio demographic characteristics of the respondents the age ranges from 17-23 and most of them were current high school student only three respondents were at primary school. Almost all of them have no jobs. Majority of the respondents are in a relationship but does not live with their partner.

Table 5: Socio-demographic characteristics of youths aged 15-24 included in the qualitative study June, 2019.

Variable	Frequency
Age	
15-19	6
20-24	3
Educational status	
No education and primary education	3
Secondary and higher	6
Marital status	
Married and living with partner	1
Not currently married	9
Occupation	
Currently working	1
Not currently working	8

6.2.2. Contraceptive method knowledge and utilization

The utilization of contraception highly depends on knowledge of available contraception option in the facility. Most of the IDI participants didn't have accurate information about contraceptive methods. A 19 years old girl with unintended pregnancy decided to continue the pregnancy said that...

"They told me that the injectable may or may not cause obesity, the arm implants may cause extended period [menstrual] flow and the tablets may cause face damage [madiyat] and I was using the injectable but I discontinued for a while because I was not in any relationship..."

Most of the respondents have limited knowledge about type of contraceptive available and the side effects for each type of modern contraceptive methods.

"*… There is loop which is inserted to under arm, a three-month injection and pills. They all use for preventing pregnancy but the problem is for example loop if it stays long in your body it causes cancer but this is what I heard I did not see anyone who has cancer because of this contraceptive and the other is the injection will make your uterus (wenfit yihonal) unable to conceive in the future but I did not know or hear about the pills…"*

Young women have low ability of negotiation and this increases their risk of unintended pregnancy. After being forced to have sexual intercourse by her boyfriend, 17 years old girl said that …..

"I was ashamed of what others might say if I call anybody for help so I just say nothing."

6.2.3. Perception on contraceptive service and Decision making

Perceptions of the community towards contraception and contraceptive use by young people negatively influence their ability to use contraception especially if they are not married. A respondent aged 17 who are a student said

"*People in my area think using contraceptive before having at least one child is not good for your future health because, they think, using contraceptive will burn you inside your abdomen (hode yakatilal) and as a result you will not be able to have children in the future."*

Another factor that influences female youths' decision on their pregnancy is the support they get from family members and from their partner. Another 17 years old respondent said

"When I suspected that I was pregnant I told my boyfriend and we came here and got checked to be sure that I am pregnant and then we decided to have an abortion because I want to continue my education and I do not want to have a child at this time. Even if I decide to have the child my family will be mad at me for having it because they do not agree with this relationship that I am having with my boyfriend. When I decided to have abortion my boyfriend was willing to support me……"

6.2.4. Legal issues

Most girls do not know the legal criteria to access safe abortion service in a health facility but they considered that having this service available for women have positive effect on the health and wellbeing of women. Having abortion care service changed women's life for good particularly when women get pregnant from a person they do not want to be. The abortion service saved them from ruining their entire life. A 17 years old high school student girl said that

"*I do not know the law but for me for example I cannot raise the child by myself if I have to give birth to this pregnancy so it is very useful for women with no choice but to abort the pregnancy."*

Table 6: Major categories and sample verbatim emerging from the qualitative data June, 2019.

Main categories	Codes	Sample verbatim
Sociodemographic status		
	age, age at first sex, educational status, marital status, occupation	
Perception and utilization		
	contraceptives knowledge, periodic abstinence, side effectsattitude,	*"The reason for me to not use contraceptive was we were planning to use science method that was because my husband did not live with me currently permanently, he is now learning so he will not be with me the whole month so I thought I can use this method but this time I remember he*

	belief, contraceptives, information, source	*came only for the weekend and I think this would not happen by single time intercourse and this pregnancy happens by accident."*
Decision making		
	discussion, perception, rumor, side effects, support	"*I think if my boyfriend heard I aborted the pregnancy he will say nothing because it is because of him that I am I this problem knowing this he left me but if my family heard this they will be very mad at me so that's why I never told anyone."*
Legal issues		
	access, legal, legal issues	"*No I do not know any of them but having this service is so important for women who got such pregnancies from the person that they do not want to have any future."*

7. Discussion

The prevalence of unintended pregnancy among pregnant youths included in the EDHS 2016 were 25% and factors found to be significantly associated with the occurrence of unintended pregnancy were occupation, marital status, knowledge of contraceptive methods and parity.The reasons identified by the qualitative interview for having unintended pregnancy were; not using any modern contraceptive, contraceptive failure, low risk prediction, lack of support by family, partner disagreement and desire to continue education.

