

**ADDIS ABABA UNIVERSITY**  
**COLLEGE OF HEALTH SCIENCES**  
**SCHOOL OF ALLIED HEALTH SCIENCES**  
**DEPARTMENT OF NURSING AND MIDWIFERY**

**ASSESSMENT ON THE DETERMINANTS OF INDUCED ABORTION AMONG  
CHILDBEARING AGE WOMEN IN NON-PROFITABLE PRIVATE HEALTH  
INSTITUTIONS, ADDIS ABABA, ETHIOPIA**

**BY: HAWENI ADUGNA**

**A THESIS SUBMITTED TO THE POSTGRADUATE STUDY OF THE COLLEGE OF  
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**Addis Ababa, Ethiopia**

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**APPROVED BY THE BOARD OF EXAMINERS**

**This thesis by Haweni Adugna is accepted in its present form by the board of examiners as satisfying thesis requirement for the Degree of Master of Science in Maternity and Reproductive Health Nursing.**

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## **List of Abbreviations**

ANC- Antenatal care

CPR- Contraceptive prevalence rate

DHS- Demographic Health Survey

ESOG- Ethiopian Society of Obstetricians and Gynecologists

ETB- Ethiopian birr

FP- Family planning

MCH- Maternal and Child health

MDG- Millennium Development Goal

MMR- Maternal mortality ratio

NGO- Nongovernmental organization

OCP- Oral contraceptive pills

RHB- Regional health bureau

SPSS- Statistical package for social sciences

TFR- Total fertility rate

TWFR- Total wanted fertility rate

SPAC- Sampling proportionate allocation of clients

VSC- Voluntary surgical contraceptive

WHO- World health organization

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## **Abstract**

**Background:** More than half of 80 million unintended pregnancies occurred worldwide would end in abortion annually. In developing countries more than one-third of all pregnancies are considered unintended and about 19% will end up in abortion. The determinants of induced abortion are considered to be socio-demographic factors, prior reproductive health and family planning behaviors and experiences. There is a need to address various problems with regards to women reproductive health needs including contraceptive use.

**Objective:** To assess determinants of induced abortion among child bearing age women attending reproductive health clinic in Addis Ababa.

**Method:** Institution based cross sectional study on assessment of determinants of induced abortion was conducted in May 2014. Study subjects were women aged 18 to 49, attending reproductive health clinic in Addis Ababa among who had experienced induced abortion by convenience sampling. A structured pre-tested questionnaire was used to collect data on abortion and related aspects.

**Result:** A total of 390 reproductive age women were interviewed. Mean age of the respondents was 26 years. The most frequent reason for induced abortion mentioned by the respondents was not using a contraceptive method 29.2%. Inappropriate use of contraceptive 15.8% and rape 8.2% were also mentioned by the respondents. Fifty three percent of the participants admitted for using at least on method of contraceptive. Age and marital status were significantly associated socio-demographic variables with induced abortion. Total number of live birth, contraceptive use and future desire of pregnancy were also significantly associated variables.

**Conclusion and recommendation:** out of all respondents 93.8% mentioned one contraceptive method, but still 55% women with induced abortion experience mentioned contraceptive related reasons for having induced abortion. This shows that there is a big gap between the knowledge and practice of contraceptive. Therefore, it is recommended that to strengthen and modify the existing family planning program in order to reduce induced abortion.

## **Chapter I: Introduction**

### **Background**

Abortion is the termination of pregnancy before viability, which is conventionally taken to be less than 28 weeks from the last normal menstrual period (LNMP). If the LNMP is not known, birth weight of less than 1000gm is considered as abortion but in developed countries it is considered to be prior to 20 weeks gestation or less than 500-gm birth weight (1). Abortion can be safe or unsafe; there are two Methods of pregnancy termination Medical using Mifepristone or Misoprostol and Surgical that are Vacuum Aspiration or Sharp Metallic curettage (2).

About 80 million of unintended pregnancies are estimated to occur worldwide annually. More than half of these pregnancies end in abortion, often in countries where abortion is illegal and access to contraception is limited. In developing countries more than one-third of all pregnancies are considered unintended and about 19% will end up in abortion, which are most often unsafe accounting for 13% of all maternal death globally (3).

Unintended pregnancy is associated with an increased risk of morbidity for women, and with health behaviors during pregnancy that are associated with adverse effects. The use of modern contraceptive methods has greatly reduced the incidence of unintended pregnancy worldwide, particularly in more developed countries. It is reported that despite of the availability of different modern methods of contraceptives, ranging from short, long term to permanent methods, as well as natural methods of contraception, the problem of unwanted pregnancies is very big worldwide but still underreported in many communities due to its sensitive nature (4).

In 2008, an estimated 103,000 women obtained legal abortions in health facilities in Ethiopia. It is likely that much of the increase in legal abortion services was facilitated by law reform and the 2006 guidelines, as well as by the substantial efforts on the part of the public, nongovernmental organizations (NGO) and private sectors to implement the provision of safe abortion services, following the regulatory changes (5). As part of law reform in Ethiopia in 2005, the penal code was revised to indications under which abortion is permitted. According to the new penal code, abortion is not punishable when it is performed to save a woman's life or health; in cases of rape, incest, and serious fetal impairment; and when a pregnant woman lacks the capacity to care for a

child because of her age or physical or mental health. And in case of grave and imminent danger which can be averted only by an immediate intervention an act of termination of pregnancy is not punishable (1).

The major consequence of unwanted pregnancy worldwide is induced abortion, this can be performed in health care services where by the abortion is provided by a skilled health care provider with proper equipment, correct technique as well as under sterile environment as part of the reproductive health services (4).

Countries where contraceptive use is very high, the rate of unwanted pregnancy as well as abortion has declined to a very great extent, that is contraceptive use is inversely proportional to the rate of abortion (6). Thus, as contraceptive prevalence rises and fertility starts to fall, an increasing proportion of couples want no more children (or want an appreciable delay before the next child), and exposure to the risk of unintended pregnancy also increases as a result (7). Even if all contraceptives users were to use their methods correctly at all time, still there will be nearly six million accidental pregnancies annually which may end up into unwanted pregnancy (8). It was estimated that current levels of unintended pregnancy and the prevalence of contraceptive use stem from early discontinuation and typical method failure rates. Every year in sub-Saharan Africa, approximately 14 million unintended pregnancies occur and a significant proportion is due to poor use of short-term hormonal methods (9).

According to the 2011 EDHS, the total wanted fertility rate (TWFR) in Ethiopia is 3.0 children per woman, 1.8 fewer than the total fertility rate (TFR) of 4.8. This suggests that the TFR is 60 percent higher than it would be if unwanted births were avoided (10). Overall, 42% of all pregnancies in Ethiopia in 2008 were unintended. The proportion of all pregnancies that were unintended was much higher than average in Addis Ababa (72%) and was lower than average in Tigray (26%) and the combined four rural regions (15%) (5).

Maternal mortality is unacceptably high; about 800 women die from pregnancy- or childbirth-related complications around the world every day. In sub-Saharan Africa, a number of countries have halved their levels of maternal mortality since 1990. In other regions, including Asia and North Africa, even greater headway has been made. However, between 1990 and 2010, the global maternal mortality ratio declined by only 3.1% per year. This is far from the annual decline of 5.5% required to achieve MDG5 (11).

## **Statement of the problem**

In 2008, of the estimated 185 million pregnancies that occurred in developing countries, 40% were unintended, and 19% ended in induced abortion and the same year, an estimated 382,000 induced abortions were performed in Ethiopia, and 52,600 women were treated for complications of such abortions (5).

Improving maternal health is one of the eight Millennium Development Goals (MDGs) adopted by the international community in 2000. Under MDG5, countries committed to reducing maternal mortality by three quarters between 1990 and 2015. Since 1990, maternal deaths worldwide have dropped by 47%. The major complications that account for 80% of all maternal deaths are: severe bleeding (mostly bleeding after childbirth), infections (usually after childbirth), high blood pressure during pregnancy (pre-eclampsia and eclampsia) and unsafe abortion (11).

The World Health Organization (WHO) estimates that every year, nearly 5.5 million African women have an unsafe abortion. As many as 36,000 of these women die from the procedure, while millions more experience short- or long term illness and disability (12).

According to a 2009 report, an estimated 251 million women in developing countries have an unmet need for modern contraceptives and more than four out of five unintended pregnancies occur among such women. Between 20- 40% of all births occurring in developing countries are unwanted posing hardships for families and jeopardizing the health of millions of women and children. As a result, significant proportions of women turn to induced abortions to avoid unwanted or unplanned births. Unintended pregnancy is the root cause of abortion that can be easily reduced by meeting the contraceptive needs of women (13, 14).

In the capital city, Addis Ababa, the high abortion rate is consistent with its extremely low TFR (1.4 in 2005), and desired family size (1.2 in 2005), and with its level of current contraceptive use; even though modern method use is moderately high and is higher than the level in all other regions (45% among married women of reproductive age used modern contraceptive methods.), it is too low to explain such a low TFR (5).

The lack of data at the individual level that relates a women's experience on pregnancy and it's outcome with a host of her individual, family and community characteristics explains not only

the limited evidence on pregnancy and abortion but also the fact that such evidence has been restricted to quantifying their incidence rather than identifying their principal determinants(15 ).

Despite the social and cultural importance of child bearing in many African communities, unwanted pregnancies are the source of problems in the families. This is more severe for young girls who often fall pregnant out of wed lock. The best option for them is to go for an abortion just to avoid facing the judgment from their families and the community in general (4). Access to voluntary family planning services, including contraception, is essential in helping to reduce the number of unintended pregnancies and, consequently, the incidence of induced abortion (3).

Some studies have been conducted to determine factors contributing to the unwanted pregnancies and induced abortion in Sub Saharan Africa, Reasons includes :- poverty, no support from the partner, disruption of education and employment, family building preferences i.e. need to post pone childbearing or to achieve health spacing between births, relationship problems with the partner/husband, risk to maternal or fetal health, pregnancy resulting from rape or incest, most of the time it is poor access to contraceptives or contraceptive failure(16).

There are few studies conducted in our country in relation to determinants of induced abortion. And these studies are weather community based or governmental institutions based and considered only a small set of household and individual socio-demographic factor. Additionally there are no studies conducted in Addis Ababa that indicate the determinants of induced abortion. For these reasons this study aims to find out the determinants of induced abortion; including to find its relationship with prior reproductive health and family planning behaviors and experiences in private non- profit health institutions.

### **Significance of the study**

The significance of the study is to describe the determinants of induced abortions in the study area that enables to reduce induced abortion. Information from this study will be used by the policy makers and program managers in addressing individual factors associated with an increased risk of pregnancy termination and come up with effective targeted family planning interventions.

## Chapter II: Literature Review

It should be kept in mind that first; information on socio-demographic differentials in abortion risk can improve our understanding of how induced abortion is distributed in sub-populations at different stages of the demographic transition. Second; identifying the contraceptive associated factors with an increased risk of induced abortion can facilitate targeted family planning interventions. And third; highlighting the factors associated with induced abortion, can encourage the case for improving access to or the quality of abortion services (17).

