



**COLLEGE OF HEALTH SCIENCES**  
**DEPARTMENT OF GYNECOLOGY AND OBSTETRICS**

**Prevalence and Factors Associated with Induced Abortion  
among Family Planning Service Utilizers in Three Teaching  
Hospitals of Addis Ababa University**

**Principal investigator: Henok Mekonnen (MD, Gyn Obs Resident)**

**Advisors:**

**Dr Endalkachew Mekonnen.** MD, MPH (Obstetrician and Gynecologist, Urogynecologist and Reconstructive Pelvic Surgeon, Assistant Professor in ObGyn)

**Dr Salih Hassen.** MD (Obstetrician and Gynecologist, Urogynecologist and Reconstructive Pelvic Surgeon, Assistant Professor in ObGyn)

A thesis submitted to the department of gynecology and obstetrics, college of health sciences, Addis Ababa University in partial fulfillment of the requirements for the specialty in gynecology and obstetrics.

June, 2024, Addis Ababa, Ethiopia

## **ACKNOWLEDGMENT**

I would like to thank the department of Obstetrics and Gynecology at Addis Ababa University, college of health sciences, School of Medicine, for giving me the opportunity to conduct this research thesis. I would also like to extend my gratitude to my advisors Dr Endalkachew Mekonnen and Dr Salih Hassen for their constructive comments and input from title selection to the development of this thesis. Lastly, my deepest gratitude goes to the data collectors and study participants, without their contribution this work was impossible.

## TABLE OF CONTENTS

<b>ACKNOWLEDGMENT</b> .....	2
<b>ACRONYM AND ABBREVIATION</b> .....	5
<b>ABSTRACT</b> .....	8
<b>1.INTRODUCTION</b> .....	10
Background .....	10
Statement of the Problem .....	11
Significance of the Study .....	13
<b>2.LITERATURE REVIEW</b> .....	14
Magnitude of Induced Abortion .....	14
Determinants of Induced Abortion.....	15
<b>3.CONCEPTUAL FRAME WORK</b> .....	18
<b>4.OBJECTIVES</b> .....	19
<b>5.METHODS</b> .....	20
Study Area .....	20
Study Design and Period .....	20
Source and Study Populations.....	20
Inclusion and Exclusion Criteria.....	20
Sample Size and Sampling Procedure.....	20
Study Variable .....	21
Operational Definitions .....	22
Data Collection, Management, Quality Assurance and Analysis.....	22
Ethical Considerations.....	23
Dissemination Plan.....	24
<b>6. Result</b> .....	24
6.1 Sociodemographic characteristics of the study participants .....	24
6.2 Obstetric characteristics of the study participants .....	25
6.3 Family planning related characteristics of the study participants .....	27
6.4 Abortion related knowledge of the study participants.....	<b>Error! Bookmark not defined.</b>
6.5 Induced abortion related characteristics of the study participants .....	29
6.6 Reproductive health related characteristics of the study participants .....	30

6.7 Sociodemographic characteristics of the study participants during induced abortion.....	32
6.8 Abortion decision related characteristics of the study participants .....	33
6.9The determinant factors of induced abortion .....	35
<b>7. Discussion.....</b>	<b>36</b>
<b>8. Conclusion .....</b>	<b>38</b>
<b>9. Recommendation.....</b>	<b>39</b>
<b>10. REFERENCE .....</b>	<b>40</b>
<b>INDEX.....</b>	<b>43</b>
Annex I: Information Sheet.....	43
Annex II: Consent Form – English Version .....	45
Annex III. Questionnaire – English Version .....	46
Annex IV: Dummy Table .....	53

## List of tables

Table 1. The sociodemographic characteristics of the study participants who come for Family Planning Service Utilizers in Three Teaching Hospitals of Addis Ababa University, 2024.....	25
Table 2. Obstetric characteristics of the study participants.....	26
Table 3. Family planning related characteristics of the study participants .....	28
Table 4. Abortion related knowledge of the study participants.....	<b>Error! Bookmark not defined.</b>
Table 5. Reproductive health related characteristics of the study participants .....	30
Table 6. Sociodemographic characteristics of the study participants during induced abortion .....	32
Table 7. Abortion decision related characteristics of the study participants .....	34
Table 8. The bivariate and multivariate logistic regression of association between independent variable and induced abortion among women who come for family planning service in the three teaching hospitals, AAU, 2024.....	36

## List of figures

Figure 1. Conceptual frame work.....	18
Figure 2: The types of abortion.....	27
Figure 3: Types of induced abortion.....	29
Figure 4: The prevalence of induced abortion among study participants.....	29
Figure 5: The list of reasons for non-medically indicated induced abortion by the study participants...	30

## ACRONYM AND ABBREVIATION

AOR	Adjusted Odds Ratio
CI	Confidence Interval
EDHS	Ethiopian Demographic Health Survey
GMH	Gandhi Memorial Hospital
MCH	Maternal and Child Health
TASH	Tikur Anbessa Specialized Hospital
WHO	World Health Organization
ZMH	Zewditu Memorial Hospital

## **Abstract**

**Background:** There has been a significant reduction in the rate of induced abortion in high-income countries, while the rate remains unchanged in low- and middle-income countries. In Ethiopia, in particular, the number of women of reproductive age seeking an induced abortion is increasing. However, there is limited information concerning the reasons why it is increasing. Abortion, besides its significant psycho-social impact, is associated with medical complications including anemia, shock, genital tract infection, incomplete evacuation, peritonitis, and renal failure, which account for increased maternal morbidity and mortality.

**Objective:** To determine the prevalence and identify the factors associated with induced abortion among women who come for family planning services in three teaching hospitals of Addis Ababa University in Addis Ababa in 2024.

**Methods:** A facility based cross sectional study was conducted on 411 women, who came for family planning services in the three teaching hospitals of Addis Ababa University, Department of Obstetrics and Gynecology from January 1, 2024 to April 30, 2024. Data was collected using a self-administered structured questionnaire, entered and analyzed by SPSS version 25 software. Logistic regression model was fitted to determine the predictors of induced abortion and those variables with p value <0.2 in binary logistic regression was entered into a multi-variable logistic regression analysis. Finally, variables with a p value of <0.05 in multi-variable logistic regression model was declared as statistically significant.

**Result:** Among the 411 study participants the prevalence of induced abortion was 28%. Age 25-29 and 30-34 years with AOR=6.5, 95%CI=1.77, 24.08 & AOR=5.5, 95%CI=1.59, 18.86 respectively, high level of education with AOR=3.8, 95%CI=1.52, 9.23, having two or more lifetime sexual partners with AOR=7.3, 95%CI=, 3.57, 14.88, having the first sex at <18 years of age with AOR=12.6, 95%CI=6.39, 68.68) were significant associated with having an induced abortion.

## **Conclusion and Recommendation:**

In this study the prevalence of total induced abortion was 29.3% and the prevalence of non-medically indicated induced abortion was 28%. The determinant factor for induced abortion were age of 25-29 and 30-34 years (AOR=6.5, 95%CI=1.77, 24.08 & AOR=5.5, 95%CI=1.59, 18.86

respectively), high level of education (AOR=3.8, 95%CI=1.52, 9.23), having experience of more than one sexual partner (AOR=7.3, 95%CI=, 3.57, 14.88), first sexual intercourse at <18 years of age (AOR=12.6, 95%CI=6.39, 68.68) were statistically significant factor for induced abortion.

Based on the findings the following are recommendation made in order to reduce prevalence of induced abortion :

- ✓ Proper sexual education at lower educational level:
- ✓ Public education
- ✓ Proper awareness creation in higher educations
- ✓ Enhanced Access to Contraceptives
- ✓ Tailored Communication Strategies
- ✓ Counseling and Support Services
- ✓ Policy and Advocacy
- ✓ Parental and Partner Involvement

**Key word:** Prevalence, Induced abortion, Reproductive age group.

## **1. INTRODUCTION**

### **1.1 Background**

Abortion is an increasingly important issue to discuss since it has significant implication on multiple aspects of a woman's life and the society at large. World Health Organization (WHO) defines abortion as a termination of pregnancy by the expulsion of a fetus or embryo from the uterus before viability. It can occur spontaneously or it can be induced (1, 2) .

Abortion can be classified as spontaneous (which can further be sub-classified as threatened, inevitable, incomplete, complete or missed abortion) or induced abortion and therapeutic abortion. Therapeutic abortion is the decision to terminate a pregnancy due to maternal medical condition or lethal congenital anomalies of the fetus and it is very less common and accounts for just a small percentage of total abortions (3).

Induced abortion in turn is defined as a purposeful termination of pregnancy prior to twenty weeks for developed countries and twenty-eight weeks for developing countries (4). Induced abortion can be safe or unsafe. Unsafe abortion is a procedure for termination of pregnancy either by a person lacking the necessary skills or in an environment lacking minimal medical standards or both (3).

Globally, from 210 million pregnancies that occur annually, about 22% end up in induced abortion (5). That means an estimated 56 million induced abortions occurred each year for no medical reason, causing the lives of more than 200,000 pregnant women and the agony of millions more people. In all unsafe abortion estimated as 45% each year (6). Therefore, this study aimed to see the prevalence and associated factors of induced abortion among women who come for family planning service in selected teaching hospitals of Addis Ababa city.

## 1.2 Statement of the Problem

Abortion has major public health problem that doesn't only affect the mother's life but the society and the overall health system at large. Abortion related complication significantly affects maternal health and accounts for increased maternal morbidity and mortality (7).

Fifty-six million induced abortions (safe and unsafe) were performed worldwide every year between the years 2010-2014, and about 7 million unsafe abortions had taken place in developing countries. It brings approximately 80,000 maternal deaths and hundreds of thousands of disabilities (8).

Worldwide women of all ages seek abortion, but in Africa, there is the highest burden of illness and deaths from complications related to induced abortion (8). Deaths from induced unsafe abortion are known to contribute to approximately 14% of all maternal deaths in Africa (9).

Ethiopia is one of the countries with the highest maternal mortality with 412 deaths per 100,000 live births according to EDHS 2016 report (10). After the amendment of Ethiopia's abortion law in 2005, even though abortion related morbidity and mortality has decreased, post-abortion complications from induced abortion continued as the significant health burden of women in the reproductive age group.

A nationally representative survey conducted in Ethiopia in 2008 revealed that an estimated 382,000 induced abortions were performed and 52,600 women were treated for complications of induced abortion and more than 13,000 required admission(11, 12).

On another subsequent study an estimated 620,300 induced abortions were performed in Ethiopia in 2014. The annual abortion rate was 28 per 1,000 women aged 15–49, an increase from 22 per 1,000 in 2008, and was highest in urban regions (Addis Ababa, Dire Dawa and Harari). Between 2008 and 2014, the proportion of abortions occurring in facilities rose from 27% to 53%, and the number of such abortions increased substantially; nonetheless, an estimated 294,100 abortions occurred outside of health facilities in 2014. The number of women receiving treatment for complications from induced abortion nearly doubled between 2008 and 2014, from 52,600 to 103,600(11). Research has shown that the high burden of post-abortion complications

consumed a large portion of the reproductive health budget in Ethiopia with annual national cost of US \$47 million(13).

Moreover, unsafe and induced abortion is one of the leading causes of pregnancy-related maternal deaths. Global estimates from 2010–2014 demonstrate that 45% of all induced abortions are unsafe. Of all unsafe abortions, one third were performed under the least safe conditions, i.e., by untrained persons using dangerous and invasive methods (14).

Among the direct cause of maternal death in the world, unsafe abortions account eight percent of overall maternal deaths; at least 22,800 women die annually from complication of unsafe abortions(2, 6). and almost six in 10 abortions in Ethiopia are unsafe(15).

Therefore, assessing the prevalence of induced abortion and associated factors among women reproductive age groups in the study area is very important to improve maternity services and thereby reducing maternal death through proper planning, providing health promotion, education, and counseling about complications of induced abortion and options of tackling the situation.

### **1.3 Significance of the Study**

Several studies done at different specific area prevailed the increasing rate of abortion from time to time. However, there was no specific study conducted on magnitude of induced abortion and associated risk factor related with induced abortion among women who came for maternity services in those big teaching institutions based in Addis Ababa; even though these institutions are responsible for giving reproductive health service for the majority of the population in the city and neighboring villages from Oromia region.