In this study the prevalence of unintended pregnancy is lower than the study done in USA and in Sudan(4, 23). Similarly secondary data analysis from the 2011 EDHS dataset showed higher prevalence(14).This prevalence was also lower than a study done in Gelemso Ethiopia, in eastern Ethiopia Harari, Arsi Negele(17-19).This difference might be most of those studies sample included pregnant mothers in reproductive age group while this study included only youths aged 15-24 years old. This lower prevalence might also be attributed by the relative accessibility of health information and services than in the previous years. On the other hand the prevalence is higher than a study done in Belessa, Bahir Dar and Gondar (5, 16, 20). The reason for this difference might be those studies cover only one site. The other reason might be those study were done in relatively town areas with relative health information and service accessibility.

With regard to region of residence the highest rate of unintended pregnancy were found in Oromiya and SNNPR followed by Amhara region. There was no unintended pregnancy in Addis Ababa, Harari and Dire Dawa which contradicts the result of 2011 EDHS where the highest rate of unintended pregnancy were found in Oromiya (38%), Harari (35%), Amhara (34%), Gambela (33%) and Addis ababa (33%) (13). Even though there was no unintended pregnancy in Harari, Gambela and Addis Ababa in this study both study found the highest rate of unintended pregnancy in Oromiya region.

The rate of unintended pregnancy is higher among no education and primary educational level and this might be due to women with low level education is less likely to access health information and also less likely to negotiate safe sex. The other reason might be due to low risk prediction ability by the young women with low educational level. The probability women with

higher educational level is less likely to involve in risky sexual act.The young women in urban residence wanting to continue their education was the other reason contributing for young women to have unintended pregnancy. This is might be due to young women being empowered and able to decide what works for them.

Occupation for not currently working was associated with unintended pregnancy with the odds of AORS= 0. 53 (CI =0.29, 0.95). This might be due to the economic dependence of young women which is difficult for raising a child without the help of partner. This finding was also supported by the qualitative study finding that women in this age group mostly depended on their partner for their expenses because either they are a student or they interrupted their education due to the pregnancy and when this happen most of the women lost the support by their partner so the pregnancy ended up being unintended. Most of young women in this age group were under family guidance and support and this have a great influence on their decision on to keep or abort the pregnancy.

Respondents who were not married or live with their partner were 88% less likely to have unintended pregnancy (AORs=0.12 CI=0.04, 0.33).This might be due to that married women and those women living with their partner are prone to continues risk of pregnancy. This might also indicate that married young women have more unmet need of contraception for spacing or limiting their fertility. In contrary, findings from a study done in Tanzania never married 2.67 (2.28–3.13) and previously married 2.01 (1.65–2.44) have higher chance of having unintended pregnancy than the currently married women (18). This finding was also contradicting with the finding in the study done in Gelemso Hospital in eastern Ethiopia that single were single marital status 5 times((AOR=5.5, 95 % CI=2.25, 13.64)) and divorced/widowed marital status 4 times (AOR=4.0, 95 % CI=1.31, 12.45)likely to have unintended pregnancy than the married women (14). The qualitative study supports this finding that the factor for having untended pregnancy was partner disagreement. This was due to most of the young women were living with their partner without being legally married and this kind of relationship could end up at any time, this happens in most of the participants in this interview and the pregnancy ended up being unintended since they do not have any means of supporting themselves or the coming baby.

Respondents who knows at least one kind of contraceptive method were 88% less likely to have unintended pregnancy (AORs= 0.12, 0.01, 0.75).This might be due to young women not being considered a main target regarding for the information and utilization of those available contraceptive methods. This might also indicate that young women has limited source of information for reproductive health issues than older women. The other reason might be due to young women do not want other person to know they know method of contraceptive as this might show utilization and this does not provide them any good in the community. This was also supported by the qualitative finding that most of the participant's reason for not using any modern contraceptive was not being accepted by the community and family for using contraceptive before marriage. The side effect of those modern contraceptive believed by the community to be caused when they are used before having at least one child was also another reason for not using. Interestingly some women use calendar method but they do not have clear and correct dates of ovulation and predict the risk of getting pregnant. The belief in the community held towards modern contraceptive have negative influence for the young women to utilize the service.