### 2.1. Socio-demographic characteristics

Socio-demographic variables are frequently mentioned as having association with induced abortion. A study done in India has indicated that the age group 20-30 years constituted major bulk for termination of pregnancy (75.14%) in the investigation (18). And also probability of pregnancy peaks for women in the middle of their childbearing years (i.e. aged 25-34); age is linearly and positively related to pregnancy termination (17). Another study conducted in Ethiopia also indicated that with the increase in age, there was a decrease in the number of mothers who had induced abortion ( $P < 0.01$ ) (11, 10, 12).

Marital status and employment were also significantly associated with induced abortion. Studies conducted in our country Ethiopia has indicated that Divorced/widowed women had also significant association with third or more pregnancies abortion with AOR= 17.7, 95% C.I (1.7, 182.16) and also married women were also 0.14 times less likely to induce their first pregnancy in the adjusted odds ratio, than cohabitants (19). Single women and students were 14.6 and 13.4 times higher in performing (having) induced abortions compared to married women and housewives respectively (20).

Educated women are more likely to have association with induced abortion. It was observed that 49.66% clients of induced abortion were with primary education and uneducated were 34.15%; total being 83.81% (14). Couple's education was also positively and consistently associated with women's experience of induced abortion. The likelihood of induced abortion was two and half times greater (OR, 2.45; 95% CI, 1.36-4.41;  $P = .003$ ) when both the husband and wife were literate compared with illiterate couples (14). And also a study finding in Ghana showed that, women without any formal education and those with basic education (up to junior high school), had a 76% (OR=0.24, CI: 0.07-0.70) and a 69% (OR=0.31, CI:0.18-0.54) reduction in the odds of

having had an abortion, respectively, when compared with women who had at least a high school education (21). Furthermore in Ethiopia across sectional study done in northwest Ethiopia indicates that, those who had a high school (or above) education were highly exposed to the risk of induced abortion with an odds ratio of 10.6 compared to illiterate women who could not read and write (20). And also in Nigeria it was reported that having a secondary-level education were the subgroups with the highest odds of ever seeking an induced abortion (odds ratios, 1.9 each) (22).

Regarding the occupation, in Ethiopia that students were 13.4 times higher having induced abortions compared to married housewives (20). Furthermore daily laborer had 0.003 times less likely to have induced abortion, than students (19). And also in Tanzania it was reported that 83 % of students to have induced abortion (4)

General income is one of those variables frequently associated with induced abortion in different countries. Women of high socio-economic status and those who live in urban areas are less likely than their low and middle socio-economic status and rural counterparts, respectively, to get pregnant; once pregnant, though, these women are more likely to have an abortion (17). In India study done in district hospital on clients for induced abortion revealed that clients with low socioeconomic and middle socioeconomic positions were 50.49% & 35.31% respectively while 14.19% were from high socioeconomic position (18). In contradictory women belonging to the higher wealth index were consistently found to be positively associated with experiencing induced abortion both in the unadjusted and adjusted models (18). The likelihood of experiencing induced abortion was almost two times higher (OR, 1.89; 95% CI, 1.53-2.33;  $P < .001$ ) among women belonging to fourth wealth index and three times higher (OR, 3.02; 95% CI, 2.41-3.80;  $P < .001$ ) among women belonging to highest wealth index than women in the lowest wealth index (14). In Barcelona, the second largest city in Spain, the abortion rate is 14.3 per 1,000 women aged 15–49 and about one in four known pregnancies end in an induced abortion(23).

## **2.2. Contraceptive use and its association with induced abortion**

Contraceptive related factors can be associated with induced abortion as in the quality and/ or access to it. Abortion is one of the oldest methods of averting unwanted births, and studies show that couples will switch to induced abortion as a method of birth control if they find

contraceptive methods unreliable (14). A report from Ethiopian study stated that, 87.7% of the respondents had heard about family planning methods. Among the respondents who had some knowledge about contraceptives, 50.2% of them reported that they had been using contraceptives. Accordingly, 62.5% used pills and 37% used Injectables (20). A study in Tanzania indicated that 99 % all respondents have heard of family planning information, but only 57 % agreed to have ever used the contraceptives, and the most mentioned method that was reported to be used was condom (55 %) (4). And also in India it is indicated that clients for induced abortion were with no knowledge about contraception constituted 249(20.54%) while patients with some knowledge were 861(71.03%)and good knowledge 102(8.41%) (18). Furthermore a study conducted in our country show that contraceptive users were at a reduced risk of having induced abortion compared to non-contraceptive users (OR = 0.4, P=.012) (20). To add up in Nigeria among women who had had an unwanted pregnancy, having ever used a modern contraceptive were the subgroups with the highest odds of ever seeking an induced abortion (odds ratios, 1.9 each) (22).

Additionally Ministry of health in Kenya indicates that an estimated 464,690 induced abortions occurred in Kenya in 2012, corresponding to an induced abortion rate of 48 abortions per 1000 women of reproductive age (15-49 years), and an induced abortion ratio of 30 abortions per 100 births in 2012. The high rate of induced abortion is associated with the high levels of un-met need for family planning and high unintended pregnancy among women in the country (24). Also in Ethiopia it is indicated that low levels of contraceptive use lead to high levels of unintended pregnancy, the root cause of abortion. In 2008, 101 unintended pregnancies occurred per 1,000 women aged 15–44, and 42% of all pregnancies were unintended (16).A study done in Harar region Ethiopia posed evidence that among the women who had unintended pregnancies the most frequent reply given as the reasons for failure to avoid unintended pregnancy were: inadequate knowledge on avoiding unwanted pregnancy – 159(70.6%) (13)

### **2.3. Other determinants of induced abortion**

Achieving the number of children is also the reason given by women having induced abortion; it is more common among women in the second parity, which reflects the influence of women's desire to limit family size on abortion (14). In north west Ethiopia it is found that as the number of pregnancies increased, the practice of induced abortion among the study subjects increased

accordingly (OR = 2.7, P <.001) (12).Also in Harar region women with fewer than 3 children had a significantly lower chance of experiencing induced abortion compared with those who had 5 or more children (AOR = 0.32, 95%CI 0.16, 0.64) (13).

Abortion is linked to violence. Only few studies attempted to correlate rape and abortion. In each of these studies rape was cited as the reason for seeking an abortion in 20-25% of the cases (25). In Ethiopia it was reported that 14.2% of the respondents had rape as determinants of induced abortion (19).

Financial reasons are one of those variables frequently associated with induced abortion in different countries. A study done in United States show that nearly one third (31%) of respondents gave partner related reasons for seeking an abortion (26). And also, in Ethiopia, Harar region husband or partner disapproval accounts for nearly 26 (11.6%) of respondents as a reason for undergoing induced abortion (13).

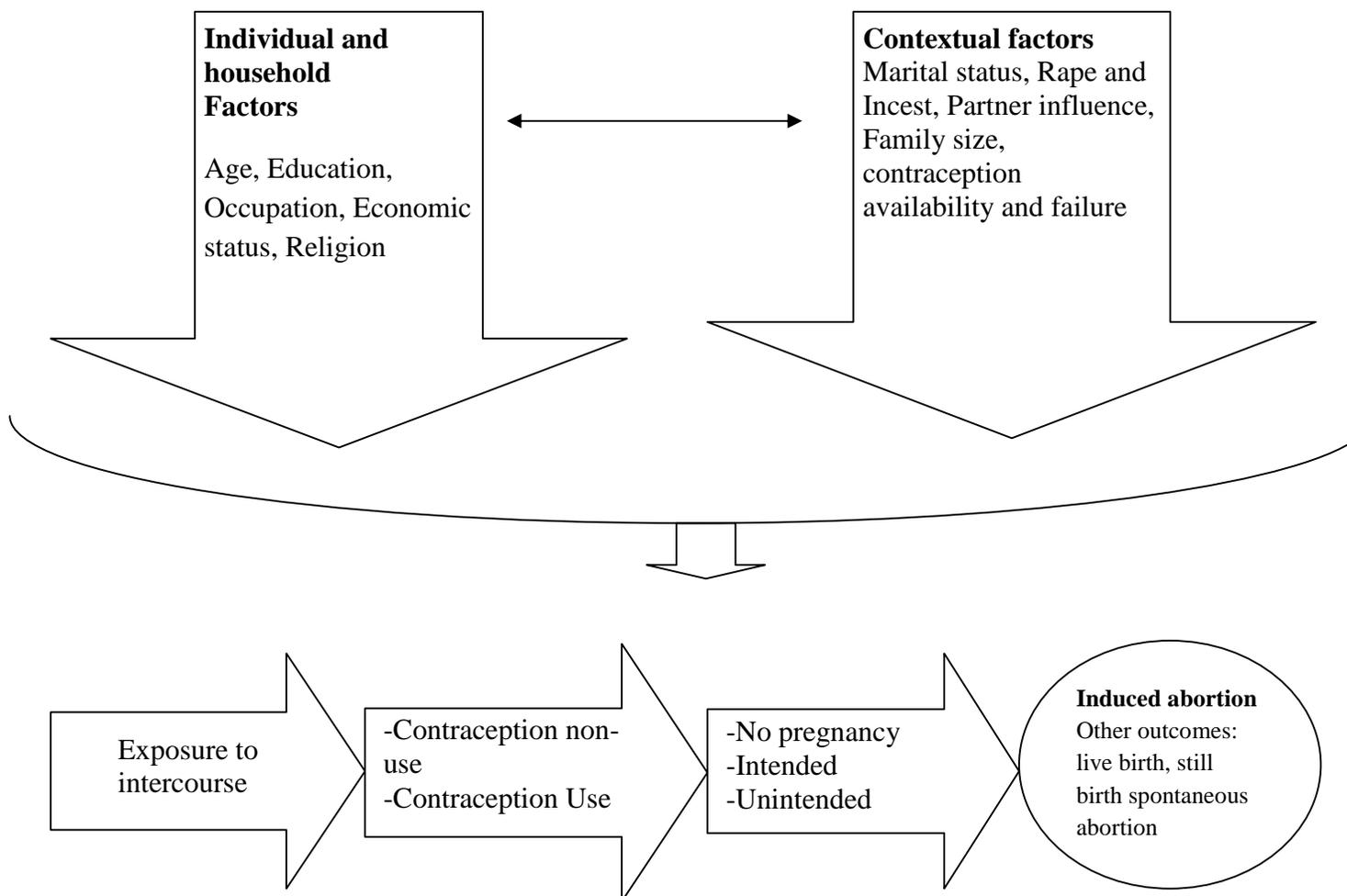
Fear of family and interrupt school are also other reasons to be considered, which was the main reasons given by the respondents for induced abortion on the study done in Northwest Ethiopia were fear of the family and the community 20 (31.3%), not to interrupt school 17(26.6%) (20). And also in Ghana Among those women who had had an abortion, the most commonly given reasons were “not to disrupt education or employment” (35.6%) (21).

In India a hospital based retrospective study found that the commonest ground for termination of pregnancy was failed contraception. The number of tubectomy failure was (3.42%) (17).

A study done in Mekele town Ethiopia indicate child spacing as determinants had shown more chance to have second pregnancy induced abortion (AOR= 10.27, 95% C.I (2.76, 38.25), than others (19). This show that child spacing was the second common determinant of induced abortion in the town, showed significant association with second pregnancy induced abortion, (AOR=10.27) and it was with highest proportion among married and commercial sex workers (15). And also in the United State a study done on reasons poses by women for induced abortion Over one third (36%) of respondents stated reasons related to timing (26). Similarly a study conducted in Ghana reported that 11.5% women who had induced abortion mentioned child spacing as their reason (21).