Research on the magnitude of induced abortions and associated risk factors in a specific area can inform designing effective health education and health promotion policy, programs and practice targeting risk groups. We hope that this study would generate baseline information that may inform implementation of evidence-based interventions in the study area.

## **2. LITERATURE REVIEW**

### **2.1 Magnitude of Induced Abortion**

A study done on female entertainment worker in Cambodia on magnitude of induced abortion showed that one-fourth (25%) of the respondents reported having been pregnant at least once, and 21.4% reported having at least one induced abortion during the time working (28). The magnitude of second-trimester-induced abortion in the study setting was 23% (95%CI: 18.5%, 27.4%) (16).

A study has examined the prevalence of induced abortion in Ghana and its associated factors using data from women who reported having a pregnancy in the 5years preceding 2017 GC. Overall, about a fifth (20.4%) of the sampled women reported having had induced abortion(17)

A study done in Samara University shows sixty-two (12.2%) of the students had pregnancy history, from those an induced Abortion was reported by 45 (8.8%) students. Skilled health professionals attend only 10 (22.2%) of the total abortion the rest 35(87.8%) were unsafe abortion terminated by people lacking the necessary skills or in an environment lacking minimal medical standards or both. (18).

Study done in college students of Debre Tabor town the overall prevalence of induced abortion was found to be 18.6 %. Out of those who had history of induced abortion, 24(54.5%) did complete the process at home,14 (31.8%) did it in governmental health institutions, and the remaining 6 (13.7%) did so at private clinics. Regarding the number of times of abortion, 45 (77.6%) study participants aborted only once, 10 (17.2%) aborted twice, 1 (1.8%) aborted three times and 2(3.4%) had abortions more than three time(19).

A study done in Gondar town; Northwest Ethiopia revealed that 5.8% women ever had any previous abortions. About 96.15% of respondents had 1-2 numbers of abortions. In all, 4.0 % of respondents had induced type of abortion (40 per 1000 women). Among respondents having induced abortions, 83.33% was safe abortion. The most visited place for committing induced abortion was health institutions (83.33%)(20).

Study done in Wachamo university on the prevalence of induced abortion was 5.9% (95% CI 3.8-8.0%), from which 9(33.3%) were conducted in an unsafe condition. A total of 180(39 %)

female students has had sexual intercourse and 58 (12.58%) of them get pregnant. Out of the total pregnancies, 53(91.4%) were unwanted (21).

A study done in Northern Ethiopia indicates that two hundred fifty-six women (19%) had abortions and the prevalence rates of spontaneous and induced abortion were computed as 14.3% and 4.8%, respectively (22). Study done in Debre Tabor revealed that the magnitude of induced abortion was 18.2% (19). A study done in Harar region shows that the magnitude of induced abortion was 42.7% (23). A study also done in Aykel Town on the prevalence of induced abortion was 14.5% with 95% CI (11.2 to 18.17 (24).

## **2.2 Determinants of Induced Abortion**

Study done in Gondar town on determinant of induced abortion revealed that the odds of becoming 15-19 years age at first pregnancy were 4 times [AOR=4.38, 95% CI (1.21, 15.81)] more likely to commit induced abortion as compared to respondents with 25 and above years of age. The odds of having unwanted pregnancy were 3 times [AOR=3.21, 95% CI (1.16, 8.90)] more likely to commit induced abortion as compared to respondents having wanted pregnancy. Odds of attending school during interfered were 5 times [AOR= 5.28, 95% CI (1.80, 15.49)] more likely to commit induced abortion as compared to respondents without attending school (20). A study done in Semera university revealed that participant ever had alcohol have 5.5 times more likelihood of having abortion than their counterparts with P-value of 0.001 (95% CI = 1.9 - 16). Participant who did not participate in youth-friendly services were more likely to have an abortion compared to students who participate in youth-friendly services (AOR [95% CI] =0.19[0.01, 0.71]) (18).

Study done in college students of Debre Tabor town revealed that the medical laboratory students were 4.9 (1.535- 15.39) times more victims of induced abortion than health extension students. HIT students were 13.9(3.965- 49.045) times more likely to practice induced abortion than health extension students. With respect to year of study, second year students had 10.8 (1.205- 96.782) times more chance of undertaking induced abortion than third year students.

Those who had used condom were 3.25(1.319-7.9940) times more likely to engage in practicing induced abortion than those who did not use it (19).

The determinate factor affecting induced abortion were living out of campus [AOR= 6.78, 95% CI: (1.44, 31.97)], Substance use [AOR= 4.75, 95% CI: (1.12, 20.16)], and earning enough pocket money [AOR= 6.91, 95% CI: (1.62, 29.50)] were significantly associated factors with induced abortion (21). Study done in northern Ethiopia indicates that the determinants of induced abortion showed that , place of residence, marital status, contraceptive use, number of pregnancies and level of education attained by the women were found to be significantly and independently associated with induced abortion (  $P < .05$  for each factor) (22).

The study done in Debre Tabor on determinants of induced abortion revealed that unwanted pregnancy [AOR=0.28 (95%CI (0.87-0.89)], utilizing of family planning [AOR=7.4 (95%CI (2.7-20.3)], maternal illness in the last one month [AOR=4.28 (95%CI) (1.27-15.1)] were statistically significant factors associated with induced abortion(19).

A study done in Harari region on associated factor of induced abortion indicates that age >30, single marital status, occupational status, students and commercial sex worker were statistically significant association with induced abortion (23). In Arba Minch and Wolayita Sodo towns, the factors associated with induced abortion among women who received abortion care services were respondent's age 25–29 and 30–34 years old (AOR = 0.38, 95%CI:0.15, 0.96 and (AOR = 0.31, 95%CI:0.10, 0.97, respectively), planned pregnancy (AOR = 0.22, 95%CI:0.11, 0.44), and delay confirming pregnancy (AOR = 2.21, 95%CI:1.15, 4.23) (16).

Factors associated with induced abortion among women of reproductive age in Addis Ababa showed that the odds of having an induced abortion was higher among unmarried women compared with those who were married (AOR = 9.6; 95% CI: 1.5–61.7). Women who had primary and tertiary education were more likely to report having an induced abortion than those who had no formal education (AOR = 5.3; 95% CI: 1.5–18.3) and (AOR = 5.7; 95% CI: 1.6–21.1) respectively. Women whose monthly income was from 100 to 300 USD and more than 300 USD were less likely to report having an induced abortion compared with those who were less paid (AOR = 0.2; 95% CI: 0.1–0.4) and (AOR = 0.1; 95% CI: 0.0–0.2) respectively. The odds of induced abortion among women who had first intercourse between the ages of 15 and 19 were 4.7 times higher than those who had first intercourse at the age of 25 or older (AOR = 4.7; 95% CI: 1.4–15.6). Women who married before the age of 18 were 2.9 times more likely to report having an induced abortion compared with those who married at 18 years or later (AOR = 2.9;

95% CI: 1.3–6.7). Women who had two children had 4.7 higher odds of induced abortion than those who had no child (AOR = 4.7; 95% CI: 1.8–12.7) (11).

A study also done in Aykel Town on determinant of induced abortion indicates that age group of 15-24 years [AOR=3.10, 95%CI (1.116-8.543)], pregnancy status unwanted [AOR=3.1; 95%CI (1.292-7.322)], not ever used contraceptive [AOR = 3.96; 95%CI (1.612-9.709)], parity [AOR=0.37, 95%CI (0.164-0.823)], partner primary educational level [AOR = 3.68, 95%CI (1.082-12.528)] were determinants of induced abortion among reproductive age women (24).

### 3. CONCEPTUAL FRAME WORK

The conceptual frame work was adopted from the literature

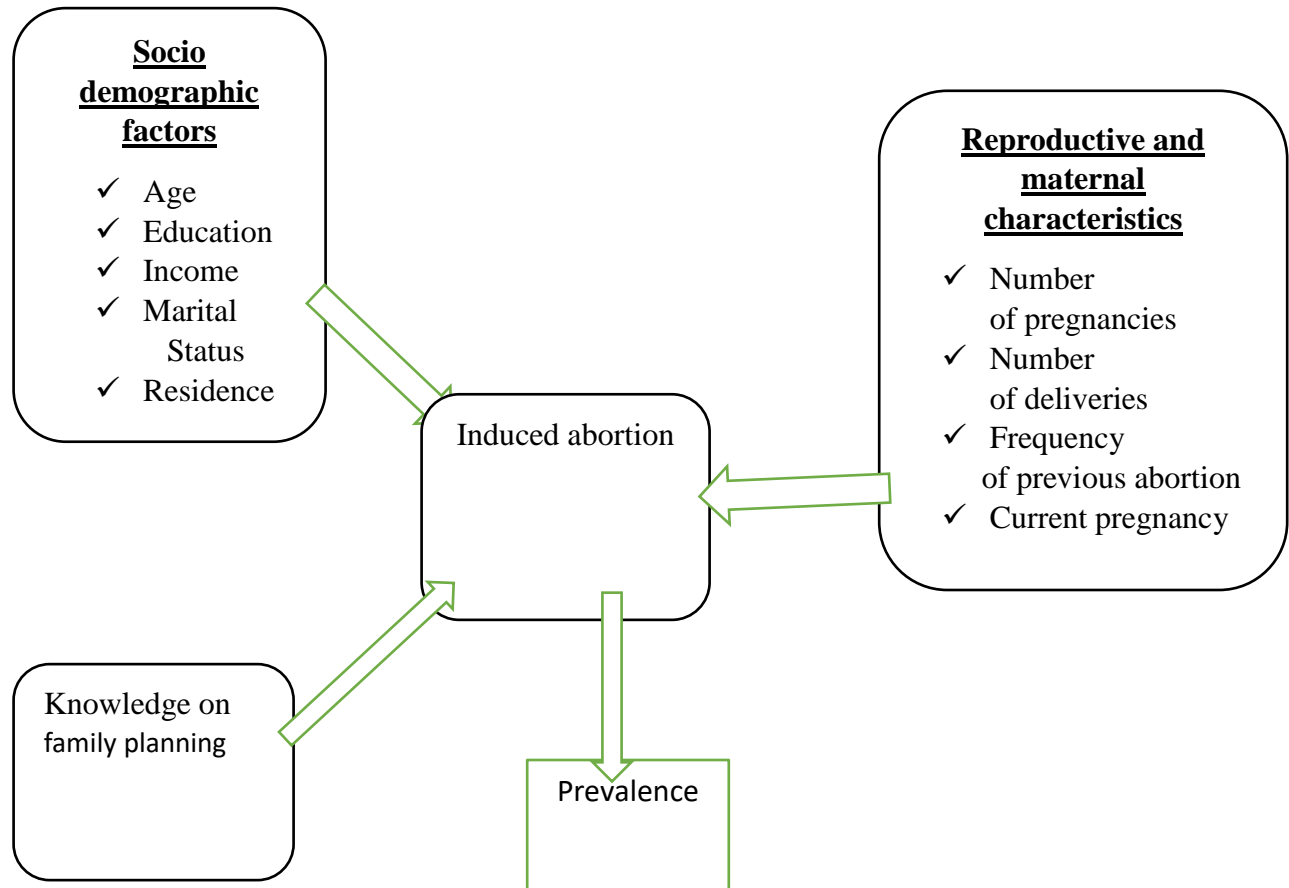


Figure 1. Conceptual frame work

## **4. OBJECTIVES**

### **4.1 General Objective**

Assess the prevalence and associated factors of induced abortion among women who come for family planning service in three teaching hospitals in Addis Ababa.

### **4.2 Specific Objectives**

- ✓ To determine the prevalence of induced abortion among women who come for family planning service in three-teaching Hospitals of Addis Ababa University.
- ✓ To identify the determinant factors of induced abortion among women who come for family planning service in the three-teaching hospital of Addis Ababa.

## **5. METHODS**

### **5.1 Study Area**

This study was conducted in the three teaching hospitals of Addis Ababa University (TASH, GMH & ZMH)

### **5.2 Study Design and Period**

A health facility based cross sectional study design was conducted from January 2024 to April, 2024.

### **5.3 Source and Study Populations**

#### **5.3.1 Source population**

Women of reproductive age

#### **5.3.2 Study Population**

Women who was come for family planning services

### **5.4 Inclusion and Exclusion Criteria**

#### **5.4.1 Inclusion Criteria**

All women who come for family planning service in the selected health facilities during the study period and willing to participate in the study.