Respondents who have less than or equal to two living children were 2.73 times less likely to have unintended pregnancy (AORs= 2.73, CI=0.79, 4.27). This might be due to young women wanting less number of children due to cost of raising children. This also might be due to women being more educated and are part of the productive working group these days so that they do not have time to raise a child than in the previous years. This finding in the present study that the chance of having unintended pregnancy for youths aged 15-24 were also in line with the studies done in Ethiopia by the 2011 EDHS dataset with AORs 1.29 [1.09, 1.52] that having 3-5 children were associated with higher chance of having unintended pregnancy than those having 0-2 children (13).This finding was also in line with the finding done in Gelemso, Eastern Ethiopia (14).

8. Strength and Limitation of the study

8.1. Strength of the study

This study was done using mixed method.

The study tries to explain the quantitative result in selected health facility where the prevalence of unintended pregnancy is the highest and the prevalence is done from the nationally representative dataset.

8.2. Limitation of the study

The qualitative study only covers one site.

9. Conclusion

According to this study finding the prevalence of unintended pregnancy in Ethiopia is still high. One out of four pregnancies among youth is unintended and this implies a great deal of health burden for young women in the country. The reasons identified by the qualitative interview for having unintended pregnancy were not using any modern contraceptive, contraceptive failure, low risk prediction, lack of support by family, partner disagreement and desire to continue education.

10. Recommendation

To Ministry of Health

Effort should focus on involving the community as part of solution in decreasing unintended pregnancy.

To Oromiya Health Office

Effort should be on making young women empowered by making accessible reproductive health related information.

To Adami- Tullu- Jido- Kombolcha Woreda Health Office

Efforts also should focus on changing the wrong belief and perception about modern contraception in the community which have an influence on the utilization of those modern contraceptives by young women.

For Batu Health Center

Every client who visited health facility should get the available reproductive health information and services given in the facilities.

For Researcher

Further study should be done in area where the prevalence is lowest to identify factors contributing and use it as an example for areas with highest prevalence to decrease the problem.

11. Reference

1. Mason A. ADOLESCENT AND YOUTH DEMOGRAPHICS: A BRIEF OVERVIEW. 2010.
2. George C Patton, Carolyn Coff ey, Susan M Sawyer, Russell M Viner, Dagmar M Haller, Krishna Bose, et al. Global patterns of mortality in young people: a systematic analysis of population health data. lancet. September 12, 2009;Vol 374 881–92.
3. Melese KG, Gebrie MH, Badi MB, Mersha WF. Unintended Pregnancy in Ethiopia. Obstetrics and Gynecology International. 2014.
4. Sabahelzain MM, Abdalla SM, Meraj SA, Mohamed EY, Almansour MA, al e. Prevalence and factors associated with unintended pregnancy among married women in an urban and rural community, Khartoum state, Sudan

GLOBAL JOURNAL OF MEDICINE AND PUBLIC HEALTH. 2014;Vol. 3

(issue 4).
5. F. Y, G. N. Prevalence and associated factors of unintended pregnancy among pregnant woman in Gondar town, North west Ethiopia, 2014. BMC public health. 2014.
6. institute G. Facts on Unintended Pregnancy and Abortion in Ethiopia. 2010:1-2.
7. CHERAGHI P, POOROLAJAL J, MOEINI B, CHERAGHI Z. Predictors of Unintended Pregnancy among Married Women in Hamadan, Western Iran: A Case-Control Study. Iranian J Publ Health. 2011;Vol. 42:pp.854-9.
8. Estimates by WHO, UNICEF, UNFPA, Group WB, Division UNP. Trends In Maternal Mortality Ratio 1990 to 2015. 2015.
9. Federal Democratic Republic of Ethiopia MoHA. National Adolescent and Youth Health Strategy. October, 2016.
10. Federal Democratic Republic of Ethiopia, Ministry of health AA. Technical and Procedural Guidelines for Safe Abortion Services in Ethiopia. In: Department FH, editor. 2006.
11. Federal Democratic Republic of Ethiopia , Central Statistical Agency Addis Ababa E. Ethiopian Demographic and Health survey 2016. Ethiopia2016.
12. World Health Organization Department of Maternal N, Child and Adolescent Health. Preventing early pregnancy and poor reproductive outcomes among adolescents in developing countries: what the evidence says. 2011.
13. Francisco V-N, Carlos V-R, Eliza V-R, Octelina C-R, Maria I. Tobacco and alcohol use in adolescents with unplanned pregnancies: relation with family structure, tobacco and alcohol use at home and by friends. Afri Health Sci. 2016.
14. Dereje Habte, Sisay Teklu, Tadele Melese, G. M, Magafu MD. Correlates of Unintended Pregnancy in Ethiopia: Results From a National Survey. plosone. December 2013 Volume 8
15. Tebekaw Y, Aemro B, Teller C. prevalence and determinants of unintended childbirth in Ethiopia BMC Pregnancy and Childbirth. 2014.
16. A. E, M. A, S. T, A. G. Level of unintended pregnancy among reproductive age women in Bahir Dar city administration, Northwest Ethiopia. BMC public health. 2015.
17. Mohammed F, Musa A, Amano A. Prevalence and determinants of unintended pregnancy among pregnant woman attending ANC at Gelemso General Hospital, Oromiya Region, East Ethiopia: a facility based cross-sectional study. BMC Pregnancy and Childbirth. 10 to April 13, 2015.
18. Fite RO, Mohammedamin A, Abebe TW. Unintended pregnancy and associated factors among pregnant women in Arsi Negele Woreda, West Arsi Zone, Ethiopia. BMC Research Notes. 2017.