## **Conceptual frame work**

First, abortion is described as the result of several conditional and interrelated behaviors and events – namely, sexual intercourse, contraceptive use and pregnancy – each with its own risk and precipitating factors. While these risk and precipitating factors may overlap across behaviors and events, the importance or direction of their effects may differ at the various stages of the process leading to abortion. Second, both pregnancies reported by women as intended and those reported as unintended may end in induced abortion as a result of different factors. Third, our model depicts abortion and its antecedent events as a function of the interrelated effects of contextual/ environmental, behavioral and socio- demographic reasons (17).



**Figure 1: Conceptual frame work of the study variables of determinants of induced abortion**

*Adopted from study conducted on Determinants of induced abortion, an analysis of individual, household and contextual factors in Rajasthan, India by Batya Elul, Ph.D.*

*Source: produced by the United States Agency for International Development. (18)*

## **Chapter III: Objective**

### **General objective**

The aim of this study is to identify determinants of induced abortions among child bearing age women attending health institution in the study area, during the study period.

### **Specific objectives**

- To identify the determinants of induced abortion in the study area
- To describe related factors associated with induced abortion

## **Chapter IV: Methods**

### **Study area**

The study was conducted in Addis Ababa, the capital of Ethiopia. Addis Ababa is set up in to ten sub-cities. According to the 2007 population and housing census, the city has a total population of 2,738,248 (3.7%) and annual growth rate of 2.1% between 1994 -2007 (27). Out of these, female population accounted for 1,433,730 (52%). Women of reproductive age group among the total population are 948,784. In the city there are 11 governmental hospitals, 19 private hospitals, 24 governmental health centers, 8 governmental clinics, 382 private clinics (Higher clinics, Medium clinics, and Lower clinics). There are 35 private non –profitable health institutions out of these 6 health centers are 3 higher clinics, 16 medium clinics (27). According to the Ethiopian liberalized abortion law; health centers, higher clinics and medium clinics are expected to perform safe abortion by using vacuum aspiration up to 12 weeks and medical abortion up to nine complete weeks of pregnancy (28).

### **Study design and period**

An institutional-based cross sectional study was conducted from April 14<sup>th</sup> – May 2<sup>nd</sup>, 2014 to identify determinants of induced abortion among women attending reproductive health clinic.

### **Source population**

All child bearing age women living in Addis Ababa during the study period

### **Study population**

All women of child bearing age, attending the reproductive clinics at study period

### **Sample Size determination**

The Sample size determination had been used with the assumption of Confidence level = 95%, Critical value  $z = 1.96$  (from significance level = 5%) and Degree of precision,  $w = 0.05$ .

Similar cross sectional study on women aged 15 to 49 was carried out in northwest Ethiopia in March 2003, the abortion prevalence was 19% (20). From the study,  $P$  was taken as 0.19 and nonresponsive rate 10% and multiplied by 1.5 for design effect. The sample size was calculated using a formula for single population proportion.

Using  $n = \frac{(Z / 2)^2 (p(1-p))}{(d^2)}$

$$, n = \frac{(1.96)^2 (0.19(1-0.19))}{(0.05)^2}$$

, n= 236, adding 10% contingency which is 24 the sample size is 260

$$260 * 1.5 = 390$$

The total sample size was 390

### **Sampling procedure**

From three non profitable organizations that provide reproductive health related services in Addis Ababa two were selected randomly. These two organizations have 20 clinics. From these 20 clinics 5 health institution were randomly selected using lottery methods. Previous one month report of the institution was revised to identify the number of clients received reproductive health service in the selected study health institutions by using proportion. Clients from each selected health institution were interviewed by selecting them conveniently.

Based on proportion to size allocation thus 390 sample sizes will be distributed into 5 health institutions.

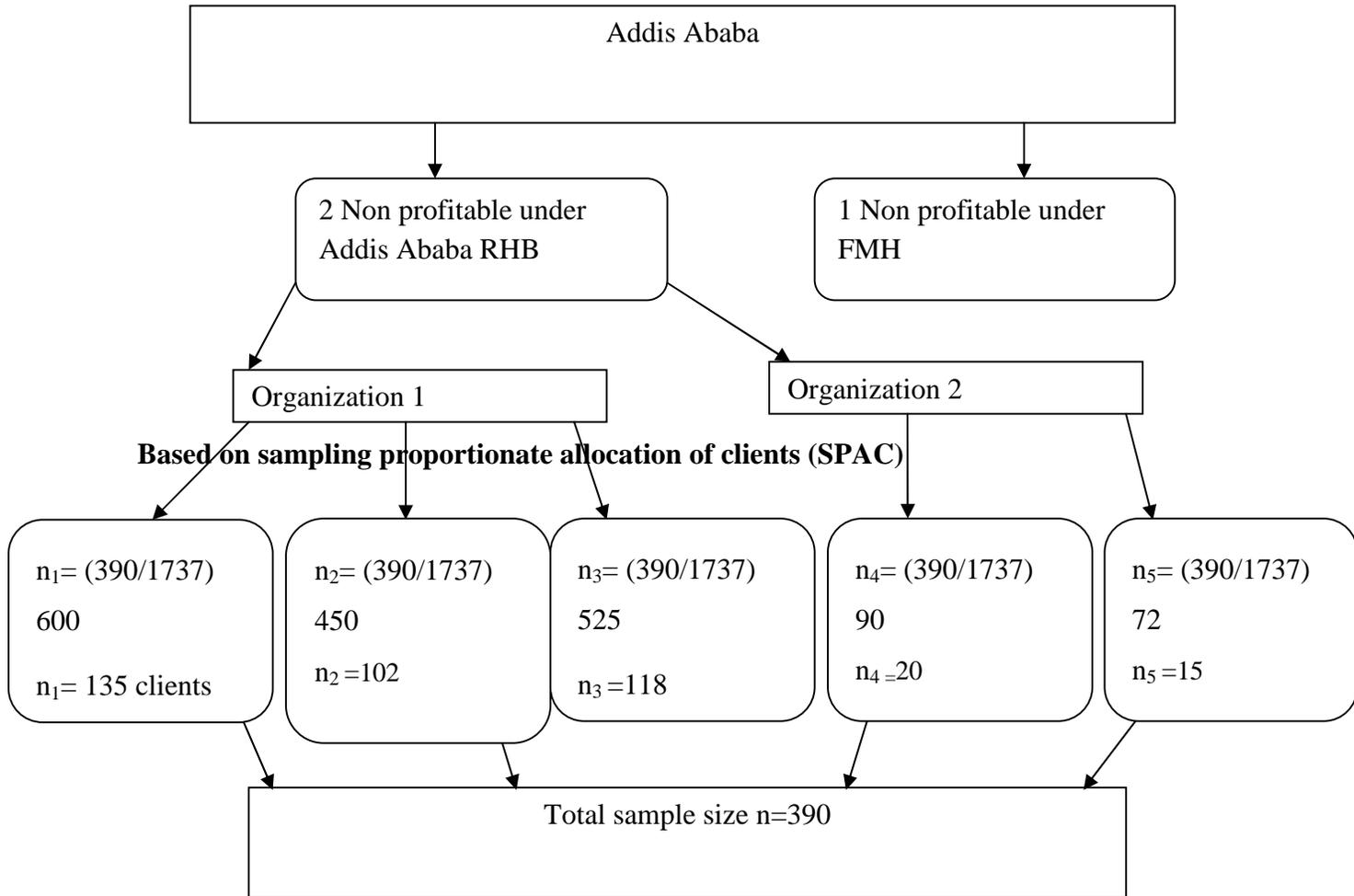
$$n_i = (n/N) N_i$$

Where  $n_i$ =sample size of the  $i^{\text{th}}$  health institution

$N_i$ = is population size of the health institution

$n = n_1 + n_2 + n_3 + \dots$  the total sample size

$N = N_1 + N_2 + N_3 + \dots$  the total population size of the health institutions



**Figure 2: Schematic sampling procedure of study clients**

**Eligibility criteria**

**Inclusion criteria;** all women who came for reproductive health service: without bleeding, not seriously sick, without mental problem, and those who are willing to participate in the study were included.

**Exclusion criteria;** those women who came with bleeding, with mental problem, with serious illness and unwilling women to participate in the study were not included in the study.

## **Data collection procedures (Instrument, personnel, data quality control)**

The data was collected by interviewing the study subjects using structured questionnaire that was adapted from research done on the determinant factors of induced abortion previously. Exit interview of the study participants after getting ethical clearance from responsible bodies and informed verbal consent from study subjects.

The tasks of supervisory was deploying data collectors by going with them, introducing the purpose of the study for clinic leaders, checking daily the filled questioners for completeness, accuracy at the closing of each day of data collection.

## **Study Variables**

### **Independent variable**

- *Socio demographic factors*: age, religion, ethnicity, marital status, level of education, monthly income, employment condition.
- *associated factors*; Exposure to FP information, contraceptive use, history of induced abortion, reasons for induced abortion and history of pregnancy

### **2. Dependant variable:**

- Induced abortion.

## **Operational definitions**

**Abortion**: the termination of pregnancy before 28weeks gestational age with apparent causes, in the way exist no viability of the fetus.

**Child spacing**: termination of pregnancy as contraceptive purpose

**Contraceptive failure**: used contraceptive gives no expected prevention.

**Determinants**: those factors contributing for the occurrence of abortion.

**Incapacitated**: women who mentally or physically unable to give their response during data collection period

**Incest**: sex between close relatives

**Induced abortion**: abortion performed by individuals for any perceived reason

***Lack of awareness:*** when the participants do not know how, where, and when to prevent pregnancy.

***Health problem-*** health related conditions that include congenital malformation, physical injury, medical condition, and mental health problem

***Maternal and Child Health clinic:*** a clinic either in hospital or separate health ANC, family planning and delivery services or abortion centers.

***No formal education:*** those who did not have grade one or more certificate.

***Safe abortion:*** is termination of pregnancy less than 28 weeks of gestation by qualified and skilled persons using correct techniques in sanitary condition.

***Rape:*** the crime of using force somebody to have sexual intercourse with somebody

***Unwanted pregnancy:*** A pregnancy in which the woman usually did not need their pregnancy without any economical, medical or social problems.

### **Data Analysis procedures**

Data entry was performed using EPI-Info versions 6 and 2000 and analyzed using SPSS V 20.0 statistical software package. To see the relative determination of independent variable on the dependent variable, bivariate and multivariate logistic regression analysis was employed. Results are presented in the form of texts, tables, figures, and graphs.

### **Data quality Assurance**

To ensure good quality of data the questionnaire was prepared originally in English and translated to Amharic and back to English. Training of the data collection team with pretesting in 5% (19) of the sample size before the actual survey was made for two days. And according to the pretest result some modifications were made on the questionnaire. The principal investigator and supervisor did check and review the filled questionnaires to ensure completeness and consistency of the information collected at each health facility.