#### **5.4.2 Exclusion Criteria**

Women who are nulligravid, women who are mentally ill, not willing to participate in the study will be excluded from the study.

### **5.5 Sample Size and Sampling Procedure**

#### **5.5.1 Sample Size Determination**

The sample size was determined using the single proportion population formula based on a P value of 0.545 from previous study done in Debre tabor town (31) and 95% confidence interval was used with a marginal error of 5%.

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

Where n = sample size

P = prevalence of induced Abortion in Debre tabor Town 0.545

d = desired degree of precision (5%)

z = is the standard normal value at 95% confidence level, which is 1.96

$$n = \frac{(1.96)^2 * 0.545 * (1 - 0.545)}{(0.05)^2} = 381$$

After adding 10% of non-response rate, due to sensitivity of the issue. The total sample size was 419.

## 5.6 Sampling Procedure

For each health facility family planning service unit, the allocated sample size was calculated using the monthly total number of women who visited the family planning service unit in each facility. The total population for three months in the three facilities was 810. So, the sample size was proportionally allocated based on the number of study population availability in the study area. Accordingly the number of population in GMH was 450 from which after sample size allocation 233 participants were picked. The number of population in TAH was 150 after sample size allocation 77 participants were picked. The number of population in ZMH was 210 among which after sample size allocation done 109 participants were picked.

## 5.7 Study Variable

### 5.7.1 Dependent Variable

- Induced abortion

### 5.7.2 Independent

- Socio demographic factors
  - ✓ Age
  - ✓ Residence
  - ✓ Educational level

- ✓ Income status
- ✓ Marital Status
- Reproductive and maternal characteristics
  - ✓ Number of previous pregnancies
  - ✓ Number of prior deliveries
  - ✓ Number of previous abortions
  - ✓ Age at first sexual intercourse
  - ✓ Age at marriage
  - ✓ Age at first pregnancy
- Knowledge on family planning
- Knowledge on complications of induced abortion
- Habits and Behavioral characteristics
  - ✓ Alcohol consumption
  - ✓ Cigarette smoking

## **5.8 Operational Definitions**

Induced Abortion: Any termination of pregnancy before 7 months of gestation as reported by the woman

Non medically indicated induced abortion: Any termination of pregnancy before 7 months of gestation with no medical indication

Medically indicated induced abortion: Any termination of pregnancy before 7 months of gestation with certain maternal or fetal indication which is decided by the health professional

## **5.9 Data Collection, Management, Quality Assurance and Analysis**

### **5.9.1 Data Collection Tool**

A structured questionnaire was adopted from literature and was used to collect the appropriate information. The questionnaires were initially prepared in English and then translated into Amharic. Then the Amharic version was translated back to English by the third person to assure language variation. The questionnaire included demographic information, socio economic, marital status, education level, contraceptive use and reproductive health history. The data was collected by self-administered and interviews for those unable to read and write.

### **5.9.2 Data Management Procedure**

The supervisors and data collectors were trained by principal investigator. Supervisor closely followed day to day data collection processes throughout the work and the completeness of data. Trained six midwives data collectors were recruited to ensure for the completeness and consistency of questionnaire administered questionnaire.

### **5.9.3 Data Quality Assurance**

Data was collected using standardized questionnaire and skilled personnel to ensure data quality. Supervisors and investigators verified the data on a daily basis to ensure its accuracy. Before the actual data processing, 5% the samples were done out of the study area for input of correction the variables of the questionnaire.

### **5.9.4 Data Analysis**

Data was carefully collected from the respondents; entry and analysis were conducted using SPSS, version 25. Descriptive statistics such as frequency, proportion, means and standard deviation (SD) will be computed. Odd ratio (OR) was computed to estimate the magnitude of the association between risk factors and induced abortion.

A logistic regression model was used for both bivariate and multivariate analysis in order to identify associated factors of induced abortion among groups of independent variables. Variables which were significantly associated ( $p < 0.2$ ) with induced abortion in binary logistic regression analysis were reanalyzed using multivariate logistic regression models. The findings were expressed in AOR with 95% CIs and significant threshold was declared at  $p < 0.05$ .

### **5.10 Ethical Considerations**

Ethical clearance was first obtained from Addis Ababa University, college of health science department of gynecology and obstetrics. Then, the ethical clearance and support letter was taken to the selected hospitals to obtain permission and cooperation during the data collection process.

Informed written consent was obtained from each study subject prior to the data collection process after the purpose of study has been explained and they become briefed about the confidentiality of their responses and the importance of providing the right information to help

the study achieve its objective. Once she consented, the consent is kept in protected place to keep confidentiality until a specified period and then destroyed by involving the DRPC /IRB. If the study participants enter into depression due to previous negative memory/trauma the interviewer was reassured and will be linked to psychiatry unit of the hospital.

All participants will be asked for their willingness to participate in the study and was told that it will not have any risk on them. Confidentiality of the information will be assured and privacy of the respondent was maintained, the hard copy of the data was kept in a locked cabinet and the soft copy was password protected.

The study participants were first communicated about the questionnaire only after they have completed the service they want from the unit and were told that not willing to participate in the study will have no effect on their current or future service they want from the unit.

### **5.11 Dissemination Plan**

The result of the study will be first presented in Addis Ababa University department of gynecology and obstetrics and Ethiopian Ministry of Health. It will also be presented in national as well as international seminars and will be published in reputable journals

## **6. Result**

### **6.1 Current Socio-demographic characteristics of the study participants**

In our study 411 study participants were involved yielding a response rate of 98.1%. Majority of the study participants were in the age group of 30-34 years with mean  $\pm$  SD of 33  $\pm$ 5.86 years respectively. Most of the study participants, around 91.7%, were from Addis Ababa and 65.7% were Orthodox in religion. Fifty-six percent of the study participants had not joined higher education and 60.3% were employee at government and private institutions and 60.8% of the participants had a house hold monthly income of  $\geq$  5000ETB.

Table1. Current Socio-demographic Characteristics of the Study Participants

<b>Variable</b>	<b>Category</b>	<b>Frequency</b>	<b>Percent</b>
<b>Age in years</b>	19-24	70	17.0
	25-29	109	26.5
	30-34	129	31.4
	≥35	103	25.1
<b>Residence</b>	Addis Ababa	377	91.7
	Out of Addis Ababa	34	8.3
<b>Marital status</b>	Yes	380	92.5
	No	31	7.5
<b>Religion</b>	Orthodox Christian	270	65.7
	Muslim	48	11.7
	Protestant Christian	93	22.6
<b>Education level</b>	Primary and secondary school	232	56.4
	Higher education	179	43.6
<b>Occupation</b>	Employed	248	60.3
	Unemployed	163	39.7
<b>Household monthly income</b>	<5000 birr	161	39.2
	≥5000 birr	250	60.8

## 6.2 Current and Past Reproductive Characteristics of the Study Participants

Majority (57.4%) of the study participants were multiparous and only 2.7% were grand multiparous. About 39.2% (161/411) of the participants had a history of abortion and of these 34.8% (56/161) had more than one abortion. About 15.8% (65/411) had spontaneous abortion in their lifetime. Nearly forty percent (164/411) of the study participants had unplanned and/or unwanted pregnancies. Among the study participants 67.9% (132/411) had induced abortion and among these 22% (29/132) had medically indicated induced abortion. The most common medical indication for induction of abortion was fetal congenital anomaly, 75.9% (22/29). Among those who had an induced abortion 87.9% (116/132) had no medical reason for induced abortion.

Table 2. Current Reproductive Characteristics of the Study Participants.

<b>Variable</b>	<b>Category</b>	<b>Frequency</b>	<b>Percent</b>
<b>Parity</b>	Nulliparous	65	15.8
	Primiparous	99	24.1
	Multiparous	236	57.4
	Grand multiparous	11	2.7
<b>History of abortion</b>	Yes	161	39.2
	No	250	60.8
<b>Ever had unplanned/unwanted pregnancy</b>	Yes	164	39.9
	No	247	60.1
<b>Number of unplanned/unwanted pregnancy (n=164)</b>	One	143	87.2
	Two	15	9.1
	Three	6	3.7
<b>Reason for the last unwanted/unplanned pregnancy (n=164)</b>	<b>Lack of contraceptive use</b>	<b>108</b>	<b>65.9</b>
	<b>Failure of contraceptive method</b>	<b>29</b>	<b>17.7</b>
	<b>Incorrect method use</b>	<b>27</b>	<b>16.4</b>
<b>Number of abortions (n=161)</b>	One	105	65.2
	Two	56	34.8
<b>Induced Abortion</b>	Yes	132	29.3
	No	279	70.7
<b>Reason for Induced Abortion (n=145)*</b>	Medically Indicated	29	20
	Not Medically Indicated	116	80
<b>Reasons of termination for medically indicated abortions (n=29)</b>	Failed pregnancy	7	24.1
	Congenital malformation	22	75.9

\*a participant may have 2 abortions

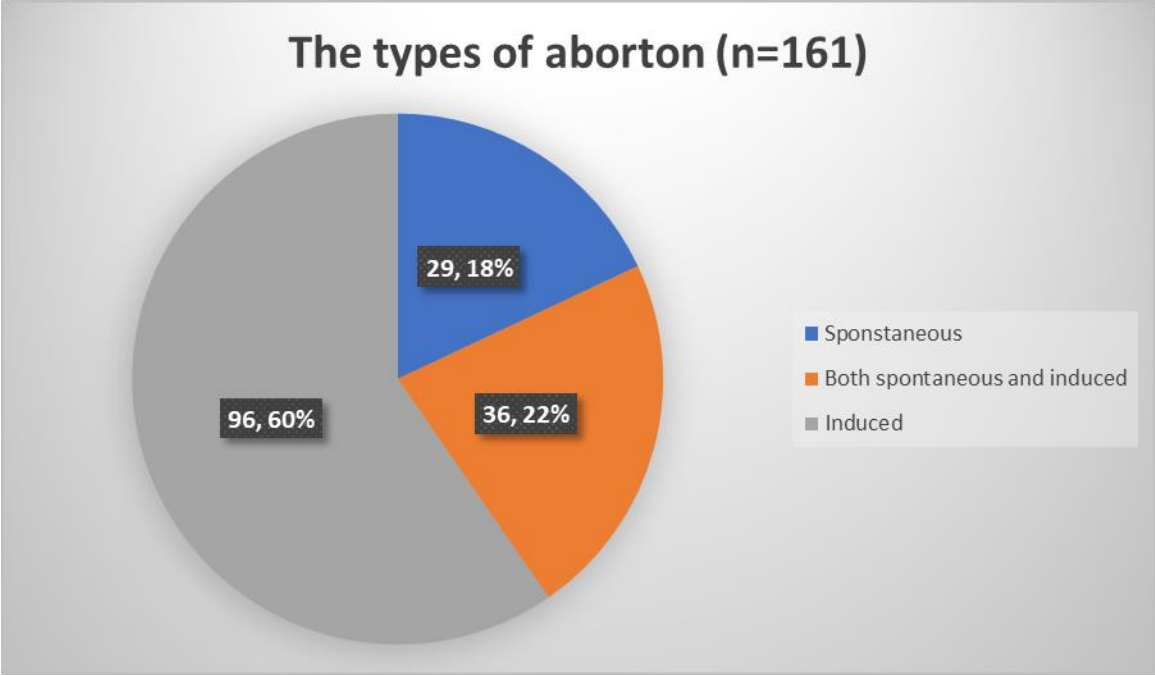


Figure2: The types of abortion

**6.3 Family planning related characteristics of the study participants**

About 75% of the study participants visited to use a family planning method while 25% came for discontinuation of a method. Around thirty-four percent of the study participants have history of usage of emergency contraceptive pill. More than half (51.8%) of the study participants were visiting the family planning unit for utilization of family planning methods and among them 51% need to utilize implant.

Only 5.1% of the participants were there for their first visit to family planning unit for getting the service. Almost eighty-three percent of the study participants believe they have adequate knowledge on family planning methods and from them 50.9% have got the information from health facilities and 62.4% of those who feel to be knowledgeable have preferred implant contraceptive.