19. Worku S, Fantahun M. Unintended pregnancy and induced abortion in a town with accessible family planning services: The case of Harar in eastern Ethiopia

Ethiopia Journal of Health Development 2001::79-83.
20. T. TA, Mengistu M, Shimeka A. Prevalence of unintended pregnancy and associated factors among married women in west Belessa Woreda, Northwest Ethiopia, . BMC Reproductive Health. 2016
21. Alba DiCenso, Gordon Guyatt, A Willan, Griffith L. Interventions to reduce unintended pregnancies among adolescents: systematic review of randomised controlled trials BMJ. 15 JUNE 2002; VOLUME 324
22. T M, A. E, F. B. Who are the targets of youth programs: results of a capacity building exercise in Ethiopia EthiopJHealth Dev. 2005.
23. Janet ER, Jonathan Z, Eve R, Gina W, Ralph D. Predicting Unprotected Sex and Unplanned Pregnancy among Urban African-American Adolescent Girls Using the Theory of Gender and Power. Journal of Urban Health: Bulletin of the New York Academy of Medicine. 2004;Vol. 93.
24. Clara C, Kathy B, Aoife MD, Kaballa M, John C, Deborah W, et al. Risk factors for unplanned pregnancy among young women in Tanzania. jFam Plann Reprod Health Care. 2008.
25. Kabiru CW, Ushie BA, Mutua MM, Izugbara CO. Previous induced abortion among young women seeking abortion-related care in Kenya. **BMC Public Health**. 2012.
26. Mustafa AL. prevalence and determinants of unintended pregnancy among women in south-western Nigeria. GHANA MEDICAL JOURNAL. 2012;vol.49.
27. Gelaye AA, Taye KN, Mekonen T. Magnitude and risk factor of abortion among female wolayita sodo university, Ethiopia. BMC Womens Health. 2011.
28. cheng D, Schwarz EB, Horon I. unintended pregnancy and associated maternal preconception,prenatal and postpartum behaviors. elsevir. 2008.
29. Caroline M, James T, Nathalie B. Contraceptive Paths of Adolescent Women Undergoing an Abortion in France. Adolescent Health. april 2012:389-94,.
30. Jayaweera RT, Nguis FM, Hall KS, Gerdts C. Women's experiences with unplanned pregnancy and abortion in Kenya:A qualitative study. PLoS ONE 13(1). 2015.
31. Maina BW, Mutua MM, Sidze EM. Factors associated with repeat induced abortion in Kenya. BMC Public Health. 2015.
32. Tesfaye G, Hambisa MT, Semahegn A. Induced Abortion and Associated Factors in Health Facilities of Guraghe Zone, Southern Ethiopia. Journal of Pregnancy. 2010.

12. Annexes

12.1. Subject information sheet

Addis Ababa University

School of public health

Information sheet

Hello, my name is Tirfe Emshaw. I am a student of Addis Ababa University School of public health conducting a research on the assessment of prevalence of unintended pregnancy and understanding the barriers in preventing unintended pregnancy among youth in Ethiopia for partial fulfillment of masters of public health. I received permission from Addis Ababa university school of public health and Addis Ababa health office to conduct this study.