**Ethical consideration**

Ethical clearance and approval was obtained from Addis Ababa University-Department of Nursing and Midwifery Research Review Committee. The necessary permission to undertake the study was also obtained from Addis Ababa RHB and specific health institution leaders. Leaders of the site and all participants were informed about the purpose, advantage and disadvantage of the study. Confidentiality of the responses was assured, and informed consent was obtained prior to each interview.

**Dissemination of results**

The output of this study will be disseminated to the department of Nursing and Midwifery, as partial fulfillment of a master's degree in Maternity and Reproductive Health. It will also be disseminated to the Addis Ababa RHB. And an attempt will be made to publish the findings on national and international journals.

## Chapter V: Results

### Socio-demographic characteristics

A total of 390 women of reproductive age group were interviewed, making the response rate of 100%. The respondents mean age was 26 (standard deviation $\pm$ 5). 181 (46.4%) were 18-24 years of age and 153 (39.2%) were age group 25-30 years. The respondents' ethnic group composed of 149 (38.2%) Amhara, 86 (22.1%) Oromo, 58 (14%) Guraghe, 41 (10.5%) Tigre and 32 (8.2%) were others. More than half were Orthodox Christian 255 (65.4%), Muslim 78 (20%) and Protestant 55 (14%). Majority of the respondent had secondary education and above 241 (61.8%) and 41 (10.5%) were those who did not had formal education. About 183 (46.9%) were single and 139 (35.6%) were married. In terms of occupation, 137 (35.2%) respondents were employed at governmental and private institutions, 62 (15.9%) of them were housewives and 64 (16.4%) were students. The income of respondents was broken down into four groups using percentile value of quartiles. The median income was 1000.00 ETB with (SD $\pm$ 3215); 104 (26.7%) had less than 300 ETB income, 98 (25.1%) 301- 1000 ETB, 116 (29.7%) had between 1001 and 3000 ETB income and the rest 72 (18.5%) had more than 3000 ETB monthly income. Most of the respondents, that is, 378 (96.9%) had lived in Addis Ababa for six months and more and the rest 12 (3.1%) had lived less than six months. The Socio-demographic characteristics of the study subjects are given in table 1.

As indicated in table 2, the women who had no child accounts 251 (64.9%), those with one up to two children 108 (27.7%), three up to four account 27 (6.9%) and those who had five or more were 4(1%). Out of the total women, those who had more than two pregnancy were 277 (71%) and most of the respondents 375 (96.2%) had not experienced stillbirth. It is also mentioned 109 (27%) of respondents had experienced abortion and 281 (72.1%) did not experienced abortion before six months.

**Table 1: Socio demographic characteristics among reproductive age women, Addis Ababa, Ethiopia, 2014 (n=390)**

<b>Socio- demographic variables</b>		
<b>Age in years</b>	<b>Frequency</b>	<b>Percent</b>
18-24	181	46.4
25-30	153	39.2
31-36	36	9.2
37-42	14	3.6
43	6	1.5
<b>Ethnicity</b>		
Amhara	149	38.2
Oromo	86	22.1
Tigre	41	10.5
Guraghe	58	14.9
Others*	32	8.2
Do not want to specify	24	6.2
<b>Religion</b>		
Orthodox	255	65.4
Muslim	78	20.0
Catholic	2	0.5
Protestant	55	14.1
<b>Marital status</b>		
Single	183	46.9
Married	139	35.6
Divorced	17	4.4
Widowed	5	1.3
Co-habitation (lived together friendly)	46	11.8
<b>Main occupation</b>		
House wife	62	15.9
Governmental Employee	47	12.1
Employed in private sector	90	23.1
Have private business	70	17.9
Commercial sex worker	14	3.6
Daily worker	43	11.0
Student	64	16.4

<b>Educational level</b>		
No formal education	41	10.5
Read and write	11	2.8
1-8 <sup>th</sup>	97	24.9
9 <sup>th</sup> - 12 <sup>th</sup>	119	30.5
12+	122	31.3
<b>Monthly income (ETB)</b>		
<300	104	26.7
301-1000	98	25.1
1001-3000	116	29.7
>3001	72	18.5
<b>Length of stay in Addis Ababa</b>		
<6 months	12	3.1
6 months	378	96.9

NB \*= Benishangul, Gumuze, Dawuro, Silte, Sumale, Walyta, Konso,

**Table 2: obstetrics characteristics among the study population, in Addis Ababa, Ethiopia, 2014 (n=390 per variable)**

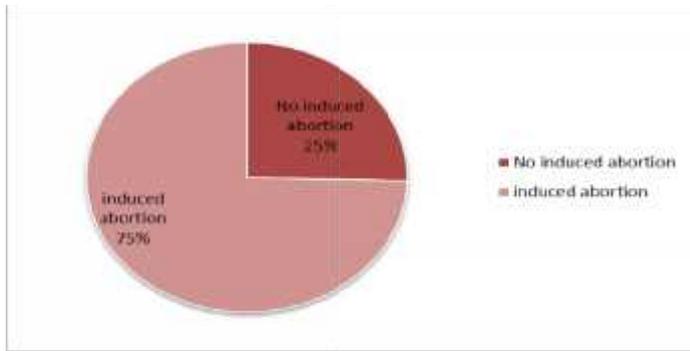
<b>Variables</b>	<b>Frequency</b>	<b>Percent</b>
<b>Total Number of pregnancy</b>		
2	277	71.0
3-4	86	22.1
5	27	6.9
<b>Total Number of live birth</b>		
0	251	64.4
1-2	108	27.7
3-4	27	6.9
5	4	1.0
<b>Total Number of still birth</b>		
0	375	96.2
1	12	3.1
2	2	.5
3	1	.3
<b>Previous abortion (before 6 months)</b>		
Yes	109	27.9
No	281	72.1

As mentioned in table 3, 83 (76.1%) of the respondents had experienced one induced abortion and 18 (16.5%) of them experienced two induced abortions, the rest 8 (7.4%) experienced three and more abortions. Those 100 (91.7%) of respondents were aborted in health institution and 9 (8.3%) were out of health institution such as, at their home and traditional healer's house. Among the total induced abortion, those 93 (85.3%) were completed without complications and 16 (14.7%) were with complications. The only two complications mentioned were bleeding accounting 11 (68.8%) followed by infection 5 (31.3%).

**Table 3: Induced abortion experiences before six month of study time among reproductive age women, Addis Ababa, Ethiopia, 2014 (n=109)**

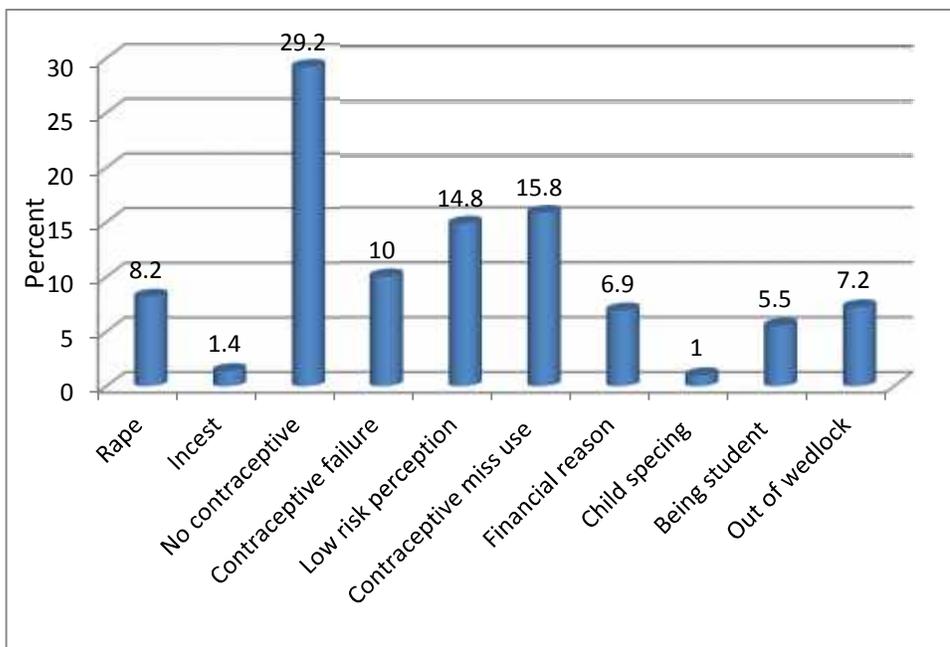
<b>Variables</b>	<b>Frequency</b>	<b>Percent</b>
<b>Number of abortion experienced</b>		
One	83	76.1
Two	18	16.5
Three	4	3.7
Four or more	4	3.7
<b>Place of abortion</b>		
Health institution	100	91.7
Her home	3	2.8
Traditional healer's house	6	5.5
<b>Complications related to abortion</b>		
Yes	16	14.7
No	93	85.3
<b>Type of complications (n=16)</b>		
Bleeding	11	68.8
Infection	5	31.3

As indicated on figure 3, 291 (74.6%) of the study participants reported they had induced abortion within the past six month and 99 (25.4%) of them reported that had not. This extremely increased prevalence of induced abortion might be the result of the study place.



**Figure 3: Frequency of induced abortion among reproductive age women within the last six months, Addis Ababa 2014**

From those who had induced abortion within the last six months; the main reasons given for induced abortion was non contraceptive users 85 (29.2%), inappropriate use of contraceptive and Low risk perception about sexual behavior were the next most common reasons reported with 46 (15.8%) and 43 (14%), respectively. The rest reported reasons were contraceptive failure 29 (10%), financial reason 20 (6.9%), because the pregnancy was out of wedlock 21 (7.2%) and not to interrupt school 16 (5.5%). Rape also accounts for 24 (8.2%) and incest 4 (1.4%) were the reasons given by the respondents (Figure 4).



**Figure 4: The reasons for induced abortion within the last six months among reproductive age women, Addis Ababa 2014**

As indicated in Table 4, 206 (52.8%) of the respondents had ever used contraceptive methods and nearly half of the total respondents 184 (47.2%) had not ever use any contraceptive methods. Among the respondents who had ever use any contraceptive methods, accordingly 102 (49.5%) used oral contraceptive pills, 67 (32.5%) used Injectable, 14 (6.8%) used IUCD, 13 (6.3%) used male condom and 10 (4.9%) of them used implants. The type of contraceptive ever known; among the respondents implants and Injectable were the most popular contraceptive methods 113 (29%) and 110 (28.2%) respectively. IUD 72 (18.5%), OCP 48 (12.3%), male condom 20 (5.1%) and 3 (0.8%) calendar method were mentioned. 24 (6.2%) of the respondents claim that they don't know any method that prevents pregnancy.