Table 3. Family planning related characteristics of the study participants

<b>Variable</b>		<b>Frequency</b>	<b>Percent</b>
<b>Reason for visiting family planning unit</b>	To get advice about FP	49	11.9
	To get FP method	213	51.8
	For changing FP method	46	11.2
	To remove Implant/ IUD	103	25.1
<b>Types of family planning you need (259)</b>	Pills	25	9.7
	Injectable	55	21.2
	Implant	132	51.0
	IUCD	44	17.0
	Not sure	3	1.2
<b>Ever used emergency contraceptive</b>	Yes	140	34.1
	No	271	65.9
<b>Ever gone health facility before for FP service</b>	Yes	390	94.9
	No	21	5.1
<b>Feel to have adequate knowledge about FP</b>	Yes	340	82.7
	No	71	17.3
<b>Where do you get the information (n=340)</b>	Reading	28	8.2
	Social media	36	10.6
	From women who use FP methods	68	20.0
	Through education	35	10.3
	From going to health facility	173	50.9

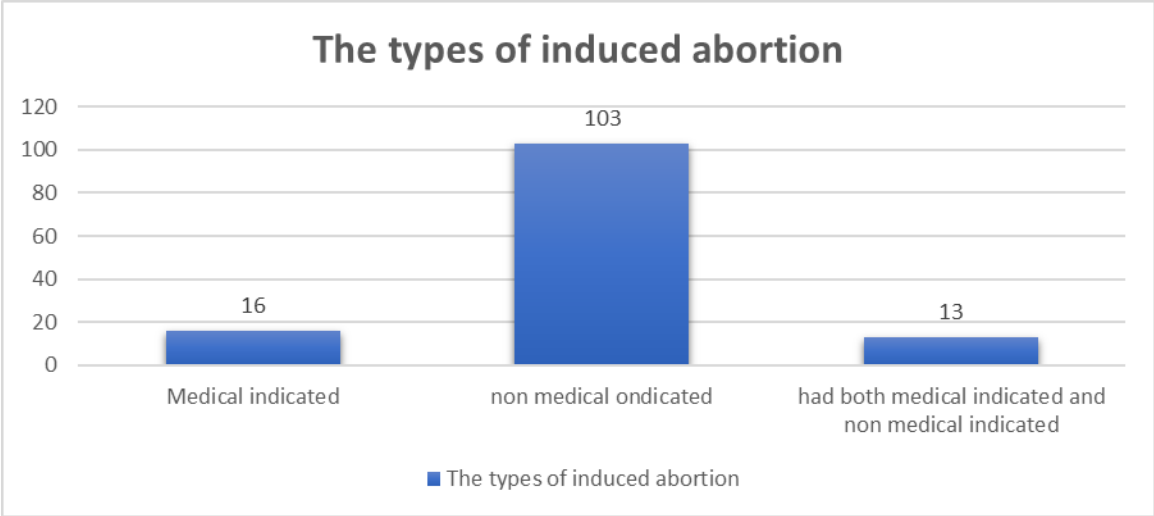


Figure 3: Types of induced abortion

**6.4 Medical Induced abortion related characteristics of the study participants**

**HISTORY OF NON MEDICALLY INDICATED INDUCED ABORTION**

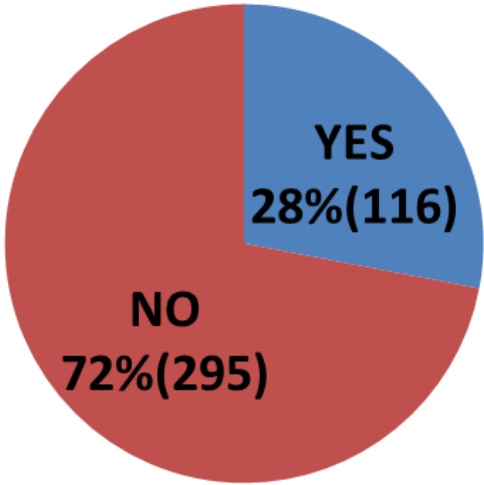


Figure 4.: The prevalence of induced abortion among study participants.

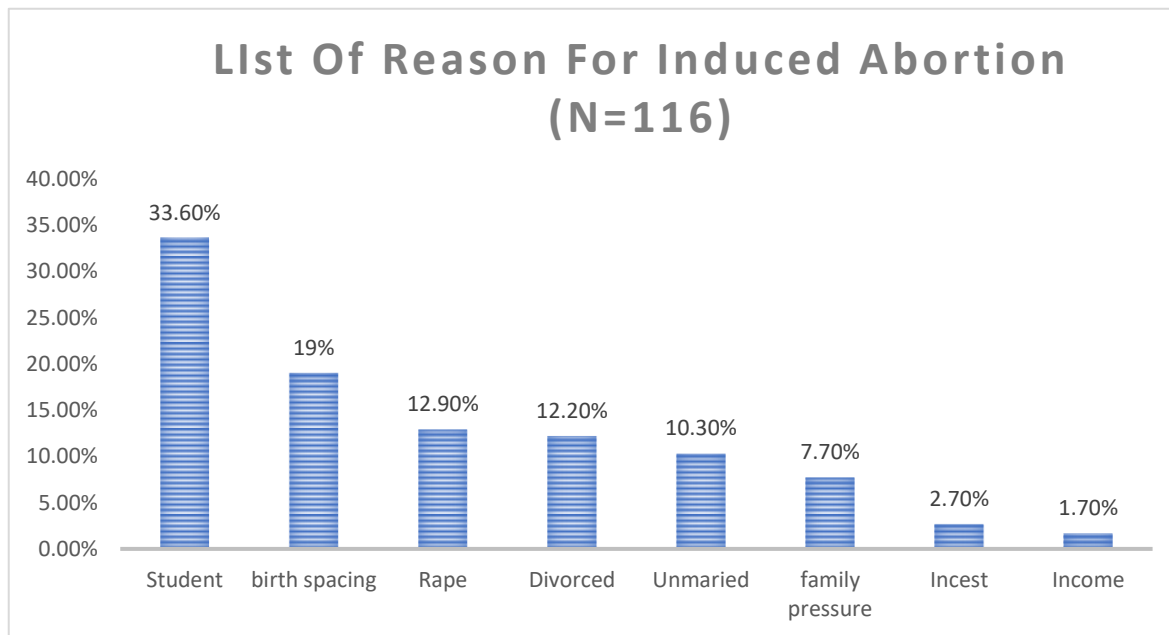


Figure 5: The list of reasons for non-medically indicated induced abortion by the study participants.

### 6.5 Reproductive health related characteristics of the study participants

All of the study participants were sexually active at the time of the interview. Most of the study participants had their 1<sup>st</sup> sexual intercourse at or after the age of 18 years while 18.7% had it before the age of 18 years. And 30.7% of the participants have had two or more sexual partners in their lifetime. Almost forty percent of the study participants have history of unwanted and unplanned pregnancy and 32.3% of the participants mentioned failed emergency pill for the cause of unwanted pregnancy followed by not having enough information about family planning methods (29.9%). Refusal of the partner to use condom accounts for 15.2% of the cases.

Table 4. Reproductive health related characteristics of the study participants

Variable	Category	Frequency	Percent
<b>Ever had sexual intercourse</b>	Yes	411	100
<b>Age at the first sexual intercourse</b>	<18yrs	77	18.7
	≥18yrs	334	81.3
<b>Number of sexual partners</b>	One	285	69.3

	Two	126	30.7
<b>Ever had unplanned and unwanted pregnancy</b>	Yes	164	39.9
	No	247	60.1
<b>Frequency of unplanned and unwanted pregnancy (n=164)</b>	One	143	87.2
	Two	15	9.1
	Three	6	3.7
<b>The reason for having the unplanned pregnancy (n=164)</b>	Lack of knowledge about family planning methods	49	29.9
	Lack of access to family planning service	6	3.7
	Failure of family planning method used	6	3.7
	Didn't use family planning for personal reason	6	3.7
	Missed pill	19	11.6
	Got pregnant despite using emergency contraceptive pill	53	32.3
	Refusal of the partner to use condom	25	15.2
<b>Measure taken after having unwanted and unplanned pregnancy(n=164)</b>	Continued the pregnancy	48	29.3
	Aborted	116	70.7
<b>Frequency of abortion due to unwanted and unplanned pregnancy (n=116)</b>	One	106	91.4
	Two	10	8.6
<b>Reason for the last unwanted and unplanned pregnancy (n=164)</b>	Lack of knowledge about family planning methods	85	51.8
	Failure of family planning method used	22	13.4
	Wasn't on any form of family planning method	23	14.0
	Missed pill	27	16.5
	Got pregnant despite using the emergency contraceptive pill	7	4.3

<b>Gestational age during abortion</b>	One month	31	26.7
	Two months	51	44.0
	Three months	26	22.4
	Four months	8	6.9

### **6.6 Sociodemographic characteristics of the study participants during the last induced abortion**

Around 87% of the participants were living in Addis Ababa. And 34.5% were students, out of which 48.3% were high school students. Almost sixty percent of the study participants were single and 19% were less than 18yrs of age.

Around forty five percent of their partners had completed secondary education level and 33.6 % of the partners were employee at different institutions.

**Table 5. Sociodemographic characteristics of the study participants during their last non medically indicated induced abortion**

<b>Variable</b>	<b>Category</b>	<b>Frequency</b>	<b>Percent</b>
<b>Marietal status (n=116)</b>	Single		
	Married	69	59.5
<b>Age</b>	≤17		
	18-24	22	19
	25-30	58	50
<b>Occupation</b>	Housewife		
	Student	26	22.4
	Employee	40	34.5
	Daily laborer	22	19.0
<b>Educational level</b>	No formal education		
	Primary school student	21	18.1
	Secondary school student	22	19.0
	Higher education student	56	48.3
	Graduate from higher education	10	8.6
<b>Residence</b>	AA		

	Out of AA	101	87.1
<b>Partner's level of education</b>	Completed primary school		
	Completed secondary school	16	13.8
	College graduate	47	40.5
<b>Occupation of the partner</b>	Unemployed		
	Student	22	19.0
	Employee	39	33.6
	Merchant	39	33.6
	Daily laborer	6	5.2

### **6.7 Abortion decision related characteristics of the study participants**

Two-third of the partners were involved in the process of deciding for abortion but in around eighty percent of the cases the idea to have abortion was raised by the women and from those partners involved in the decision making only forty percent of them had agreed with the decision to have abortion. Around fifty percent of the study participants had obstetric ultrasound before having the abortion. The lion share of these induced abortions (63.8%) were made at private health institutions. Around 53% of the induced abortions were performed by medication and hundred percent of the induced abortions done at home were by medication without any formal prescription from a health professional. Being unmarried(29.3%), rape incident(18.1%) and having un planned pregnancy(17.2%) were the most common reasons the participants mentioned for deciding to abort the pregnancy.

More than fifty percent of the participants reported they had some medical complication during or after the abortion, 66.1% and 33.9% of the study participants reported to encounter infection and bleeding respectively. And only around thirty nine percent of the participants used long term contraceptives ( IUD and Implant) after the incident.

Table 6. The decision to abort related characteristics of the study participants on the last abortion incident

<b>Variable</b>	<b>Category</b>	<b>Frequency</b>	<b>Percent</b>
<b>Partner involved in the decision</b>	Yes	74	63.8
	No	42	36.2
<b>If involved, did he agree to abort (n=74)</b>	Yes	30	40.5
	No	44	59.5
<b>Who did first raise the idea to abort</b>	Her partner	24	20.7
	The study participant	92	79.3
<b>The reason to decide for abortion</b>	The pregnancy was by rape incident	21	18.1
	The pregnancy was from close relatives	11	9.5
	Was un married	34	29.3
	Was divorced	6	5.2
	Health problem	3	2.6
	Had no money to raise a child	15	12.9
	To have birth space between children	6	5.2
	Was un planned pregnancy	20	17.2
<b>Did you have obstetric ultrasound before making the abortion</b>	Yes	61	52.6
	No	55	47.4
<b>Where was the abortion done</b>	At home	11	9.5
	By a traditional hiller	6	5.2
	At private health institutions	74	63.8
	At government health facility	25	21.6
<b>The mechanism used for the abortions done at home (n=11)</b>	Abortion medication bought from pharmacy	11	100
<b>Was the medication used at home prescribed by health provider(n=11)</b>	No	11	100
<b>The method used to abort (n=116)</b>	Pills	61	52.6
	MVA	55	47.4

<b>Had any medical complication occurred during or after the abortion</b>	Yes	59	50.9
	No	57	49.1
<b>What complication did occur (n=59)</b>	Bleeding	20	33.9
	Infection	39	66.1
<b>What type of family planning method did you use after the abortion</b>	None	20	17.2
	Birth control Pill	6	5.2
	Injectable	45	38.8
	IUCD	6	5.2
	Implant	39	33.6

### 6.8 The determinant factors of induced abortion

The find of the study found that age, residence, education level, number of sexual partners, , were an association with induced abortion by bivariate logistic regression. The multivariate logistic regression revealed that study participant whose age of 25-29 and 30-34 years had 6.5 and 5.5 folds increase its induced abortion compared to those of age 19-24 years (AOR=6.5, 95%CI=1.77, 24.08 & AOR=5.5, 95%CI=1.59, 18.86 respectively) and study participant having higher education level had 3.8 folds increase its induced abortion compared to those of lower education level (AOR=3.8, 95%CI=1.52, 9.23). Study participant who had an experience of two sexual partner had 7.3 folds increase its induced abortion compared to those of one sexual partner (AOR=7.3, 95%CI=, 3.57, 14.88) and study participant whose age at first sex of <18years were 12.6times increase its induced abortion compared to its opposite compartment (AOR=12.6, 95%CI=6.39, 68.68).