You are selected to participate in this study because you are here to use abortion care and/or Antenatal care. Your participation in this study is voluntary. If you agree to participate in the study, you will be asked to answer some questions about yourself, your pregnancy experience. The interview with you will take about 30-45 minutes.

It is your right to be willing to participate in the study or not. If you are willing, you have the right to stop at any time or withdraw without giving any reason which you will not be subjected to any ill-treatment.

There will be no direct benefit by participating in this study but in future information gathered by this study will helps policy makers, programmers and researchers to give appropriate attention on issues of youth unintended pregnancy experience and problems in Addis Ababa and also will help to formulate appropriate interventional strategies focusing on youth.

The information that you provide will be kept confidential by using only code numbers and locking the data. Only the members of the study team will have the access to the non-coded data and the data will not be used for purposes other than the study. Your willingness and active participation is very important for the success of this study.

If you need any further information or explanation regarding to the study, you can have this address to contact.

Name – Tirfe Emshaw Tel. no – 0912723056 E-mail –emshawt@gmail.com

12.2. English version of interview guides

Before we start the interview we will ask for their consent, after we get their consent we turn on the recorder and start our discussion first by thanking the interviewee.

Interview number:

Participant unique number:

Interviewer name:

Code:

Date of interview:

Interview starts here:

Interview ends here:

Socio demographic and pregnancy history

1. First we will discuss about you and your current pregnancy (ask about age, educational level, marital status,)

- How old are you?
- What is your job/your source of income?
- What is your educational status?
- What is your marital status?
- How old were you when you had your first sexual intercourse?
- How many pregnancies did you have until now?
- How many living children did you have now?
- Did you encounter unintended pregnancy before?
- What decision did you took at the time? Why?
- Did you had abortion before? (how long does the pregnancy took, where did you got the service, what services did you got, who helped you at the time (husband, family, friend, other)

Contraceptive method knowledge and utilization

2. Now we will discuss contraceptive methods, what kind of contraceptive methods did you know? (Where did you hear the information, what kind of benefits and side effects did you for each type?)
    - Which method did you choose to use? Why?
    - What types of contraceptive were there in the health facility you visited?
    - What side effects and benefits did were you told about the method you chose?
    - How much did you pay for the service?
    - Did you encounter any problem in accessing the method you chose? What were they?
    - What did you know about the emergency contraceptive? (How it is taken, how does it work?)
    - From where could you get contraceptive method other than health center and hospitals?

3. If you did not ever use any contraceptive method, why was that?
    - Because of high cost, did not get type you wanted, not knowing the methods at all, or fear of side effects?
    - Did you have intention of using any method in the future? If you want to use any method what will be the response of your partner, family…
    - Could you tell me when could you get pregnancy if you don't use any contraceptive method and have sexual intercourse?
    - What will happen to your relationship if don't want to have sexual intercourse on those days?

Perception on contraceptive service

4. Now we will discuss the communities you live in kind of attitude towards using contraception and unintended pregnancy?
    - How about unmarried girls using contraceptive? In addition how do they perceive if unmarried and underage girls got pregnant?

Decision making

5. Let's discuss on your current pregnancy, how did you became aware of your pregnancy?
    - How did you decide to continue/abort this current pregnancy?
    - What was the contribution of your partner/family friends or people around you/ in what way did they helped you (money, emotional support…)
    - What were your concerns while deciding?
    - What things helped you for your decision?
    - How long does it take you to decide?
    - How do feel about your decision now? Why?
    - In your opinion in such issues who should have the final saying whether to continue or abort the pregnancy?
    - What would be your family's response if they knew you had an abortion (your partner, friends …)?

Legal issues

- Do you know the abortion law in Ethiopia (abortion is legal on the certain condition)?
- In your opinion how does it help women in this area?

Conclusion

- I finished my questions I am very happy with our stay you can say if you have anything to add before I turn off the recorder.

  Thank you very much for your time!!