**Table 4: Family planning and related characteristics among the study population, Addis Ababa, Ethiopia, 2014**

<b>Variables</b>	<b>Frequency</b>	<b>Percent</b>
<b>Ever used contraceptives (n=390)</b>		
Yes	206	52.8
No	184	47.2
<b>Type of contraceptives ever used (n=206)</b>		
Male / female condom	13	6.3
Oral contraceptive	102	49.5
Injectable contraceptive	67	32.5
Implantable contraceptive	10	4.9
IUD (Intra-Uterine Device)	14	6.8
<b>Types of contraceptives ever known</b>		
Condom (male or female)	20	5.1
Oral contraceptives pills	48	12.3
Injectable	110	28.2
Implant	113	29.0
IUD	72	18.5
Don't know any method	24	6.2
Calendar method	3	0.8
<b>Future pregnancy</b>		
No / never	61	15.6
Yes / immediately (within 3 months)	22	5.6

Yes / within two years	68	17.4
Yes / more than two years	148	37.9
Other*	91	23.3
<b>Reason for not using contraceptive currently (n=390)</b>		
Desire for more children	76	19.5
Not planning to have sex	96	24.6
Contraceptive not available	10	2.6
Cost of contraceptives	1	0.3
Partner opposed	25	6.4
Concerns about contraceptive ( side effects, health risk)	93	23.8
Religious of moral reasons	4	1.0
I was using	59	15.1
Other**	26	6.7
<b>Want to use contraceptive after wards (n=390)</b>		
Yes	289	74.1
No	101	25.9
<b>Reason for not using contraceptive after ward (n=101)</b>		
I want to get pregnant soon	20	19.8
Not planning to have sex	61	60.4
Partner opposition	2	2.0
Concerns about contraceptive ( side effects, health risk)	17	16.8
Religious of moral reasons	1	1.0

**NB:\*= Not decided yet, \*\*= reason not specified**

It is also indicated on table 4, 148 (37.9%) of the respondents want to delay their next pregnancy by more than two years. Also about 68 (17.4%) want to wait not more than two years and 22 (5.6%) want to get pregnant within three months. And also 61 (15.6%) of the respondents don't want to get pregnant again. Of all the study participants 91 (23.3%) haven't decided yet when to get pregnant again. Not planning to have sex and concerns about side effect of contraception reported as the most important reasons for not using contraceptives 96 (24.6%) and 93 (23.8%) respectively. Desire for more children and partner opposition were reported as the next important reasons for not using contraceptives currently among the respondents 76 (19.5%) and 25 (6.4%)

respectively. Regarding future contraceptive use 289 (74.1%) want to use and 101 (25.9%) don't want to use.

### **Association of variables with induced abortion**

The assessment of association was calculated based on bivariate and multivariate binary logistic regression. Accordingly, the socio-demographic variables considered in the bivariate analysis were age, marital status, educational status, current occupation and monthly income of the respondents. As can be seen from table 5 in bivariate analyses, all the variables showed significant association with induced abortion. As regarding to age, youths aged 18-24 years were more likely to have induced abortion compared to 43 and more years (COR=42.63, 95% C.I (4.73-384.37) (AOR=17.3, 95% CI (1.14-263.9). Also the age group 25-30 years shows significant association as compared to 43 years and above (COR=9.43, 95% CI (1.07- 82.85) but lost association during multivariate association. As for marital status the association is statistically significant, married women, as well as divorced women were less likely to have induced abortion as compared to the co-habitants counterparts p-value <0.001 and <0.01 respectively with COR. But only the association of divorced women remains significant during the multivariate association (AOR=0.15, 95% CI (0.02-0.85) in relation to the co-habitants. In particular, among the total responding subjects, those who had a high school and above education were less likely exposed to the risk of induced abortion compared to illiterate women who could not read and write (COR=0.339, 95% CI (0.132- 0.870). As per occupational status, daily laborers were more likely to have induced abortion as compare to house wives (COR=6.829, 95% CI (1.88-24.70). When we compare monthly income, those with monthly income less than 300 ETB and 1000 ETB were highly exposed to induced abortion as compared with those respondents more than 3000 ETB, (COR=3.017, 95% CI (1.52-5.98) and (COR=4.047 95% CI (1.93- 8.44) respectively but fail to show significant association during the multivariate analyses.

It was also observed from these bivariate analyses that subjects who have one up to two live birth were at higher risk of practicing induced abortion than those who had more than five live births (COR=12.367, 95% CI (1.26-121.46). Regarding to contraceptive use women those who did not use contraceptive are more likely to have induced abortion than those who did, (COR= 1.71,

95% CI (1.07-2.73). But the reverse was observed during the multivariate analyses that those who did not use contraceptives were less likely to experience induced abortion than those who did use (AOR= 0.75, 95% CI (0.38-1.5) and it was not statistically significant. As a final bivariate association respondents who want to get pregnant within three months and within two years were in a decreased risk of induced abortion (COR=0.014, 95%CI (0.002-0.115) and (COR=0.356, 95% CI (0.166-0.763) than those who did not want to have any more pregnancy. This association remains significant during the multivariate analyses, that is, (AOR=0.003, 95% CI (0.01-0.04) and (AOR=0.15, 95% CI (0.04-0.52) who want to get pregnant within three months and within two years respectively.

The multivariate logistic regression which takes the effects of confounding variables into account was applied. All explanatory variables which were considered in the bivariate analyses were included in the logistic regression. Accordingly, age of respondents, marital status and desire for future pregnancy of the respondents remained to be significantly associated with induced abortion.

**Table 5: Impact of selected characteristics on induced abortion among the study population Addis Ababa, Ethiopia, 2014**

		<b>Induced abortion</b>		<b>COR 95% CI</b>	<b>AOR 95%CI</b>
		<b>No N (%)</b>	<b>Yes N (%)</b>		
<b>Age</b>	18-24	19 (10.5%)	162 (89.5%)	42.633 (4.73-384.37)**	17.371 (1.14-263.9)*
	25-30	53 (34.6%)	100 (65.4%)	9.43 (1.07-82.85)*	7.922 (0.57-109.6)
	31-36	17 (47.2%)	19 (52.8%)	5.58 (0.529-52.73)	4.778 (0.34-67.49)
	37-42	5 (35.7%)	9 (64.3%)	9.0 (0.81-100.14)	6.749 (0.39-115.57)
	43	5 (83.3%)	1 (16.7%)	1	1
<b>Marital status</b>	Single	31 (16.9%)	152 (83.1%)	0.467 (0.16-1.38)	0.730 (0.18-2.89)
	Married	55 (39.6%)	84 (60.4%)	0.145 (0.049-0.43)***	0.654 (0.155- 2.76)
	Divorced	8 (47.1%)	9 (52.9%)	0.107 (0.03-0.43)**	0.157 (0.02-0.85)*
	Widowed	1 (20%)	4 (80%)	0.381 (0.03-4.282)	0.822 (0.05-12.81)
	Co-habitant	4 (8.7%)	42 (91.3%)	1	1

<b>Education level</b>	No formal education	6 (14.6%)	35 (85.4%)	1	1
	Read and write	3 (27.3%)	8 (72.7%)	.990 (0.13-7.62)	0.598 (0.02-12.8)
	1-8 <sup>th</sup>	26 (26.8%)	71 (73.2%)	0.468 (0.176-1.242)	0.619 (0.16-2.28)
	9- 12 <sup>th</sup>	23 (19.3%)	96 (80.7%)	0.716 (0.269-1.903)	1.687 (0.44-6.42)
	12 <sup>th</sup> +	41 (33.6%)	81 (66.4%)	0.339 (0.132-0.870)*	1.418 (0.32-6.12)
<b>Occupation</b>	House wife	21 (33.9%)	41 (66.1%)	1	1
	Governmental Employee	17 (36.2%)	30 (63.8%)	0.904 (0.41-2.00)	0.412 (0.11-1.52)
	Employed in private sector	31 (34.3%)	59 (65.6%)	0.975 (0.49-1.93)	0.379 (0.12-1.17)
	Have private business	24 (34.3%)	46 (65.7%)	0.982 (0.47-2.01)	0.839 (0.29-2.39)
	Commercial sex worker	1 (7.1%)	13 (92.9%)	6.659 (0.81-54.42)	3.028 (0.26-34.19)
	Daily worker	3 (7%)	40 (93%)	6.829 (1.88-24.70)**	3.153 (0.58-16.92)
	Student	2 (3.1%)	62 (96.9%)	15.878 (3.53-71.38)***	3.526 (0.46-26.71)
<b>Monthly income</b>	<300	19 (18.3%)	85 (81.7%)	3.017 (1.52-5.98)**	1.086 (0.36-3.21)
	301-1000	14 (14.3%)	84 (85.7%)	4.047 (1.93- 8.44)***	2.408 (0.82-7.04)
	1001-3000	37 (31.9%)	79 (68.1%)	1.440 (0.78-2.65)	1.128 (0.49-2.54)
	>3000	29 (40.3%)	43 (59.7%)	1	1
<b>Total no. of live birth</b>	0	49 (19.5%)	202 (80.5%)	12.367 (1.26-121.46)*	7.687 (0.39-150.18)
	1-2	35 (32.4%)	73 (67.6%)	6.257 (0.63-62.33)	4.977 (0.27-89.77)
	3-4	12 (44.4%)	15 (55.6%)	3.750 (0.34-40.80)	2.649 (0.13-50.31)
	5	3 (75%)	1 (25%)	1	1
<b>Contraceptive use</b>	Yes	62 (30.1%)	144 (69.9%)	1	1
	No	37 (20.1%)	147 (79.9%)	1.71 (1.07-2.73)*	0.758 (0.38-1.50)
<b>Desire of future pregnancy</b>	No/ never	14 (23%)	47 (77%)	1	1
	Yes (within 3 months)	21 (95.5%)	1 (4.5%)	0.014 (0.002-0.115)***	0.003 (0.01-0.04)***
	Yes (within 2 years)	31 (45.6%)	37 (54.4%)	0.356 (0.166-0.763)**	0.152 (0.04-0.52)**
	Yes ( after 2 years)	21 (14.2%)	127 (85.5%)	1.801 (0.847-3.831)	0.664 (0.21-2.08)
	Others	12 (13.2%)	79 (86.8%)	1.961 (0.837-4.594)	0.606 (0.17-2.12)

**NB: \*= p-value < 0.05, \*\* = p-value < 0.01, \*\*\* = p-value < 0.001**

## Chapter VI: Discussion

### Socio-demographic characteristics

In this study age and marital status were significantly associated with induced abortion during the multivariate analyses.

As for the age, it was shown that youths aged 18-24 and women 25-30 years were more likely to have induced abortion with the proportion of 89.5% and 65.4% respectively. This is the same as what was reported from study in India indicated that the age group 20-30 years constituted major bulk for termination of pregnancy 75.14% in the investigation (17). It is also shown that the age group 18-24 years also have significant association with induced abortion with P values  $<0.05$  (AOR=17.3, 95% CI (1.14-263.9)). This finding is supported with the study conducted in Northwest Ethiopia indicated that with the increase in age, there was a decrease in the number of mothers who had induced abortion with P value of  $<0.01$  (20).