Table 7. The bivariate and multivariate logistic regression of association between independent variable and induced abortion among women who come for family planning service in the three teaching hospitals, AAU, 2024.

Variable	Induced abortion		p-value	COR with 95%CI	P-value	AOR with 95%CI
	Yes	No				
<b>Age in years</b>						
19-24	17	53	1		1	
25-29	26	83	0.947	0.98(0.48, 1.97)	0.005	<b>6.5(1.77, 24.08)</b>
30-34	50	79	0.041	1.9(1.03, 3.78)	0.007	<b>5.5(1.59, 18.86)</b>
≥35	23	80	0.765	0.89(0.44, 1.84)	0.232	2.3(0.59, 8.56)
<b>Residency</b>						
Addis Ababa	100	277	1		1	
Out of Addis Ababa	16	18	0.013	2.5(1.21, 5.01)	0.638	1.4(0.36, 5.32)
<b>Educational level</b>						
Primary school	60	172	1		1	
High school and college	56	123	0.226	1.3(0.85, 2.01)	0.004	<b>3.8(1.52, 9.23)</b>
<b>Age at first sex</b>						
<18	62	15	0.000	12.4(11.36, 40.43)	0.000	<b>12.6(6.39, 68.68)</b>
≥18	54	280	1		1	
<b>Number of sexual partners</b>						
One	32	253	1		1	
Two	84	42	0.000	15.8(9.38, 26.65)	0.000	<b>7.3(3.57, 14.88)</b>

## 7. Discussion

Induced abortion refers to the intentional termination of a pregnancy for medical or non-medical reason. In our study the total prevalence of abortion was 39.2% and the total prevalence of induced abortion was 29.3%. Among the induced abortions medically indicated ones were 20% whereas non-medically indicated ones accounts for 80%. The most common cause of medically indicated abortion was fetal congenital malformation.

According to our study the prevalence of non-medically indicated induced abortion among the whole participants was 28%. This finding was higher than the study done in female entertainment workers in Cambodia (21.4%), Ghana (20.4%), Samara University (12.2%), Debre Tabor town(18.6%), Northern Ethiopia (19%) and in Aykel Town (14.5%) (17, 18,19, 22, 24, 28). This may be due to varied sampling methods such as random sampling, convenience sampling. Besides some of the above studies had targeted specific populations. And the studies relied on self-reported data, medical records, surveys, and interviews, each of which can produce different results. The characteristics of the population being studied (age, socioeconomic status, education level, access to abortion service etc.) can influence abortion prevalence. Prevalence rates can change over time due to shifts in societal attitudes, laws, and access to contraceptive and abortion services. Studies conducted in different years might reflect these temporal changes. Access to safe and legal abortion services can influence prevalence rates. In Addis Ababa there are many clinics doing abortion without any restriction. As evidenced by the finding, 63.8% of the induced abortions were done in private clinic.

The other difference was societal attitudes towards abortion can affect the willingness of individuals to report abortions. In cultures where abortion is highly stigmatized, underreporting is more likely. The level of awareness and education about reproductive health can influence abortion rates. Populations with better access to reproductive health education and services might have different prevalence rates compared to those with limited access.

In this study two-third of the male partners were involved by the women in the abortion decision making process and from those involved in the decision process around 40.5% had agreed to continue with the abortion. And in 79.3% of the cases the idea to have abortion first came from the women.

Study participant whose age is between 25-29yrs and 30-34yrs had 6.5 and 5.5 folds increased chance of induced abortion compared to those with age of 19-24 years (AOR=6.5, 95%CI=1.77, 24.08 & AOR=5.5, 95%CI=1.59, 18.86 respectively). This finding was in line with the study done in Harari region and Arba-Minch (16, 23). This may be due to women in this age group are typically in their peak reproductive years, leading to a higher number of pregnancies compared to other age groups and many women in this age range are actively making family planning decisions, including timing and spacing of children, which can lead to a higher incidence of

abortions when pregnancies are unplanned. Women in this age group often prioritize career development and educational achievements. This idea might be supported by the significant finding of the study participant who had higher education level had 3.8 folds increase chance of having induced abortion compared to those with lower education level (AOR=3.8, 95%CI=1.52, 9.23).

Study participant who had an experience of two sexual partners had 7.3 folds increased chance of induced abortion compared to those with one sexual partner (AOR=7.3, 95%CI=, 3.57, 14.88). This may be due to individuals with multiple sexual partners might be less consistent in using contraceptives, which increases the risk of unintended pregnancies. This can occur due to misunderstandings about contraceptive use, irregular access to contraceptives, or incorrect use during sexual intercourse,

Study participants whose age at first sexual intercourse being <18years were having 12.6times increased chance of induced abortion compared to its opposite compartment (AOR=12.6, 95%CI=6.39, 68.68). This finding was congruent with the study done in Addis Ababa (11). This may be due to adolescents often have limited access to, or knowledge about, effective contraceptive methods which can lead to unintended pregnancies, resulting in the decision to seek an abortion. Many young people receive insufficient sexual education, leaving them unaware of how to prevent pregnancy or the consequences of unprotected sexual intercourse.. Younger individuals do also lack the financial stability and social support needed to raise a child. This economic uncertainty can make continuing the pregnancy to seem unmanageable, leading to committing abortion.

## **8. Conclusion**

In this study the prevalence of total induced abortion was 29.3% and the prevalence of non-medically indicated induced abortion was 28%. The determinant factor for induced abortion were age of 25-29 and 30-34 years (AOR=6.5, 95%CI=1.77, 24.08 & AOR=5.5, 95%CI=1.59, 18.86 respectively), high level of education (AOR=3.8, 95%CI=1.52, 9.23), having experience of more than one sexual partner (AOR=7.3, 95%CI=, 3.57, 14.88), first sexual intercourse at <18 years of age (AOR=12.6, 95%CI=6.39, 68.68) were statistically significant factor for induced abortion.

## 9. Recommendation

In this study the prevalence of induced abortion was high. So, the recommendation of the current finding to reduce its prevalence was

- ✓ **Proper sexual education at lower educational level:** Proper and normative sexual education at early age in high school will prevent unprotected sexual intercourse and unintended pregnancy. Leverage the influence of peer groups by training individuals within their age range to educate their peers, creating a more relatable and impactful learning environment.
- ✓ **Public education:** Social and main stream medias should be used to enhance awareness of the public on the consequences of unprotected sexual intercourse and effect of having induced abortion on women general health
- ✓ **Proper awareness creation in higher educations:** -Organize workshops and seminars targeting this demographic group to provide in-depth information on healthy sexual life, various contraceptive methods, their effectiveness, and proper usage
- ✓ **Enhanced Access to Contraceptives:** -Train healthcare providers to offer non-judgmental, comprehensive contraceptive counseling and services.
- ✓ **Tailored Communication Strategies:** -Develop communication campaigns that address the specific concerns and lifestyles of individuals with higher educational status. Use data-driven insights to create messages that emphasize the benefits of planned parenthood and the risks of inadequate family planning.
- ✓ **Counseling and Support Services:** -Establish support groups where individuals can share experiences and receive guidance on managing relationships and reproductive health.
- ✓ **Policy and Advocacy:** -Launch advocacy campaigns to influence public policies in favor of mandatory comprehensive sexual education and accessible contraceptive services.
- ✓ **Parental and Partner Involvement:** Encourage open dialogues between partners and within families about reproductive health to build a supportive environment for informed decision-making.

## 10. REFERENCE

1. Leveno K CF, Alexander J, Bloom S, Casey B, Dashe J. . Williams's Manual of Obstetrics: Pregnancy Complications. McGraw Hill Professional 2007;163:63-7.
2. Niguss Cherie N AB. Proportion of Safe Abortion and Associated Factors among Women who Seek Abortion Care Services in Family Guidance and Marie Stopes International Clinic in Dessie Town, North-East Ethiopia. . Journal of Public Health and Epidemiology. 2017;9(10):279-85.
3. Senbeto E AG, Abesno N, Yeneneh H. Prevalence and associated risk factors of Induced Abortion in Northwest Ethiopia. Ethiop J Health Dev. 2005;19(1):37-44.
4. Organization. WH. Safe and Unsafe Induced Abortion: Global and Regional Levels in 2008, and Trends during 1995-2008. World Health Organization, Geneva, Switzerland. 2012:2-8.
5. Shah EAaI. Unsafe Abortion: Global and Regional Estimates of the Incidence of Unsafe Abortion and Associated Mortality in 2008. World Health Organization, Geneva, Switzerland. 2011.
6. Worldwide: IA. Global Incidence and Trends. Fact Sheet. The Guttmacher Institute, New York, USA. 2018.
7. Yusuf L ZZ. Abortion at Gondar College Hospital, Ethiopia. . East Afr Med J. 2001;978(8):265-68.
8. Sedgh G SS, Shah IH, Åhman E, Henshaw SK, et al. . Induced abortion: incidence and trends worldwide from 1995 to 2008. Lancet. 2012;379:625-32.
9. Ann M. Moore YG, Tamara Fetters, Yohannes Dibaba Wado, Akinrinola Bankole, Susheela Singh, Hailemichael Gebreselassie and Yonas Getachew. The Estimated Incidence of Induced Abortion in Ethiopia, 2014: Changes in the Provision of Services Since 2008. International Perspectives on Sexual and Reproductive Health 2016;42(3):111-20.
10. WHO. Demographic and Health Survey. 2016.
11. S. Singh TF, H. Gebreselassie et al. The estimated incidence of induced abortion in Ethiopia, 2008. International Perspectives on Sexual and Reproductive Health. 2010;36(1):16-25.

12. Hailemichael Gebreselassie. Caring for women with abortion complications in Ethiopia: national estimates and future implications:2010 Mar;36(1).
13. Bikila Soboka Megersa OAO, Andreas Deckert<sup>4</sup> and Olufunmilayo Ibitola Fawole. Factors associated with induced abortion among women of reproductive age attending selected health facilities in Addis Ababa, Ethiopia: a case control study. BMC Women's Health 2020;20(188).
14. WHO. Abortion. <https://www.who.int/news-room/fact-sheets/detail/abortion>. 2021.
15. WHO. Global and regional estimates of the incidence of unsafe abortion and associated mortality in 20082008.
16. Abebe M MA, Degefa N, Molla W and Wudneh A. Magnitude of second-trimester-induced abortion and associated factors among women who received abortion service at public hospitals of Arba Minch and Wolayita Sodo towns, southern Ethiopia: A cross-sectional study. . Front Glob Womens Health. 2022;3(969310.).
17. Ololade Julius Baruwa AYAaEB. Induced abortion in Ghana: prevalence and associated factors. Journal of Biosocial Science. 2021.
18. Nejimu Biza YH, Alemayehu Bayray,. Dr. P. Surender Reddy: Med. Res Chron. 2018;5(3):191-201.
19. Zelalem Tilahun Muche M, Awgichew Behaile Teklemariam, MSc, Endeshaw Chekol Abebe, MSc, Animut Tilahun Mulu, MSc, Edgeit abebe Zewude, MSc. the magnitude and determinants of induced abortion among college students at Debre Tabor Town, Debre Tabor, Ethiopia. the Ethiopian Journal of Reproductive Health. 2021;13:29-37.
20. Mohammed Oumer AM. Prevalence and Associated Factors of Induced Abortion Among Women of Reproductive Age Group in Gondar Town, Northwest Ethiopia. . Science Journal of Public Health 2019;7(3):66-73.
21. Meskele. SMPMDFBM. Prevalence of Induced Abortion and Associated Factors among Wachamo University Regular Female Students, Southern Ethiopia, 2015. . Journal of Health, Medicine and Nursing. 2015;21.