12.1.የአማርኛየስምምነትማሸገንዘቢያቅጽ

አዲስ አበባ ዩኒቨርሲቲ

ህብረተሰብ ጤና ሳይንስ ኮሌጅ

ጤና ይስጥልኝ፤ ስሜ ትርፌ እምሻው ይባላል፡፡ የመጣሁት በአዲስ አበባ ዩኒቨርስቲ ህብረተሰብ ጤና ሳይንስ ኮሌጅ ነው፡፡ የሁለተኛ ድግሪ መመረቂያ ጥናት የምሰራው በወጣቶች ዙሪያ ያለውን ያልተፈለገ እርግዝናን ለመከላከል ያሉት ችግሮች ላይ ነው፡፡ ጥናቱን ለማድረግ ከአዲስ አበባ ዩኒቨርሲቲ ህብረተሰብ ጤና ሳይንስ ኮሌጅ እና ከአዲስ አበባ ጤና ቢሮ ፈቃድ አግኝቻለሁ፡፡

እርስዎ የተመረጡት ደህንነቱ የተጠበቀ የውርጃ አገልግሎት/የቅድመ ወሊድ ክትትል አገልግሎት ለመጠቀም እዚህ በመገኘቶት ነው፡፡ በጥናቱ ላይ መሳተፍ መሉ በመሉ በርስዎ ፈቃድ ላይ የተመሰረተ ሲሆን ለመሳተፍ ከተስማሙ መጠይቁ የተለያዩ ክፍሎችን ያካተተ ይሆናል ስለ እርስዎ እንዲሁም በውርጃ አገልግሎት ዙሪያ ስላሎት ልምድ ጥያቄዎችን ይጠየቃሉ፡፡

ቃለ መጠይቁ ወደ 30-45 ደቂቃ የሚፈጅ ይሆናል፡፡ በጥናቱ የመሳተፍ ወይም አለመሳተፍ መሉ ሙበት አለዎት አንዲሁም ለመሳተፍ ፈቃደኛ ከሆኑ በኃላ በፈለጉት ጊዜ ማቋረጥ ወይም ማቆም ይችላሉ፡፡ በጥናቱ አለመሳተፍ የሚደርስቦ ጉዳት የለም፡፡

በዚህ ጥናት ላይ በመሳተፍዎ የሚያገኙት ቀጥተኛ ጥቅም የለምነገር ግን የዚህ ጥናት መደርግ መመሪያ አውጪዎችን እንዲሁም አጥኚዎችን በአዲስ አበባ ውስጥ በጉዳዩ ዙሪያ ስላለው ሁኒታ የበለጠ እወቀት እና ግንዛቤ እንዲኖራቸው ያደርጋል እንዲሁም ለወደፊት ወጣቶች የተሻለ አገልግሎት እንዲያገኙየሚያግዝ ደንቦችን ለማዉጣት ይረዳቸዋል፡፡

ከዚህ ጥናት የተሰበሰበው መረጃ መሉ ሚስጥራዊነቱ የተጠበቀ ይደረጋል፡፡ ከጥናት ቡድኑ ውጪ ማንም የተሰበሰበውን መረጃ ማግኘት አይችልም፡፡ እንዲሁም መረጃውከጥናቱ አላማ ውጪለ ምንም አይውልም፡፡ የእርስዎ ፈቃደኝነትና የነቃተሳትፎ ለዚህ ጥናት ስኬታማነት አስፈላጊ ነው፡፡

ስለ ጥናቱ ጥያቄ ወይም ተጨማሪ መረጃ ከፈለጉ በዚህ አደራሻ መጠየቅ ይችላሉ፡፡

ስም፡ -ትርፌ እምሻውስልክቁጥር፡ -0912723056 ኢሜል፡ - emshawt@gmail.com

12.2. የ አ ማር ኛ የ ቃለ ምልልሱመመሪ ያ

ቃለ ምልልሱን ከ መጀመራችን በ ፊ ት ስ ምምነ ታቸውን እ ን ተ ይ ቃለ ን ፡ ፡ ስ ምምነ ታቸውን ካ ገ ኝ ን በ ኋላ መቅ ረ ጸ -ድምጽ ን እ ና በ ራ ዋ ለ ን ፡ ፡ ነ ግ ግ ራ ች ን ን ተ ስ ታ ፊ ዋ ን ለ ፈ ቃ ደ ኝ ነ ቷ በ ማመስ ገ ን እ ን ጀ ምራ ን ፡ ፡

የ ቃለ ምልልሱ ቁ ጥ ር :

የ ተ ሳ ታ ፍ ዋ መለ ያ ቁ ጥ ር :

ቃለ ምልልሱን ያ ካ ሄ ደ ዉ ሰ ው ስ ም:

ኮ ድ:

የ ቃለ ምልልሱ ቀ ን :

ቃለ ምልልሱ የ ጀ መረ በ ት ሰ አ ት :