In the bivariate analysis, divorced women and married women were less likely to have induced abortion (COR=0.14 and 0.11 respectively) than the co-habitants. But when the confounding factors were considered only divorce women were less likely to have an induced abortion (AOR=0.15, 95% CI (0.02-0.85) than co-habitants remains significant. This result is similar with the finding in another study in Ethiopia that Married women were also 0.14 times less likely to induce their first pregnancy in the adjusted odds ratio, than cohabitants (19). This can be reasoned out as women who are married feel more secured about their relationship to have a child and rise than those who are co- habitants. Regarding education the result from bivariate analysis showed that women had high school and more education were less likely to have induced abortion (COR=0.339, 95% CI (0.132-0.870) than those who were illiterate. However, women with high school and more education had an increase probability of induced abortion (AOR=1.687, 95% CI (0.44- 6.42) and AOR=1.418, 95% CI (0.32- 6.12) than women without any formal education during the multivariate analysis. This finding is similar with the finding in Ghana, women without any formal education and those with basic education (up to junior high school), had a 76 % ( OR=0.24, CI: 0.07-0.70) and a 69% (OR=0.31, CI: 0.18-0.54) reduction in the odds of having had an abortion, respectively, when compared with women who had at least a high school education (21). This can also be confirmed by another study in Ethiopia that among the total responding subjects, those who had a high school (or above) education were highly

exposed to the risk of induced abortion with an odds ratio of 10.6 compared to illiterate women who could not read and write (20). This can be explained as women are educated they tend to have induce abortion because it might be they are empower on their reproductive health decisions.

Concerning occupation, 62 (96.6%) of the students reported to have induced abortion and had 15.8 times risk for induced abortion than housewives (COR=15.878, 95% CI (3.53-71.38). This finding is similar with different studies, in Ethiopia that students were 13.4 times higher having induced abortions compared to married housewives (20). Furthermore daily laborer had 0.003 times less likely to have induced abortion, than students (19). And also in Tanzania it was reported that 83 % of students to have induced abortion (4).This indicates that pregnant students left with very few choices .They can either continue with their pregnancies and consequently expelled from the school, a situation which may have huge implications for their future lives or they can decide to have an induced abortion.

As for income it is found that 81.7% women who had less than 300 ETB incomes were more likely to have induced abortion (COR= 3.017, 95% CI (1.52-5.98)) than women with income more than 3000 ETB. And also the risk of induced abortion was 4 times for those women had income between 300 and 1000 ETB (85.7%) than women with income more than 3000 ETB (COR=4.047, 95% CI (1.93-8.44)) This is supported by the finding in India that the study done in district hospital on clients for induced abortion revealed that clients with low socioeconomic and middle socioeconomic positions were 50.49% & 35.31% respectively while 14.19% were from high socioeconomic position (18). However it is contradicted with another result from India that the likelihood of experiencing induced abortion was almost two times higher (OR, 1.89; 95% CI, 1.53-2.33;  $P < .001$ ) among women belonging to fourth wealth index and three times higher (OR, 3.02; 95% CI, 2.41-3.80;  $P < .001$ ) among women belonging to highest wealth index than women in the lowest wealth index (14). This explains that induced abortion is not only the problem of low income part of society but it is also the problem of well-to-do part of society.

### **Contraceptive use and its association with induced abortion**

Accessibility to family Planning information and Education as well as the use of modern Family planning method was being associated with the reduction of unwanted pregnancies and induced abortion, only if used correctly as advised by the health care provider. This study also tried to find the level of awareness and use of family planning among the study participants and

it was found that almost all respondents have ever known at least one contraceptive method (93.8%). But only 52.8 % agreed to have ever used a contraceptive method, from these OCP was the one being used by 49.5% of the respondents and 32.5% used injectables. This result is supported by the report from Ethiopian study that stats 87.7% of the respondents had heard about family planning methods. Among the respondents who had some knowledge about contraceptives, 50.2% of them reported that they had been using contraceptives. Accordingly, 62.5% used pills and 37% used Injectables (20). And also the study in Tanzania indicated that almost all respondents have heard of family planning information (99 %), but only 57 % agreed to have ever used the contraceptives, and the most mentioned method that was reported to be used was condom (55 %) (4). This can be supported by that the 12-month contraceptive discontinuation rate for the pill 70% which was the highest , followed by the male condom 62% (10). Since not using contraceptive methods exposed to unwanted pregnancy with an increase probability of induced abortion. In contrary in India it is indicated that clients for induced abortion were with no knowledge about contraception constituted 249(20.54%) while patients with some knowledge were 861(71.03%)and good knowledge 102(8.41%) (11).When we see the association contraceptive use with induced abortion, those who did not use contraceptive had 1.7 (95%, CI 1.07-2.73) times risk having induced abortion than those who did use. Similarly a study conducted in our country show that contraceptive users were at a reduced risk of having induced abortion compared to non-contraceptive users (OR = 0.4, P=.012) (20). These above findings are proof that not only knowledge but practice is important as a way of preventing induced abortion.

#### **Other determinants of induced abortion**

Achieving the number of children is a reason frequently given by women having induced abortion. But in this study it was found that women who have no live children were 12 times (95% CI (1.26, 121.46) more likely to have induced abortion than those who had more than five live birth. And also subjects who have one up two live birth were at higher risk of practicing induced abortion than those who had more than five live births (COR=6.257, 95% CI (0.63, 62.33). However in Northwest Ethiopia it is found that as the number of pregnancies increased, the practice of induced abortion among the study subjects increased accordingly (OR = 2.7, P <.001) (20).Also in Harar region women with fewer than 3 children had a significantly lower chance of experiencing induced abortion compared with those who had 5 or more children (AOR = 0.32, 95%CI (0.16-0.64) (13). As most of the study participants were age group 18-24 were

64.4%, it can be assumed that the finding related to women with no live birth being exposed to induced abortion is associated with this age group.

Rape was also given as a reason for having induced abortion by 8.2% of the respondents. This is nearly similar with finding in Ethiopia that 14.2% of the respondents had rape as determinants of induced abortion (19). And also in a literature review report rape was cited as the reason for seeking an abortion in 20-25% of the cases (25).

Financial related reason was mentioned by 6.9% of the respondents in the present study. This result can be supported with a baseline quantitative and qualitative data in United States indicated financial reason given by (40%) of women was the most frequently mentioned theme. Six percent of women mentioned this as their only reason for seeking abortion. Most women (38%) cited general financial concerns (26). And also a cross sectional study done in Northwest Ethiopia indicated that, reasons given by the respondents for committing induced abortion 14.1% were due to economic problem (20).

In the present study the results show that 5.5% of respondents mentioned being a student as one of their main reason for having induced abortion. This finding was supported by the study in Northwest Ethiopia 26.6% of the respondents considered not to interrupt school as a reasons for induced abortion(20).And also in Ghana Among those women who had had an abortion, the most commonly given reasons were “not to disrupt education or employment” (35.6%) (21). This shows that still there is a stigma in the society that for whatever reason a women cannot attend school while being pregnant.

The other reason given for having induced abortion was contraceptive failure that was 10% of the respondents. This can be related to the finding In India a hospital based retrospective study found that the commonest ground for termination of pregnancy was failed contraception. The number of tubectomy failure was (3.42%) (17). As contraceptive failure caused up on different reasons, but it mainly shows that there is a weak counseling for ways of contraceptive use.

Child spacing was given as a reason by only 1% of the respondents for induced abortion. But A study done in Mekele town Ethiopia indicated child spacing as determinants had shown more chance to have second pregnancy induced abortion (AOR= 10.27, 95% C.I (2.76-38.25), than others (19). And also in the United State a study done on reasons poses by women for induced abortion, over one third (36%) of respondents stated reasons related to timing (26). Similarly a

study conducted in Ghana reported that 11.5% women who had induced abortion mentioned child spacing as their reason (21).

In the present study it was found that contraceptive related reasons were frequently mentioned as not using a contraceptive method was a reason given by 29.2% of respondents, contraceptive failure 10% and inappropriate use of contraceptive methods 15.8% respondents stated as a reason for induced abortion. EDHS 2011 reported that the desire to stop childbearing decreases from 42 percent in 2005 to 37 percent in 2011. Thus, once the fertility preference of a population declines, then the prevalence and effectiveness of contraception becomes important in predicting unintended pregnancies and the abortion rate. According to EDHS 2011 CPR was 28.6% for the modern methods. Therefore, in communities where the proportion of women using contraception is low and methods being utilized are not effective or are used inconsistently, then unintended pregnancies will arise which in turn leads to induced abortion . Overall, the total wanted fertility rate (TWFR) in Ethiopia is 3.0 children per woman, 1.8 fewer than the total fertility rate (TFR) of 4.8. This suggests that the TFR is 60 percent higher than it would be if unwanted births were avoided. The proportions who seek abortion after experiencing an unwanted pregnancy worldwide is estimated at 58 per cent, and is estimated to be higher in the developed world (73%) than in developing nations (54%) (29).

A study done in United States show that nearly one third (31%) of respondents gave partner related reasons for seeking an abortion (26). And also, in Ethiopia, Harar region husband or partner disapproval accounts for nearly 26 (11.6%) of respondents as a reason for undergoing induced abortion (13). Even though partner influence was not mention by the respondent as reason for seeking abortion, it was mentioned by 6.4% of respondents as not using contraceptive. Therefore partner influence on the decisions on reproductive health of women is still one of the components.

## **Strength and limitation of the study**

### ***Strength of the study:***

- It is primary data, which can be used as base-line information for intervention programs and further study.
- To assure the clients confidentiality health professional working in the department were employed as a data collector

### ***Limitation of the study:***

- The study was not supplemented with qualitative component
- The study had miss reproductive age women who did not visit the clinics during data collection
- This study could not assess the relationship between exposure and outcome as it is cross sectional study.
- The study is less representative.

## **Chapter VII Conclusion and Recommendation**

The study tried to assess the determinants factors of induced abortion among reproductive aged women. From the study findings, the following conclusions are drawn. Firstly, most of the proportion of women who experienced induced abortion was composed of 89.5% of the 18-24 years aged respondents. And also this age group had 17 times odds of having induced abortion than older aged women. Furthermore married women were less likely to have an induced abortion. And again being a student had an increased risk of induced abortion. In addition low income had a significant association with induced abortion.

Even though most of the respondents want to wait till their next pregnancy more than two years, most of them were using short acting contraceptive methods. Furthermore not using contraceptive was the main reason to have induced abortion. And those who were not using a contraceptive method were nearly two times at risk of having induced abortion. Inappropriate use of contraceptive and contraceptive failure was also mentioned frequently as reason for induced abortion.

Other reasons such as rape, financial incapacity and the pregnancy being out of wed lock were also reported as a reason for having induced abortion.

Based on the above findings we would like to recommend that

- For the health professionals and community health workers to focus their strategies to address the need on reproductive health issues of early reproductive age women
- To Strengthening of the existing family planning services and to create a better understanding of modern family planning methods, especially long acting methods
- To conduct a qualitative study in the community in order to have an in depth discussion with regard to induced abortion.

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## Annexes

### Part I. English version Information sheet:

#### Study on assessment of determinants of induced abortion among child bearing women

Greeting- Hello!

My name is \_\_\_\_\_, this study is conducting by Haweni Adugna, she came from Addis Ababa University Nursing department, post graduate school, and she has permission from Addis Ababa Regional Health bureau. The reason why she came here is to conduct a research on assessment of factors that influences induced abortion among reproductive age mothers who experience induced abortion. The purpose of this study is to identify determinants of induced abortion and fore ward some recommendation to concerned bodies that will help to improve the existing efforts in the area of maternal health services. I would like to ask you some very personal questions which may take about 30minutes. All the information that you are going to provide me will remain confidential and you don't need to mention your name. For this reason, I kindly request you to give me your sincere and truthful answer. All this is completely on voluntary bases and you have the right to refuse from participation. Participation or non-participation and refusal to answer questions will have no effect on your life. If you have further questions or would like to know the results of this study, please feel free to contact the principal investigator; with the following address.