22. Elias Senbeto GDA, Nuru Abesno, Hailu Yeneneh. . Prevalence and associated risk factors of Induced Abortion in northwest Ethiopia. . EthiopJHealth Dev. 2005;19(1).
23. Jamie AH, Abdosh, M.Z. Prevalence of induced abortion and associated factors among women of reproductive age in Harari Region, Ethiopia. Public Health of Indonesia. 2020;6(2):35-40.
24. Zeleke. AM. Prevalence and determinants of induced abortion among reproductive-aged women in Aykel town North West, Ethiopia: A community-based cross-sectional study. . World Journal of Advanced Research and Reviews. 2021;12(02):32-41.

# INDEX

## Annex I: Information Sheet

Questionnaire Identification Number \_\_\_\_\_

My name is \_\_\_\_\_. I am working as data collector in the research Conducted by Dr Henok Mekonnen, who is conducting this research for the partial fulfillment of his specialty in Obstetrics and Gynecology in AAU. We are trying to assess the prevalence and factors associated with induced abortion among family planning service utilizers in the three teaching hospitals of Addis Ababa University

**Purpose:** I am hopeful that this research will benefit all who will use it and I will provide the research results to concerned body for intervention.

**Procedure:** Assess prevalence and factors associated with induced abortion among family planning service utilizers. So, the study will be performed by interviewing and chart\_review. If you are willing to participate in this project, you need to understand and say “yes” on the agreement form. Once you have consented, the consent is kept in protected place to keep confidentiality until a specified period and then destroyed by involving the DRPC /IRB

**Risk/ Discomfort:** By participating in this research project, you may feel that it has some discomfort especially on remembering may be of bad memories, negative feeling, and spending time (about 60 minutes). We hope you will participate in the study for the sake of the benefit of the research result. I am sure there is no risk in participating in this research project.

**Benefits:** There may not be direct benefit to you but your participation is likely to help us in the assessment of prevalence and factors associated with induced abortion among family planning service utilizer women.

**Confidentiality:** The information collected from this research project will be kept confidential and information about your identity that will be collected by this study will be stored in a file, without your name, but a code number assigned to it. In addition, it will not be revealed to anyone except the principal investigator and will be kept locked with key.

**Right to refuse or withdraw:** This interview is part of the ongoing research and it is not part of your care at the clinic and you have the right to refuse or decline and it doesn't have any impact in your current service. You can choose not to respond to some or all questions if you do not want to give your response.

Having the stated information above, would you like to participate in this study?

1. Yes \_\_\_\_\_

2. No \_\_\_\_\_

Thank you for your collaboration!

If you have additional questions about the study, please contact

Dr Henok Mekonnen (Principal investigator) Tel: +251-913870459

## Annex II: Consent Form – English Version

I have been fully informed about this study and given written information and understood the aim of this study. I also understood that the result will be helpful for maternal health. I understand that there are no risks by participating in this study. I agree to participate in this study. I understand that by participating I will not be entitled to any special services or be given payment or gifts. I was told that the information obtained will be confidential. I understand that any information that identifies me will be excluded from any report or publication. This authorization is only valid for this study.

Are you willing to participate in the study?            1- Yes                            2 - No

If the answer is yes, please sign in the space below.

Participant's name \_\_\_\_\_, sign \_\_\_\_\_

Thank you for participating!

If the answer is no, Thanks!

Don't force or reinforce an individual to participate in the survey

Interviewer's code -----name ----- signature -----

Date of interview ----- date -----month/2016 E. C.

Time of interview began \_\_\_\_\_ hours: minutes

Time of interview finished \_\_\_\_\_ hours: minutes

Checked on ----- date-----month/2016E.C

Informed consent Checked by: Supervisor: Name \_\_\_\_\_Signature: \_\_\_\_\_

Complete    1

Incomplete 2      Other (specify) ----

## Annex III. Questionnaire – English Version

Data collection date (day/month/year) \_\_\_\_\_

### Part I: Socio-demographic Characteristics

S.N.	Question	Response	Remark
1	How old are you?	_____ years	
2	Where do you live?	1. In Addis Ababa 2. Out of Addis Ababa (specify): _____	
3	Are you currently married?	0. No 1. Yes	
4	What religion do you follow?	1. Orthodox Christianity 2. Islam 3. Protestantism 4. Catholic 5. Other (specify): _____	
5	What is your educational level?	1. Illiterate 2. Can read and write 3. Completed primary school 4. Completed secondary school 5. Completed college diploma/degree 6. Completed my master's degree 7. Completed my PhD	
6	What do you do for living currently?	1. I am a housewife 2. I am a student 3. I'm a Private employee 4. I'm a Gov't employee 5. I'm a Business woman 6. Other (specify): _____	
7	How much is your Approximate monthly family income in ETB?	_____ ETB	

### Part II: Obstetric and Reproductive Characteristics

8	How many pregnancies have you ever had in your life time?	_____	If 0, you have finished
9	How many children did you give birth to? (after 7 month of gestation, alive or dead )	_____	
10	Did you ever have a spontaneous abortion?	0. No 1. Yes	If 'no', go to Quest. no. 12

11	If 'yes' to no. 10, how many?	_____	
12	Did you ever have induced abortion for medical reasons?	0. No 1. Yes	If 'no', go to no. 15
13	If 'yes' to no. 12, What was (were) the reason (s)?	_____ _____ _____	
14	If 'Yes' to no. 12, How many?	_____	
15	Did you ever have an induced abortion for non-medical reason?	0. No 1. Yes	If 'no', go to Question no. 18
16	If 'yes' to no. 15, what was the reason?	_____	
17	If 'yes' to no. 15, how many?	_____	
18	What is the Reason for your current visit?	1. To get contraceptive advise 2. To get a contraceptive 3. To change a contraceptive 4. To remove a contraceptive 5. Other (specify): _____	
19	What family planning method do you choose to use?	1. None 2. OCP 3. Injectable 4. Implants 5. IUD 6. Other (specify): _____	
20	Have you ever have sexual intercourse?	0. No 1. Yes	If 'no', you have finished
21	What was your age when you start sexual intercourse?	_____ years	
22	How many sexual partners did you ever have?	_____	
23	Have you ever had an unwanted or unplanned pregnancy before?	0. No 1. Yes	If 'no', you have finished
24	How many unwanted or unplanned pregnancies did you have?	_____	
25	How did the unwanted or unplanned pregnancy (ies) happen?	1. Didn't know about contraceptives 2. Couldn't access a contraceptive service nearby 3. Get pregnant while using a contraception 4. Did not use contraception for personal reasons 5. Missed my contraceptive pill 6. Used a post-pill but conceived	Multiple answer possible

		7. Forgot to use condom 8. Partner pressure not to use condoms 9. I was rapped 10. Other (specify): _____	
26	If 'yes' for no. 22, what did you do with the unwanted or unplanned pregnancy (ies)?	1. Continued (all) pregnancy (ies) 2. Have an induced abortion(s)	If '1', you have finished the interview.
27	If '2' for no. 25, how many?	_____	
28	How old were you at your 1 <sup>st</sup> induced abortion?	_____	

### Part III: Characteristics in the Incident (most recent) Induced Abortion

29	When was your most recent induced abortion?	_____ weeks/months/years	
30	How did the pregnancy happen?	1. Didn't know about contraceptives 2. Couldn't access a contraceptive service nearby 3. Get pregnant while using a contraception 4. Did not use contraception for personal reasons 5. Missed my contraceptive pill 6. Used a post-pill but conceived 7. Forgot to use condom 8. Partner pressure not to use condoms 9. I was rapped 10. Other (specify): _____	
31	What was the age of the pregnancy when terminated?	_____ weeks/months	
32	How old were you at the time of the termination?	_____ years	
33	How was your marital status at the time of the induced abortion?	1. Married 2. Single 3. Divorced 4. Widowed 5. Other (specify): _____	
34	What was your work status at the time of the induced abortion?	1. House wife 2. Student 3. Employee (specify Job):	

		<p>_____</p> <ol style="list-style-type: none"> <li>4. Business woman</li> <li>5. Daily laborer</li> <li>6. Other (specify):</li> </ol> <p>_____</p>	
35	What was your level of schooling at the time of the induced abortion?	<ol style="list-style-type: none"> <li>1. Not in school</li> <li>2. In Primary School</li> <li>3. In Secondary School</li> <li>4. In College education</li> <li>5. Completed my education and working</li> <li>6. Others (specify):</li> </ol> <p>_____</p>	
36	Where were you living at the time of the induced abortion?	<ol style="list-style-type: none"> <li>1. Addis Ababa</li> <li>2. Out of Addis Ababa (specify) :</li> </ol> <p>_____</p>	
37	How much was your income per month in birr at the time of the induced abortion?	_____ Ethiopian Birr	
38	The highest level of education your partner has completed at the time?	<ol style="list-style-type: none"> <li>1. Illiterate</li> <li>2. Can Read and Write</li> <li>3. Primary Education</li> <li>4. Secondary Education</li> <li>5. College and Above</li> </ol>	
39	What was your partner's work status?	<ol style="list-style-type: none"> <li>1. Didn't have work</li> <li>2. A Student</li> <li>3. An Office worker</li> <li>4. A Merchant</li> <li>5. A Daily laborer</li> <li>6. Other (Specify):</li> </ol> <p>_____</p>	
40	Was your partner involved in the decision to abort the pregnancy?	<ol style="list-style-type: none"> <li>0. No</li> <li>1. Yes</li> </ol>	If 'no', go to Question no. 42
41	If 'yes' to no. 40, did he agree with the plan to abort?	<ol style="list-style-type: none"> <li>0. No</li> <li>1. Yes</li> </ol>	
42	What is the reason of the induced abortion?	<ol style="list-style-type: none"> <li>1. Rape</li> <li>2. Incest</li> <li>3. Being single</li> <li>4. Being divorced</li> <li>5. Related to health</li> <li>6. Related to income</li> <li>7. To complete my education</li> <li>8. To have spacing between children</li> <li>9. Partner pressure</li> <li>10. Family pressure</li> </ol>	

		11. Other (specify): _____	
43	Did you have ultrasound before the induced abortion was executed?	0. No 1. Yes	
44	Where did you have the induced abortion?	1. At home by myself 2. At a traditional healer 3. At a private health facility 4. At a government health facility 5. Other (specify): _____	
45	If the induced abortion was done at home, what method did you use?	1. Medication from Pharmacy/drug store 2. Traditional Medicine (Specify): _____ 3. Other (specify): _____	
46	If the induced abortion was done at home with medication, did you get a standard prescription from a health facility?	0. <u>NO</u> 1. <u>YES</u>	
47	How did you abort it?	1. By medication from a health facility 2. By surgical evacuation at a health facility 3. By herbal medication 4. Other (specify): _____	
48	Was there any complication during/after the abortion?	0. NO 1. YES	
49	What was the complication?	1. Excessive bleeding 2. Organ injury 3. Infection 4. Infertility 5. Depression 6. Hospitalization for >24 hours (specify duration): _____ Others (specify _____	
50	If complication has happened, what did you do?	1. Stayed at home 2. Went to health facility	
51	If you go to health facility did you require admission?	0. NO 1. YES	
52	If yes, for how many days?	----- days	

53	After abortion which method of contraceptive did you use?	<ol style="list-style-type: none"><li>1. None</li><li>2. Condom</li><li>3. OCP</li><li>4. Injectables</li><li>5. IUCD</li><li>6. Implant</li><li>7. Other (specify): _____</li></ol>	
----	---	--	--

54	Have you ever used emergency contraceptive pill/Post pill?	0.NO 1. YES	
55	Have you ever before visited a health facility to receive services or information on contraception	0.NO 1. YES	
56	Did you request contraceptive services during your past visit?	0.NO 1.YES	
57	Which type of contraceptive method is more effective for you?	1.OCP 2.Injectables 3.Condom 4.Emergency Pills 5.IUCD 6.Implant 7.Others /specify	
58	Do you think that abortion is legal in Ethiopia?	1.It is legal 2.Not legal 3.I don't know It is legal in some conditions ( specify ) -----	
59	What possible complications do you know that can occur due to abortion? (more than one answer possible)	1.Excessive bleeding 2.Organ injury 3.Infection 4.Infertility 5.Depression 6.Death 7.Others/ Specify -----	
60	Do you know any mechanism women use to abort?	0. No 1. Yes, specify _____	
61	Which of these had ever influenced you for initiation to have sexual intercourse?	1.Alcohol 2.Chat 3.Drugs 4.Financial problem 5.Peer pressure 6. Others-----	