ቃለ ምልልሱ ያ ለ ቀ በ ት ሰ አ ት :

1. እ ሺ አ ሁን ስ ለ አ ን ቺ እ ና ስ ለ አ ሁኑ እ ር ግ ዝ ና ሽ እ ን ወ ያ ያ ለ ን
   - እ ድ ማ ሽ ስ ን ት ነ ዉ?
   - ስ ራ ሽ ምን ድ ን ነ ዉ/የ ገ ቢ ምን ጭ ሻ ምን ድ ነ ዉ ?
   - ት ም ህ ር ት አ ስ ከ ስ ን ት ተ ም ረ ሻ ል ?
   - አ ግ ብ ተ ሻ ል ?
   - ለ መ ጀ መ ሪ ያ ጊ ዜ ግ ን ኙ ነ ት ያ ደ ረ ግ ሽ ው በ ስ ን ት አ መ ት ሽ ነ በ ር ?
   - በ ጠ ቅ ላ ላ ስ ን ት እ ች ር ግ ዝ ና ነ በ ረ ሽ ?
   - ስ ን ት በ ሂ ወ ት ያ ሉ ል ጆ ች አ ሉ ሽ ?
   - ከ ዚ ህ በ ፊ ት ከ እ ቅ ድ ሽ ወ ጪ ያ ጋ ጠ መ ሽ እ ር ግ ዚ ና ነ በ ር ?
   - ያ ን ጊ ዘ ምን ነ በ ር ዉ ሳ ነ ሽ ? ለ ምን ?
   - ከ ዚ ህ በ ፊ ት ዉ ር ጃ አ ጋ ጥ ሞ ሽ ያ ዉ ቃ ል ?(እ ር ግ ዝ ና ሽ ስ ን ት ጊ ዝ ቆ የ ፣ የ ት ነ በ ር የ ዉ ር ጃ አ ገ ል ግ ሎ ቶ ት ያ ገ ኘ ሽ ዉ፣ ምን ተ ደ ረ ገ ል ሽ ፣ ምን ምን አ ገ ል ግ ሎ ቶ ች ን

አገኘሽ፣ እርዳታ ያረገልሽ ሰዉ ነበር (ባልሽ፣ በተሰብ፣ ጋደኛ፣ የአካባቢዉ ሰዉ)፣ አሁን ምን ያህል ጊዘ ሆነ ዉ?)

ስለ ወሊድ መቆጣጠሪያ መንገዶች ዙሪያ ያለውየእዉቀት ደረጃ አጠቃቀምሁነታ

2. እሺ አሁን ስለ ወሊድ መቆጣጣጠሪያ ዘደዎች እንወያያለን የ ወሊድ መቆጣጠሪያ መንገዶች ምን ምን ታቂያለሽ?(ከየት ሰማሽ?ምን ምን ጉዳትና ጥቅም ታቂያለሽ ስለያንዳንዳቸዉ?)
   - አንቺ ምን ለመጠቀም ወሰንሽ?ለምን?
   - በሂድሽበት የጠና ተቋም ዉስጥ ምን ኣይነት የ ወሊድ መቆጣጣሪያ ዘደዎች ነበሩ?
   - ስለተጠቀምሺዉ የ ወሊድ መቆጥጠሪያ ጥቅምና ጉዳት ምን ምን ተነገረሽ?
   - ለተጠቀምሽዉ ኣገልግሎት ምን ያክል ክፍያ ከፈልሽ?
   - ስትጠቀሚየነበረውን ዘዴ ለማርኘት ችግር አጋጥሞሻል ወይ?
   - ስለ ድንገተኛ የ ወሊድ መቆጣጣሪያ ምን ታዉቂያለሽ?
   - የ ወሊድ መቆጣጣሪያ ዘደዎችን ከ ሆስፒታልና ከጠና ጣቢያ ዉጪከየት ሊታገኚ ትችያለሽ?
3. ከዚህ በፊት ወሊድ መቆጣጣሪያ ተጠቅመሽ የማታቂዉበምን ምክንያት ነዉ?
   - ዋጋው፣ የምትፈልጊዉን ኣይነት ስላላገኘሽ ነዉ፣ እንዳለ ስለማታቂ ነዉ፣ ወይስ ጉዳት ያመጣብኛል ብለሽ አስበሽ ነዉ?
   - ከዚህ በኋላስ የመጠቀምፍላጎት አለሽ?
   - የመጠቀምፍላጎት ቢኖርሽ ወሳነሽን እንደት ይመለከቱታል ባካባቢሽ ያሉሰዎች(ባለበትሽ)?
   - የ ወሊድ መቆጣጠሪያ ሳትጠቀሚ ወሲብ ብትፈትጽሚልታረግዚ የሚትችይባቸዉን ቀናት እስኪ ኒገሪግኝ?
   - በነዚህ ቀናት ወሲብ መፈጸምኣልፈልግምብትይ በግንኙንትሽ ላይ ምን ይፈጠራል?