Cell phone: +251 911 34 01 12, E-mail: [hawe\\_me@yahoo.com](mailto:hawe_me@yahoo.com)

**Part II. Amharic version Information sheet**

አዲስአበባ ዩኒቨርሲቲ ነርሲንግ እና ሚድዋይፈሪ ት/ክፍል የድህረ ምረቃ ፕሮግራም

እድሜቸው ከ18-49 ለሆኑ ሴቶች የመረጃ መስጫና የፈቃደኝነት መጠየቂያ ቅጽ

**ክፍል 1 የመረጃ መስጫ ቅጽ**

እንደምን አደሩ/ ዋሉ?

ስሜ \_\_\_\_\_ ይባላል። እኔ በአዲስ አበባ ዩኒቨርሲቲ የድህረ ምረቃ ተማሪ ስሆን በነርሲንግ እና ሚድዋይፈሪ ት/ክፍል አስተባባሪነት በሚከናወነው ጥናት በእኔና በእርሶ አጠር ያለና 30 ደቂቃ የሚወስድ ወይይት ይኖረናል። ለዚህም ወይይት እንዲተባበሩኝ በትህትና ጠይቃለሁ። ወደውይይቱ ከመግባታችን በፊት ስለጥናቱ አላማና ጠቅላላ ሁኔታ ስለማንብልዎት በጥሞና እንዲያዳምጡኝ እጠይቃለሁ። በመጨረሻም በጥናቱ ለመሳተፍ መስማማትዎን ወይም አለመስማማትዎን ይነግሩኛል።

የዚህ ጥናት አላማ በአዲስ አበባ ከተማ ያሉ ሴቶች ጽንሰ የሚያቋርጡበት ምክንያት ምን እንደሆነ ለማወቅ ሲሆን ጥናቱ የሚካሄድበት መንገድ በመረጃ ሰብሳቢው በሚቀርብ መጠይቅ ይሆናል። መጠየቁ የራስዎን ሁኔታ በተመለከተ ይሆናል። እርሶ የሚሰጡት መረጃ የእናቶች ጤና ለማሻሻል እየተደረገ ያለው ንጥረት ያግዛል።

በቆይታዎ ሁሉ ሚስጥር እንደሚጠበቅ እያረጋገጥኩኝ ለእያንዳንዱ ተሳታፊ የተለየመለያ ቁጥር የሚኖረው ሲሆን ስምም አይጻፍም። ለማንኛውም ጥያቄ የሚሰጡት ምላሽ ለሌላ ሰው ተላልፎ የማይሰጥ ሲሆን የጥናቱ ሪፖርት ስር የእርሶ ስም አይገለጽም። በተጨማሪም የጥናቱ ሪፖርት ቢታተምም የሚወጣው ስለአጠቃላይ ተሳታፊዎች መረጃ ብቻ ይሆናል።

መጠይቁ በፈቃደኝነት ላይ የተመሠረተ ሲሆን የእርሶ መሳተፍ ወይም አለመሳተፍ እንዲሁም ጥያቄዎችን ለመመለስ ፈቃደኛ አለመሆንና በጥያቄው ወቅት አቋርጦ መውጣት አሁንም ይሁን ወደፊት እርሶም ሆኑ ቤተሰብዎ በሚያገኙት አገልግሎት ላይ ምንም አይነት ተጽዕኖ አይኖረውም።

በጥናቱ ለመሳተፍ ፈቃደኛ ነዎት?

- 1. አዎ
- 2. አይደለሁም

**ማስታወሻ:**

- 1. በጥናቱ ለመሳተፍ ፈቃደኛ ከሆኑ ወደ ፈቀደኛነ ተማረጋገጫ ቅጽ ይለፉ።

የአገልግሎቱ ተጠቃሚዎች በጥናቱ እንዲሳተፉ ማስገደድ አያስፈልግም።

**Part III. English version Informed consent form**

**For study on assessment of determinants of induced abortion among child bearing women**

*Read the following paragraph for the selected person.*

I have been informed about the purpose, advantage, and disadvantage of this study titled “Assessment on the determinants of induced abortion among child bearing age women attending MCH clinic”. I have understood the information given and the participation is completely voluntary based. I have been told that my answers to the questions will not be given to anyone and not expect to write my name. Now I am giving my consent to participate in the study voluntarily.

**“Do you agree to participate in the interview? Thank you!”**

Yes, \_\_\_\_\_ (continue the interview)

No, \_\_\_\_\_ (skip to the next respondent)

**Name of interviewer** \_\_\_\_\_ **sign** \_\_\_\_\_ **Date of interview** \_\_/\_\_/\_\_

**Part IV. Amharic version Informed consent form**

**እድሜያቸው ከ18-49 ለሆኑ ሴቶች የፈቃደኝነት መጠየቂያ ቅጽ**

ከዚህ በታች ፊርማዬን ያኖርኩት እኔ የጥናቱን አላማ የተነገረኝ ሲሆን ለምጠየቀው ጥያቄ የማውቀውን መመለስ እንደምችል፣ እኔ የምሰጠው መረጃ ለዚህ ጥናት አገልግሎት ብቻ የሚውል ሲሆን ስሜንና የምሰጠው መረጃ በሚስጥር እንደሚጠበቅ ተነግሮኛል። ፍላጎት ከሌለኝ በጥናቱ ያለመሳተፍ፣ ጥያቄ ያለመመለስና በጥያቄው ወቅት ምላሽ መስጠት ማቋረጥ እንደሚቻል ተነግሮኛል። በዚህ መሰረት በጥናቱ ለመሳተፍ ፈቃደኛ መሆኔን መፊርማዬ አረጋግጠለሁ።

ፊርማ \_\_\_\_\_

ቀን \_\_\_\_\_

**ማስታወሻ**

1. የጥናቱ ተሳታፊ በጥናቱ ለመሳተፍ ፈቃደኛ ከሆኑ መጠይቁን ይጀምሩ
2. የፈቃደኝነት መግለጫ ለመልስ ሰጪው በቃል መሰጠቱን የሚያረጋግጥ የመረጃ ሰብሳቢው

ስም \_\_\_\_\_

ፊርማ \_\_\_\_\_

ቀን \_\_\_\_\_

ስልክ \_\_\_\_\_

ማንኛውም ገለጻ የሚያስፈልጋቸው ነገሮች ካሉ መረጃ ሰብሳቢውን ሆነ ዋና ተመራማሪውን በአካልም ሆነ ከታች በተገለጸው አድራሻ ይጠይቁ።

የዋናው ተመራማሪ አድራሻ : ሀወኒ አዱኛ

ስልክ፣ 0911340112

ኢሜይል፣ [hawe\\_me@yahoo.com](mailto:hawe_me@yahoo.com)

አዲስ አበባ

**Part V English version of questionnaire**

**A. Socio-demographic background of respondent.**

S.No.	Item	Response
1	Age in years	_____
2	What is your ethnic group?	1. Amhara 2. Oromo 3. Tigre 4. Gurage 3. Others, specify _____
3	What is your religion?	1. Orthodox 2. Muslim 3. Catholic 4. protestant 5. Others, specify _____
4	What is your current marital status?	1. Single 2. Married 3. divorced 4. widowed 5. Co-habitation (lived together friendly) 6. Other, specify _____
5	What is your occupation?	1. House wife 2. governmental Employee 3. Employed in private sector 4. Have private business 5. commercial sex worker 6. Daily worker 7. Student 8. Others, specify _____
6	What is your educational level	1. No formal education 2. Read and write 3. 1-8 <sup>th</sup> 4. 9 <sup>th</sup> – 12 <sup>th</sup> 5. 12+
7	Monthly income of the client (write in average number)	_____
8	For how long have you been living in this area?	1. for 6month 2. 6month-1 year 3. >1 year

**Questionnaire regarding contextual factors**

9	Total number of pregnancy	_____	
10	Total number of live birth	_____	
11	Total number of Still birth	_____	
12	Have you experienced induced abortion prior to 6 months?	1. Yes 2. No	If no go to Q 18
13	If yes to Q 12, How many abortions did you have experienced?	1. One 2. Two 3. Three 4. Four or more	
14	Where did you do the last abortion process?	1. Health institution 2. Her home 3. traditional healer's house 4. Other, specify _____	
15	Who did perform the abortion?	1. skilled health professional 2. traditional healer 3. client her self 4. Others, specify _____	
16	Was there any complication related to abortion?	1. Yes 2. No	
17	If there was complication, what was the main complication?	1. bleeding 2. mechanical trauma 3. infection 4. others, specify _____	
18	Have you experienced induced abortion within the past 6 months?	1. Yes 2. No	If no go to Q no. 20

19	If yes to Q 18 what is the reason for the abortion?	<ol style="list-style-type: none"> <li>1. Caused by rape</li> <li>2. Caused by incest</li> <li>3. Non use of contraceptive</li> <li>4. Caused by contraceptive failure</li> <li>5. Low risk perception</li> <li>6. Inappropriate use of contraceptive</li> <li>7. Financial reason</li> <li>8. Too many/ too close pregnancies</li> <li>9. Being student and to complete my education</li> <li>10. Out of wedlock</li> <li>11. Others _____</li> </ol>	
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**Questionnaire regarding contraceptive**

20	Have you ever use contraceptive?	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> </ol>	If no go to Q22
21	If you were using contraceptives, what type of contraceptive were you using	<ol style="list-style-type: none"> <li>1. male / female condom</li> <li>2. Oral contraceptive</li> <li>3. Injectable contraceptive</li> <li>4. Implantable contraceptive</li> <li>5. IUD (Intra-Uterine Device)</li> <li>6. VSC(Voluntary Surgical Contraception)</li> <li>7. Other, Specify _____</li> </ol>	
22	Do you desire a future pregnancy?	<ol style="list-style-type: none"> <li>1. No – never</li> <li>2. Yes – immediately (within 3 months)</li> <li>3. Yes – within two years</li> <li>4. Yes – more than two years</li> <li>5. Other (specify)</li> </ol>	
23	What methods do you know to prevent unwanted pregnancy? (multiple response possible)	<ol style="list-style-type: none"> <li>1. Condom (male or female)</li> <li>2. Oral contraceptives</li> <li>3. Injectables</li> <li>4. Implant</li> <li>5. IUD</li> <li>6. VSC</li> <li>7. Don't know any method</li> <li>8. Calendar method</li> <li>9. Other (specify)</li> </ol>	

24	If you were not using a contraceptive method when you got pregnant previously, why not?	<ol style="list-style-type: none"> <li>1. Current pregnancy was planned</li> <li>2. Not planning to have sex</li> <li>3. Contraceptive not available</li> <li>4. Cost of contraceptives</li> <li>5. Partner opposed</li> <li>6. Concerns about contraceptive (side effects, health risk)</li> <li>7. Religious or moral reasons</li> <li>8. I was using</li> <li>9. Others (specify)_____</li> </ol>	
25	Do you want to use a contraceptive after this afterwards?	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> </ol>	If yes go to Q. No. 27
26	If “no” to Q 25, why don’t you want to use a contraceptive?	<ol style="list-style-type: none"> <li>1. I want to get pregnant soon</li> <li>2. Not planning to have sex</li> <li>3. Contraceptive not available</li> <li>4. Cost of contraceptives</li> <li>5. Partner opposition</li> <li>6. Concerns about contraceptive (side effects, health risk)</li> <li>7. Religious or moral reasons</li> <li>8. Others (specify)_____</li> </ol>	
27	If “yes” to Q 25, what type of contraceptive do you want to use?	<ol style="list-style-type: none"> <li>1. Condom (male or female)</li> <li>2. Oral contraceptives</li> <li>3. Injectables</li> <li>4. Implant</li> <li>5. IUD</li> <li>6. VSC</li> <li>7. Other (specify)</li> </ol>	