## Annex IV: Dummy Table

Table 1: Socio-demographic Characteristics

Variable	Categories	Freq. (%)	Induced Abortion					
			No (%)	Yes (%)	P value	COR	P value	AOR
Current Age	<20							
	20-34							
	≥35							
Married	No							
	Yes							
Religion	Christianity							
	Islam							
	Other							
Educational level completed	Illiterate							
	No formal edu							
	Primary edu							
	Secondary edu							
	Tertiary edu							
Current work/job	Housewife							
	Student							
	Private employee							
	Gov't employee							
	Business woman							
	Other (specify):							
Household income								

Table 2: Obstetric and Reproductive Characteristics

Variable	Categories	Freq. (%)	Induced Abortion					
			No (%)	Yes (%)	P value	COR	P value	AOR
Gravidity	Nulligravid							
	Multi/primi							
Parity	Nulliparous							
	Parous							
Spontaneous abortions	No							
	Yes							
Induced abortion (indicated)	No							
	Yes							
Induced abortion (unwanted)	No							
	Yes							
Coitarche	Normal							
	Early							
Multiple partners	No							
	Yes							
Current FP method								

Table3: Characteristics in the Incident Induced Abortion

Variable	Categories	Freq. (%)	Induced Abortion					
			No (%)	Yes (%)	P value	COR	P value	AOR
Age at IAb	<20							
	20-34							
	≥35							
Residence in the IAb	Addis Ababa							
	Out of Addis							
Marital status	Not Married							
	Married							
Work/job status								
Educational status								
Partner's educational status								
Partner's work status								
Income								
Partner Involved	No							
	Yes							
GA of IAb	1 <sup>st</sup> TM							
	2 <sup>nd</sup> TM							

	<b>(early)</b>							
	<b>2<sup>nd</sup> TM (late)</b>							
<b>Reason for IAb</b>	<b>Medical</b>							
	<b>Unwanted</b>							
<b>Place of IAb</b>								
<b>Method of IAb</b>								

**መለያ I: ስለጥናቱ መረጃ**

መጠይቅ መለያ ቁጥር \_\_\_\_\_

የኔ ስም \_\_\_\_\_ . በAABU በጽንሰና ማህፀን ህክምና ትምህርታቸውን ለማሟላት በይ/ር ሄኖክ መኮንን በተካሄደው ምርምር መረጃ ሰብሳቢ ሆኜ እየሰራሁ ነው። በአዲስ አበባ ዩኒቨርሲቲ ሦስቱ የማስተማርያ ሆስፒታሎች በቤተሰብ ምጣኔ አገልግሎት ተጠቃሚዎች መካከል ካለው ፅንሰ ማስወረድ ጋር ተያይዞ ያለውን ስርጭትና ምክንያቶች ለመገምገም እየሞከርን ነው።

**ዓላማው:** ይህ ጥናት ለሚጠቀሙት ሁሉ እንደሚጠቅም ተስፋ አደርጋለሁ እናም የምርምር ውጤቱን ለሚመለከተው አካል አቀርባለሁ።

**ሂደት:-** በቤተሰብ እቅድ አገልግሎት ተጠቃሚዎች መካከል ከሚፈጠረው ፅንሰ ማስወረድ ጋር የተቆራኙትን ስርጭት እና ምክንያቶችን መገምገም። ስለዚህ ጥናቱ በቃለ መጠይቅ እና በካርድ ግምገማ ይከናወናል። በዚህ ፕሮጀክት ላይ ለመሳተፍ ፈቃደኛ ከሆኑ መረዳት አለዎት እና በስምምነቱ ቅጽ ላይ «አዎ» ማለት አለበዎት። ፍቃደኛ ከሆናችሁ በኋላ እስከተወሰነ ጊዜ ድረስ ምስጢራዊነቱን ለመጠበቅ ፈቃዱ በተጠበቀ ቦታ ይጠበቃል እና ከዚያም DRPC/IRBን በማሳተፍ ይጠፋል።

**ስጋት/ አለመመችት:** በዚህ የምርምር ፕሮጀክት ላይ በመሳተፍ በተለይ በማስታወስ ላይ አንዳንድ ምች ማጣት እንዳለበዎት ሊሰማዎት ይችላል መጥፎ ትዝታዎች፣ አሉታዊ ስሜቶች እና ጊዜ ማሳለፍ (60 ደቂቃ ያህል)። ለምርምር ውጤቱ ጥቅም ሲባል በጥናቱ ላይ እንደሚሳተፉ ተስፋ እናደርጋለን። በዚህ የምርምር ፕሮጀክት ውስጥ መሳተፍ ምንም አይነት ስጋት እንደሌለ እርግጠኛ ነኝ።

**ጥቅም ጥቅሞች:** ለእርስዎ ቀጥተኛ ጥቅም ላይኖር ይችላል ነገርግን የእርስዎ ተሳትፎ በቤተሰብ እቅድ አገልግሎት ተጠቃሚ ሴቶች መካከል ያለውን ስርጭት እና ከሚያስከትላቸው ፅንሰ ማስወረድ ጋር በተያያዙ ጉዳዮች ግምገማ ላይ ሊረዳን ይችላል።

**ምስጢራዊነት:-** ከዚህ የምርምር ፕሮጀክት የሚሰበሰቡ መረጃ በሚስጥር ይጠበቃል እና በዚህ ጥናት የሚሰበሰቡ የማንነት መረጃ በፋይል ውስጥ ያለ ስምዎ ይቀመጣል ነገር ግን ከድ ቁጥር ይመደብላታል። በተጨማሪም፣ ከዋናው መርማሪ በስተቀር ለማንም አይገለጽም እና በቁልፍ ተቆልፎ ይቆያል።

**እምቢ የማለት ወይም የመውጣት መብት:** ይህ ቃለ መጠይቅ በመካሄድ ላይ ያለ ምርምር አካል ነው እና በክሊኒኩ ውስጥ የእርስዎ እንክብካቤ አካል አይደለም እናም እምቢ ማለት ወይም ውድቅ የማድረግ መብት አለዎት እና አሁን ባለው አገልግሎት ላይ ምንም ተጽእኖ አይኖረውም። ምላሽዎን መስጠት ካልፈለጉ ለአንዳንድ ወይም ለሁሉም ጥያቄዎች ምላሽ ላለመስጠት መምረጥ ይችላሉ።

ከላይ የተጠቀሰው መረጃ ካለዎት በዚህ ጥናት መሳተፍ ይፈልጋሉ?

- 1. አዎ \_\_\_\_\_
- 2. አይ \_\_\_\_\_

ስለ ትብብርዎ እናመሰግናለን!

ስለ ጥናቱ ተጨማሪ ጥያቄዎች ካሉዎት እባክዎን ያነጋግሩ  
ይ/ር ሄኖክ መኮንን (ዋና ተመራማሪ) ስልክ: +251-913870459

**አባሪ II: የስምምነት ቅጽ - የአማረኛ ቅጽ**

ስለዚህ ጥናት ሙሉ በሙሉ ተረድቻለሁ እና የጽሁፍ መረጃ ተሰጥቶኛል እናም የዚህ ጥናት አላማ ተረድቻለሁ። ውጤቱ ለእናቶች ጤና እንደሚጠቅም ተረድቻለሁ። በዚህ ጥናት ውስጥ በመሳተፍ ምንም አይነት አደጋዎች እንደሌሉ ተረድቻለሁ። በዚህ ጥናት ለመሳተፍ ተስማምቻለሁ። በመሳተፍ ምንም አይነት ልዩ አገልግሎት የማግኘት መብት እንደሌለኝ ወይም ክፍያ ወይም ስጦታ እንደማይሰጠኝ ተረድቻለሁ። የተገኘው መረጃ ሚስጥራዊ እንደሚሆን ተነግሮኛል። እኔን የሚገልጽ ማንኛውም መረጃ ከማንኛውም ዘገባ ወይም ህትመት እንደሚገለል ተረድቻለሁ። ይህ ፈቃድ የሚሰራው ለዚህ ጥናት ብቻ ነው።

በጥናቱ ለመሳተፍ ፈቃደኛ ነዎት? 1- አዎ 2 - አይደለም

መልሱ አዎ ከሆነ፣ እባክዎ ከታች ባለው ክፍት ቦታ ይፈረሙ።

የተሳታፊው ስም \_\_\_\_\_, ፍርማ \_\_\_\_\_

ስለተሳተፉ እናመሰግናለን!

መልሱ አይደለም ከሆነ አመሰግናለሁ!

አንድን ግለሰብ በዳሰሳ ጥናቱ ውስጥ እንዲሳተፍ አያስገድዱ ወይም አያበረታቱ

የቃለ-መጠይቅ ኮድ -----ስም ----- ፈረማ ----

የቃለ መጠይቁ ቀን ----- ቀን ----- ወር/2016 ኢ.ሲ.

የቃለ መጠይቁ ጊዜ \_\_\_\_\_ ሰዓት ጀመረ፣ ደቂቃዎች

የቃለ መጠይቁ ጊዜ አልቋል \_\_\_\_\_ ሰዓቶች፣ ደቂቃዎች

የተረጋገጠው ----- ቀን----- ወር/2016ኢ.ሲ

በመረጃ የተደገፈ ስምምነት የተረጋገጠው በ: ሱፐርቫይዘር: ስም \_\_\_\_\_ ፈረማ: \_\_\_\_\_

ያጠናቅቁ 1

ያልተሟላ 2 ሌላ (ይግለጹ) ----

**አባሪ III. መጠይቅ - የአማረኛ ቅጂ**

የመረጃ መሰብሰቢያ ቀን (ቀን/ወር/ዓመት) \_\_\_\_\_

**ክፍል አንድ:- ማህበረ-ሕዝብ ባህሪያት**

1 እድሜዎ ስንት ነው? \_\_\_\_\_ ዓመታት

2 የት ነው የሚኖሩት?

- 1. በአዲስ አበባ
- 2. ከአዲስ አበባ ውጪ (ይግለጹ): \_\_\_\_\_

3 በአሁኑ ጊዜ አግብተዋል?

- I. አይ
- II. አዎ

4 የትኛውን ሃይማኖት ነው የምትከተሉት?

- I. ኦርቶዶክስ ክርስትና
- II. እስልምና
- III. ፕሮቴስታንት
- IV. ካቶሊክ
- V. ሌላ (ይግለጹ): \_\_\_\_\_

5 የትምህርት ደረጃዎ ስንት ነው?

- I. ያልተማረች
- II. ማንበብ እና መጻፍ
- III. የተጠናቀቀ የመጀመሪያ ደረጃ ትምህርት ቤት
- IV. የተጠናቀቀ ሁለተኛ ደረጃ ትምህርት ቤት
- V. የኮሌጅ ዲፕሎማ/ዲግሪ ያጠናቀቀች
- VI. የማስተርስ ዲግሪዬን አጠናቅቄያለሁ
- VII. ፕሎቶዲዩዬን አጠናቅቃለች

6 በአሁኑ ጊዜ ለመኖር ምን ታደርግለሽ

- I. የቤት እመቤት ነኝ
- II. ተማሪ ነኝ
- III. እኔ የግል ሰራተኛ ነኝ
- IV. የመንግስት ሰራተኛ ነኝ
- V. እኔ የንግድ ቤት ነኝ

VI. ሌላ (ይግለጹ): \_\_\_\_\_

7 በETB ውስጥ ያለዎት የቤተሰብ ወርሃዊ ገቢ ምን ያህል ነው? \_\_\_\_\_ ETB

**ክፍል II: የማህፀን እና የመራቢያ ባህሪያት**

8 በህይወትዎ ስንት እርግዝና አጋጥሞዎት ያውቃል? (0 ከሆነ ጨርሰዋል)

9 ስንት ልጆች ወለዱ? (ከ 7 ወር እርግዝና በኋላ በህይወት ወይም በሞት) \_\_\_\_\_

10 በድንገት ፅንሰ አስወርዶ ታውቃለህ? መልሱ 'አይ' ከሆነ ወደ 12ኛ ይሂዱ።

- I. አይ
- II. አዎ

11 'አዎ' ከሆነ፣ ስንት? \_\_\_\_\_

12 በህክምና ምክንያት ፅንሰ ማስወረድ ፈጥረው ያውቃሉ? መልሱ 'አይ' ከሆነ ወደ 15 ይሂዱ።

- I. አይ
- II. አዎ

13 'አዎ' ከሆነ 12, ምክንያቱ (ቶች) ምን ነበሩ?