በ ወሊድ መቆጣጠሪያ መንገዶች ዙሪያ ያለውአመለካከት

4. እሺ አሁን ደሞ በ ወሊድ መቆጣጣሪያ ዘደዎች ዙሪያ ያለዉን አመለካከት እንወያያለን በምትኖሪበት አካባቢ ላይ የሚኖረው ሁብረተሰብ ስለ ወሊድ መቆጣጠሪያ ምን አመለካከት አለዉ?
   - ያላገቡሴቶች የ ወሊድ መቆጣጠሪያ ሲጠቀመስ ህብረተሰቡእንዴት ይመለከተዋል
   - በተመሳሳይ መልኩ ያላገቡ እንዲሁም እድሜያቸው ያልደረሰ ሴቶች እርግዝና ሲያጋጥማቸው እንዴት ይመልከተዋል?
   - እርግናቸውን ማቋረጥ ለሚያስቡሴቶች በአካባቢያችሁ ምን ኣይነት እርዳታ ይደለግላቸዋል? ወሳነ አሰጣጥ

5. አሁን ደሞ የአሁኑን እርግዝናሽን እንዴት ልታውቂ አንደቻልሽ ንገሪግኝ? እርግዝናሽን ለማቹረጥ/ለመቀጠል እንዴት ወሳኔ ላይ ደረሽ (ባለበትሽ፣ ቤተሰቦችሽ/ጋደኞችሽ/ጎረቤቶች በምን መልኩ ነበር የረዱሽ? እርዳታቸው በምን መልኩ ነበር፤ በገንዘብ፣ በቁስ፣ በሀሳብ ወ.ዘ.ተ...

- ወሳኔሽን በምትወስኚነት ጊዜ ምን አይነት ጥርጣሬዎች ነበሩሽ? እርግዝናሽን ለማቋረጥ/ለመቀጠል የመጨረሻ ወሳኔ ላይ ለመድረስ ምን ረዳሽ? የመጨረሻ ወሳኔ ላይ ለመድረስ ምን ያህል ጊዜ ፈጀብሽ? ስለወሳኔሽ አሁን ምን ይሰማሻል...ለምን
- በአንቺ አመለካከት በዚህ ጉዳይ ላይ የመጨረሻ ወሳኔ መሆን ያለበት የማን ይመስልሻል
- ቤተሰቦችሽ ውርጃ እንደፈጸምሽ ቢያውቁ ምላሻቸውምን ይሆናል፡፡ (ማሻሻያ፤ የወንድ ጉደኛሽስ/ባለቤትሽስ፣ የሀይማኖት አባትሽስ፣ ት/ቤት...) ያልታቀደ እርግዝና ያጋጠማት ጉደኛ ብትኖርሽ ምን ምክር ትለግሻታለሽ

6. የህግ ጉዳይ

- በኢትዮጵያ ውስጥ ስላሉ የውርጃ ህጎች ታውቂያለሽ (ኢትዮጵያ ውስጥ ውርጃ የሚቀደው በተወሰኑ ሁኖታዎች ላይ ብቻ ነው፤ ይህንን ሕግ እንዴት ታይዋለሽ፤ ይህ ህግ በዚህ አካባቢ ለሚኖሩ ሴቶች ምን ፋይዳ አለው) በዚህ ህግ ላይ ምን አስተያየት አለሽ።

7. *መደምደሚያ*

- በእኔ በኩል ያለኝ ጥያቄ ይሄ ነው፡፡ በቆይታችን በጣምደስተኛ ነኝ፡፡ የምትጨምሪው ነገር ካለ መቅረጸ-ድምጹን ከማጥፋቴ በፊት እድሉን ልስጥሽ፡፡
    - ስለነበረን ቆይታ እጅግ አድርጌ አመሰግናለሁ