**Part VI Amharic version questionnaire**

**እድሜያቸው ከ18-49 ለሆኑ ሴቶች መጠይቅ**

ይህ መጠይቅ በመላሾቹ ፊት መሞላት አለበት። ምሹላ ግልጽ ካልሆነ መልሱን በመድገም ትክክለኛነቱን ያረገግጡ። ከተሰጡት አማራጮች ቁጥሩን በማክበብ መልሱን ያስቀምጡ።

የመጠይቅ ኮድ፡ \_\_\_\_\_ / \_\_\_\_\_ / 2006

**ማህበራዊና ነባራዊ ሁኔታ**

ተ.ቁ	ጥያቄ	መልስ	ወደ ይዘሉ
1	እድሜዎ (በአመት) ስንት ነው?	_____ አመት	
2	ብሔር	1. አማራ 2. ኦሮሞ 3. ትግሬ 4. ጉራጌ 5. ሌላ (ይገለጹ) _____	
3	በአሁኑ ወቅት ያላቸው ሀይሞኖት	1. ኦርቶዶክስ 2. ሙስሊም 3. ካቶሊክ 4. ፕሮቴስታንት 5. ሌላ (ይገለጹ) _____	
4	በአሁኑ ወቅት ያላቸው የጋብቻ ሁኔታ	1. አግብታ የማታውቅ 2. በአሁኑ ወቅት ጋብቻ ላይ ያለች 3. የፈታች 4. ባል የሞተባት 5. ጋብቻ ሳይፈጸም አብረው የሚኖሩ 6. ሌላ (ይገለጹ) _____	
5	በአሁኑ ወቅት የሚሰሩት ዋና ስራ	1. የቤት እመቤት 2. የመንግስት ሰራተኛ 3. የግል መስሪያ ቤት ተቀጠሪ 4. የግል ስራ 5. ሴተኛ አዳሪ 6. የቀን ሰራተኛ 7. ተማሪ 8. ሌላ (ይገለጹ) _____	
6	የትምህርት ደረጃ	1. ያልተማረች 2. ማንበብና መጻፍ የምትችል 3. 1-8ኛ ክፍል የተማረች 4. 9-12ኛ ክፍል የተማረች 5. ከ12ኛ ክፍል በላይ የተማረች	
7	ወርሃዊ ገቢ (በአማካይ ይገለጹ)		
8	በእዚህ አካባቢ ለምን ያህል ጊዜ ኖርሽ?	1. ከ6 ወር በታች 2. ከ6ወር እስከ 1 አመት 3. ከ 1 አመት በላይ	

**የስነ ተዋልዶ ሁኔታ በተመለከተ**

9	እስከ አሁን ለምን ያህል ጊዜ አርግዘዋል? (በቁጥር ይገለጽ)		
10	በህይወት የተወለዱት ልጆች ብዛት (በቁጥር ይገለጽ)		
11	ሞተው የተወለዱ ልጆች ብዛት (በቁጥር ይገለጽ)		
12	ከአሁን በፊት ውርጃ ነበርዎት? (ከ 6 ወር በፊት)	1. አዎ 2. የለም	የለም ከሆነ ወደ ጥያቄ ተ.ቁ 18
13	ለጥያቄ 12 አዎ ካሉ ስንት ጊዜ ውርጃ ነበርዎት?	1. 1 ጊዜ 2. 2 ጊዜ 3. 3 ጊዜ 4. ከ 4 ጊዜ በላይ	
14	የመጨረሻው ውርጃ የት ነበር የተካሄደው?	1. በጤና ተቋም 2. መኖሪያ ቤት 3. ባህላዊ ህክምና ቤት 4. ሌላ (ይገለጽ) _____	
15	ውርጃውን የካሄደው ማን ነው?	1. በሰለጠነ የጤና ባለሙያ 2. ባህላዊ ህኪም 3. እኔ በእራሴ 4. ሌላ (ይገለጽ) _____	
16	በጊዜው የጋጠመ የጤና ችግር ነበር?	1. አዎ 2. የለም	የለም ከሆነ ወደ ጥ.ተ.ቁ.18
17	ያጋጠመ የጤና ችግር ከነበር ዋናው ችግር ምን ነበረ?	1. ደም መድማት 2. የአካል ጉዳት 3. ኢንፌክሽን 4. ሌላ (ይገለጽ)	
18	ባለፉት 6 ወራት ውስጥ ውርጃ ነበርዎት	1. አዎ 2. የለም	የለም ከሆነ ወደ ጥ.ተ.ቁ.20

19	ለጥያቄ 18 አዎ ካሉ፣ ለማስወረድ የወሰኑበት ዋና ምክንያት ምንድን ነው?	<ol style="list-style-type: none"> <li>1. ተደፍራ ነው</li> <li>2. ከዘመድ ነው</li> <li>3. የወሊድ መቆጣጠሪያ ስላልተጠቀምኩ ነው</li> <li>4. የወሊድ መቆጣጠሪያ መድሀኒት አለመስራት ነው</li> <li>5. ችግሩን ካለመገንዘብ ነው</li> <li>6. የወሊድ መቆጣጠሪያ መድሀኒቱን በትክክል ሳልወሰድ ቀርቼ ነው</li> <li>7. የገንዘብ ችግር ነው</li> <li>8. ብዙና ተቀራራቢ ልጆች ስላሉኝ ነው</li> <li>9. ተማሪ ስለሆንኩ ነው</li> <li>10. ከጋብቻ ውጪ ስለሆነ</li> <li>11. ሌላ (ይገለጽ)</li> </ol>	
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**የወሊድ መቆጣጠሪያን በተመለከተ**

20	የወሊድ መቆጣጠሪያ ተጠቅመው ያውቃሉ?	<ol style="list-style-type: none"> <li>1. አዎ</li> <li>2. የለም</li> </ol>	የለም ከሆነ ወደ ጥያቄ ተ.ቁ 22
21	ለ ጥያቄ 20 አዎ ካሉ በመጨረሻ ላይ ምን አይነት የወሊድ መቆጣጠሪያ ተጠቅመዋል?	<ol style="list-style-type: none"> <li>1. የወንድ/ የሴት ኮንዶም</li> <li>2. በአፍ የሚወሰድ እንክብል</li> <li>3. በመርፌ የሚሰጥ</li> <li>4. ክንድ ላይ የሚቀመጥ</li> <li>5. በማህጸን የሚገባ መቆጣጠሪያ</li> <li>6. ማህጸን ማስቋጠር</li> <li>7. ሌላ (ይገለጽ)_____</li> </ol>	
22	ወደፊት የማርዝ ፍላጎት አልዎት?	<ol style="list-style-type: none"> <li>1. በፍጹም አልፈልግም</li> <li>2. አዎ በ 3 ወር ጊዜ ውስጥ</li> <li>3. አዎ በ 2 አመት ጊዜ ውስጥ</li> <li>4. አዎ ከ2 አመት በኋላ</li> <li>5. ሌላ(ይገለጽ)_____</li> </ol>	
23	ያልተፈለገ ወይም ያለእቅድ የሚመጣ እርግዝናን ለመከላከል የሚጠቅም የወሊድ መቆጣጠሪያ ያውቃሉ? (ከአንድ በላይ መለስ ይቻላል)	<ol style="list-style-type: none"> <li>1. የወንድ/ የሴት ኮንዶም</li> <li>2. በአፍ የሚወሰድ እንክብል</li> <li>3. በመርፌ የሚሰጥ</li> <li>4. ክንድ ላይ የሚቀበር</li> <li>5. በማህጸን የሚገባ መቆጣጠሪያ</li> <li>6. ማህጸን ማስቋጠር</li> <li>7. ምንም አላውቅም</li> <li>8. ካላንደር</li> <li>9. ሌላ (ይገለጽ)</li> </ol>	

24	እርስዎ በአስወረዱበት ወቅት የእርግዝና ወቅት የእርግዝና መቆጣጠሪያ ያልተጠቀሙ ከሆነ ዋና ምክንያቱ ምን ነበር?	<ol style="list-style-type: none"> <li>1. እርግዝናው የተፈለገ ነው</li> <li>2. የግብረ ስጋ ግንኙነት ማድረግ ስላላሰብኩ ነው</li> <li>3. የወሊድ መቆጣጠሪያ ስለሌለ ነው</li> <li>4. መክፈል ሰለማልችል</li> <li>5. ንደኛዬ ስላልፈለገ</li> <li>6. የወሊድ መቆጣጠሪያ የጎን ችግር ስለምፈራ</li> <li>7. ሀይማኖቱ ስለማይፈቅድ</li> <li>8. ተጠቅሜ ነበር</li> <li>9. ሌላ (ይገለጽ)</li> </ol>	
25	ከአሁን በኋላ የእርግዝና መቆጣጠሪያ መጠቀም ይፈልጋሉ?	<ol style="list-style-type: none"> <li>1. አዎ</li> <li>2. የለም</li> </ol>	አዎ ከሆነ ወደ ጥ.ተ.ቁ.27
26	ለ ጥያቄ ተ.ቁ. 25 የለም ከሆነ ዋና ምክንያቱ ምንድን ነው?	<ol style="list-style-type: none"> <li>1. እንደገና ማርገዝ ስለምፈልግ</li> <li>2. የግብረ ስጋ ግንኙነት ማድረግ ስላላሰብኩ ነው</li> <li>3. የወሊድ መቆጣጠሪያ ስለማላገኝ</li> <li>4. መክፈል ሰለማልችል</li> <li>5. ንደኛዬ ስለማይፈልግ</li> <li>6. የወሊድ መቆጣጠሪያ የጎን ችግር ስለምፈራ</li> <li>7. ሀይማኖቱ ስለማይፈቅድ</li> <li>8. ሌላ (ይገለጽ)</li> </ol>	
27	ለ ጥያቄ ተ.ቁ. 25 አዎ ከሆነ ምን አይነት የወሊድ መቆጣጠሪያ መጠቀም ይፈልጋሉ?	<ol style="list-style-type: none"> <li>1. የወንድ/ የሴት ኮንዶም</li> <li>2. በአፍ የሚወሰድ እንክብል</li> <li>3. በመርፌ የሚሰጥ</li> <li>4. ክንድ ላይ የሚቀበር</li> <li>5. በማህጸን የሚገባ መቆጣጠሪያ</li> <li>6. ማህጸን ማስቋጠር</li> <li>7. ሌላ (ይገለጽ)_____</li> </ol>	

**Declaration**

I, the undersigned, declare that this thesis is my original work, has not been presented for a degree in this or another university and that all sources of materials used for this thesis have been fully acknowledged.

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