\_\_\_\_\_

\_\_\_\_\_

14 'አዎ' ከሆነ ጥያቄ 12, ስንት? \_\_\_\_\_

15 ከህክምና ውጭ በሆነ ምክንያት ፅንሰ አስወርዶ ታውቃለህ? (አይ' ከሆነ ወደ ጥያቄ ቁጥር ይሂዱ። 18)

- I. አይ
- II. አዎ

16 'አዎ' ከሆነ ጥያቄ 15, ምክንያቱ ምን ነበር? \_\_\_\_\_

17 'አዎ' ከሆነ ጥያቄ 15, ስንት? \_\_\_\_\_

18 ለአሁኑ ጉብኝትዎ ምክንያት ምንድን ነው?

- I. የወሊድ መከላከያ ምክር ለማግኘት
- II. የወሊድ መከላከያ ለማግኘት
- III. የወሊድ መከላከያ ለመለወጥ
- IV. የወሊድ መከላከያን ለማስወገድ
- V. ሌላ (ይግለጹ): \_\_\_\_\_

19 የትኛውን የቤተሰብ ምጣኔ ዘዴ ለመጠቀም ትመርጣለህ?

- I. የለም
- II. አ.ሲ.ፒ
- III. በመርፌ መወጋት
- IV. መትከል
- V. 5.ሉፕ
- VI. ሌላ (ይግለጹ): \_\_\_\_\_

20 የግብረ ሥጋ ግንኙነት ፈጽመዎ ያዉቃሉ? 'አይ' ከሆነ, ጨርሰዋል

- I. አይ
- II. አዎ

21 የግብረ ሥጋ ግንኙነት ስትጀምር ዕድሜዎ ስንት ነበር? \_\_\_\_\_ ዓመታት

22 ምን ያህል የጾታ አጋሮች ነበሩዎት? \_\_\_\_\_

23 ከዚህ በፊት ያልተፈለገ ወይም ያልታቀደ እርግዝና አጋጥሞህ ያውቃል? 'አይ' ከሆነ, ጨርሰዋል

- I. አይ
- II. አዎ

24 ስንት ያልተፈለገ ወይም ያልታቀደ እርግዝና ነበረዎት? \_\_\_\_\_

25 ያልተፈለገ ወይም ያልታቀደ እርግዝና (እርግዝና) እንዴት ተከሰተ?

- I. ስለ የወሊድ መከላከያ ዘዴዎች አያውቅም
- II. በአቅራቢያ ያለ የወሊድ መከላከያ አገልግሎት ማግኘት አልተቻለም

- III. የወሊድ መከላከያ ሲጠቀሙ እርጉዝ ይሁኑ
  - IV. ለግል ምክንያቶች የወሊድ መከላከያ አልተጠቀመም
  - V. የወሊድ መከላከያ ክኒን አጣሁ
  - VI. ድህረ-ክኒን ተጠቅሟል ነገር ግን ተፀነሰ
  - VII. ኮንዶም መጠቀምን ረስቷል
  - VIII. ኮንዶም ላለመጠቀም የአጋር ግፊት
  - IX. ተደፈርኩኝ።
  - X. ሌላ (ይግለጹ): \_\_\_\_\_ ብዙ መልስ ይቻላል
- 26 መልሰዎ 'አዎ' ከሆነ ጥያቄ 22, ባልተፈለገ ወይም ባልታወቀ እርግዝና (ዎች) ምን አደረግክ?
- I. የቀጠለ (ሁሉም) እርግዝና (ዎች)
  - II. ፅንሰ ማስወረድ (ዎች) 'I' ከሆነ, ቃለ-መጠይቁን ጨርሰዋል.
- 27 '2' ከሆነ አይሆንም። 25, ስንት? \_\_\_\_\_
- 28 በመጀመሪያ ፅንሰ ማስወረድ ስንት አመት ነበር? \_\_\_\_\_

**ክፍል III: በድርጊቱ ውስጥ ያሉ ባህሪያት (በጣም የቅርብ ጊዜ) የተከሰተ ፅንሰ ማስወረድ**

- 29 የቅርብ ጊዜ ፅንሰ ማስወረድ መቼ ነበር? \_\_\_\_\_ ሳምንታት/ወሮች/ዓመታት
- 30 እርግዝናው እንዴት ተከሰተ?
- I. ስለ የወሊድ መከላከያ ዘዴዎች አያውቅም
  - II. በአቅራቢያ ያለ የወሊድ መከላከያ አገልግሎት ማግኘት አልተቻለም
  - III. የወሊድ መከላከያ ሲጠቀሙ እርጉዝ ይሁኑ
  - IV. ለግል ምክንያቶች የወሊድ መከላከያ አልተጠቀመም
  - V. የወሊድ መከላከያ ክኒን አጣሁ
  - VI. ድህረ-ክኒን ተጠቅሟል ነገር ግን ተፀነሰ
  - VII. ኮንዶም መጠቀምን ረስቷል
  - VIII. ኮንዶም ላለመጠቀም የአጋር ግፊት
  - IX. ተደፈርኩኝ።
  - X. ሌላ (ይግለጹ): \_\_\_\_\_
- 31 እርግዝናው ሲቋረጥ ዕድሜው ስንት ነበር? \_\_\_\_\_ ሳምንታት/ወር
- 32 በመቋረጡ ጊዜ ዕድሜዎ ስንት ነበር? \_\_\_\_\_ ዓመታት
- 33 ፅንሰ ማስወረድ ወቅት የጋብቻ ሁኔታዎ እንዴት ነበር?
- I. ያገባ
  - II. ያላገባ
  - III. የተፋታ
  - IV. ባል የሞተባት
  - V. ሌላ (ይግለጹ): \_\_\_\_\_
- 34 ፅንሰ ማስወረድ በተጀመረበት ወቅት የስራዎ ሁኔታ ምን ይመስላል?
- I. የቤት እመቤት
  - II. ተማሪ
  - III. ሰራተኛ (ስራውን ይግለጹ): \_\_\_\_\_
  - IV. የንግድ
  - V. የቀን ሰራተኛ
  - VI. ሌላ (ይግለጹ): \_\_\_\_\_
- 35 ፅንሰ ማስወረድ በተጀመረበት ወቅት የትምህርት ደረጃዎ ምን ያህል ነበር?
- I. በትምህርት ቤት ውስጥ አይደለም
  - II. በአንደኛ ደረጃ ትምህርት ቤት
  - III. በሁለተኛ ደረጃ ትምህርት ቤት
  - IV. በኮሌጅ ትምህርት

- V. ትምህርቱን አጠናቅቄ ሥራዬን ጀምራለሁ
  - VI. ሌሎች (ይግለጹ): \_\_\_\_\_
- 36 ፅንሰ ማስወረድ በሚደረግበት ጊዜ የት ነበር የምትኖረው?
- I. አዲስ አበባ
  - II. ከአዲስ አበባ ውጭ (ይግለጹ): \_\_\_\_\_
- 37 ፅንሰ ማስወረድ በተጀመረበት ወቅት የወር ገቢዎ በተባባሪ ምን ያህል ነበር? \_\_\_\_\_ የኢትዮጵያ ብር
- 38 የትዳር ጓደኛዎ በወቅቱ ያጠናቀቀው ክፍተኛ የትምህርት ደረጃ?
- I. ማንበብ መፃፍ
  - II. ማንበብ እና መጻፍ ይችላል
  - III. የመጀመሪያ ደረጃ ትምህርት
  - IV. የሁለተኛ ደረጃ ትምህርት
  - V. ኮሌጅ እና በላይ
- 39 የአጋርዎ የስራ ሁኔታ ምን ነበር?
- I. ሥራ አልነበረውም
  - II. ተማሪ
  - III. የቢሮ ሰራተኛ
  - IV. አንድ ነጋዴ
  - V. የቀን ሰራተኛ
  - VI. ሌላ (ይግለጹ): \_\_\_\_\_
- 40 የትዳር ጓደኛዎ እርግዝናን ለማቋረጥ በተደረገው ውሳኔ ውስጥ ተሳታፊ ነበር? 'አይ' ከሆነ ወደ ጥያቄ ቁጥር ይሂዱ። 42
- I. አይ
  - II. አዎ
- 41 'አዎ' ከሆነ ጥያቄ 40, ፅንሰ ማስወረድ በተዘጋጀው እቅድ ተስማምቷል?
- I. አይ
  - II. አዎ
- 42 የፅንሰ ማስወረድ ምክንያት ምንድን ነው?
- I. መደፈር
  - II. የግብረ ሥጋ ግንኙነት
  - III. ነጠላ መሆን
  - IV. መፋታት
  - V. ከጤና ጋር የተያያዘ
  - VI. ከገቢ ጋር የተያያዘ
  - VII. ትምህርቱን ለማጠናቀቅ
  - VIII. በልጆች መካከል ክፍተት እንዲኖር
  - IX. የአጋር ግፊት
  - X. የቤተሰብ ግፊት
  - XI. ሌላ (ይግለጹ): \_\_\_\_\_
- 43 ፅንሰ ማስወረድ ከመደረጉ በፊት አልትራሳውንድ ነበረዎት?
- I. አይ
  - II. አዎ
- 44 ፅንሰ ማስወረድ የት ነው ያደረከው?
- I. በራሴ ቤት
  - II. በባህል ሃኪም
  - III. በግል የጤና ተቋም
  - IV. በመንግስት የጤና ተቋም
  - V. ሌላ (ይግለጹ): \_\_\_\_\_
- 45 ፅንሰ ማስወረድ የተከናወነው በቤት ውስጥ ከሆነ ምን ዓይነት ዘዴ ነው የተጠቀሙት?

- I. መድሃኒት ከፋርማሲ / የመድሃኒት መደብር
- II. ባህላዊ ሕክምና (ይግለጹ): \_\_\_\_\_
- III. ሌላ (ይግለጹ): \_\_\_\_\_

46 ፅንሰ ማስወረድ በቤት ውስጥ በመድኃኒት የተደረገ ከሆነ ከጤና ተቋም መደበኛ የሐኪም ትእዛዝ አግኝተዋል?

- I. አይ
- II. አዎ

47 እንዴት አስወረድከው?

- I. ከጤና ተቋም በተገኘ መድኃኒት
- II. በጤና ተቋም በቀዶ ሕክምና በመልቀቅ
- III. ከዕለታዊ የተቀመጡ መድኃኒቶች
- IV. ሌላ (ይግለጹ): \_\_\_\_\_

48 ፅንሰ ማስወረድ ወቅት/በኋላ የተወሰዱ ችግሮች ነበሩ?

- I. አይ
- II. አዎ

49 ውስብስብነቱ ምን ነበር?

- I. ከፍተኛ የደም መፍሰስ
- II. የአካል ክፍሎች ጉዳት
- III. ኢንፌክሽን
- IV. መሃንነት
- V. የመንፈስ ጭንቀት
- VI.  $\lambda > 24$  ሰዓታት ሆስፒታል መተኛት (የሚቆይበትን ጊዜ ይግለጹ): \_\_\_\_\_
- VII. ሌሎች (ይጥቀሱ)

50 ውስብስብነት ከተፈጠረ ምን አደረጉ?

- I. በቤት ውስጥ ቆየ
- II. ወደ ጤና ተቋም ሄዷል

51 ወደ ጤና ተቋም ከሄዱ መቀበል ፈልጎ ነበር?

- I. አይ
- II. አዎ

52 አዎ ከሆነ፣ ለስንት ቀናት?----- ቀናት

53 ፅንሰ ካስወረዱ በኋላ የትኛውን የእርግዝና መከላከያ ዘዴ ተጠቅመዋል?

- I. የለም
- II. ኮንዶም
- III. ኦ.ሲ.ፕ
- IV. መርፌዎች
- V. S.ፕ
- VI. መትከል
- VII. ሌላ (ይግለጹ): \_\_\_\_\_