



**UTILIZATION OF MODERN CONTRACEPTIVES AND CHOICE  
DETERMINANTS AFTER SAFE ABORTION SERVICE FOR UN  
INTENDED PREGNANCY AT ST. PAUL HOSPITAL, ADDIS ABABA,  
ETHIOPIA, 2018.**

**a dissertation submitted to the department of obstetrics and gynecology saint  
Paul hospital millennium medical college for partial fulfillment to the  
requirement of certificate of specialty in obstetrics and gynecology**

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**ADDIS ABABA**

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## ABSTRACT

**Background:** Increased access to and use of contraception among women who have experienced an abortion, would lower the incidence of unintended pregnancy and, in turn, women's recourse to unsafe abortion, thereby putting the lives of women at less risk of lifelong injury or death.

**Objective:** The aim of the study was to assess the utilization of modern contraceptives after safe abortion service for unintended pregnancies in St. Paul hospital with the view of recommendations to increase the uptake of LARC.

**Method:** Facility based cross-sectional study was undertaken from September 1<sup>st</sup> till December 31<sup>st</sup>, 2018 and total of 550 clients interviewed at exit places using a structured questionnaire. The data was entered in to Epi-info version 3.5.4 then the data was cleared and exported to SPSS version 20 and analyzed using descriptive statistics, chi-square, logistic regression and multivariate analysis in SPSS version 20. P-value of less than 0.05 was taken as significant.

**Result:** Of 550 clients interviewed total of 440(80%) respondents came for the safe abortion service as a result of unplanned or unwanted pregnancy, from these 417(94.8 %) used one form of modern contraceptive method, and about 304(69 %) used long acting reversible contraceptives. Multivariate analysis showed that being married and employed have higher rate of accepting one form of modern contraceptive methods. Those who have higher educational status are less likely in accepting LARC.

**Conclusion:** The acceptance rate of modern contraceptives was higher than other studies done in Ethiopia after safe abortion service. Even though there is increased information on the awareness of modern contraceptive methods still there is high incidence of unplanned pregnancies. Marital status, level of income and occupation are significant predictors of accepting modern contraceptive methods and level of education is a significant predictor of LARC usage.

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## LIST OF ABBREVIATIONS

OB: Obstetrics

GYN: Gynecology

SPHMMC: Saint Paul hospital millennium medical college

MCH: Maternal child health

WHO: World health organization

MOH: Ministry of health

RHB: Regional health bureau

FP: Family planning

LARC: Long Acting Reversible Contraceptive

IUD: Intra uterine device

ANC: Ante natal care

SAC: Safe abortion care

PACA: Post abortion contraceptive acceptance

## 1. Introduction:

### 1.1 Background

The World Health Organization (WHO) defines Safe abortion as abortion performed by qualified person using correct techniques and under sanitary conditions, while policy and regulatory environments for safe abortion care may vary, abortion is legal at least to save the life of the woman in almost all countries, more than two thirds of countries have one or more additional grounds for legal abortion, and the provision of care for complications is always legal. Unsafe abortion is a procedure for terminating an unintended pregnancy, carried out either by persons lacking the necessary skills or in an environment that does not conform to minimal medical standards, or both. (1)

Globally, an estimated 99 million unintended pregnancies occur each year as of 2010–2014. This means that roughly 44% of the 227 million annual pregnancies happen too soon (are mistimed) or are unwanted altogether. Expressed as a rate, 62 unintended pregnancies occur each year per 1,000 women aged 15–44; unintended pregnancy happens more frequently in developing regions than developed ones at rates of 65 and 45 per 1,000, respectively. (2)

As of 2010–2014, an estimated 55.9 million abortions occur each year—49.3 million in developing regions and 6.6 million in developed regions. Overall, 35 abortions occur each year per 1,000 women aged 15–44 worldwide; the rate in developed regions is significantly lower than that in developing regions (27 vs. 36 per 1,000). To put these estimates into real-life terms, an annual rate of 35 per 1,000 suggests that, on average, a woman would have one abortion in her lifetime. (2)

An estimated 55% of all abortions are safe, 31% are less safe, and 14% are least safe in the year 2010 - 2014. These proportions differ dramatically by major region. When we combine the less- and least-safe abortions into one category, an estimated 12% of abortions in the developed world (primarily in Eastern Europe) and 49% of those in the developing world are considered unsafe. These proportions translate to more than 25 million unsafe abortions per year virtually all (97%) of which are in the developing world. (2)

Overall, modern contraceptive use is growing but at a slow pace that has not kept up with the growing need for it. As of 2015, some 58% of all women in a union worldwide were using a modern method, up from 48% in 1990. Current levels and trends during the more recent period are similar across developed regions (from 58% to 61% between 2000 and 2015) and developing regions (from 55% to 57%). However, the increase has been faster than average in groupings of countries in which the starting point was very low: Between 1990 and 2015, modern method use rose in the 48 least-developed countries, from 11% to 34%, and in Sub-Saharan Africa, from 8% to 25%. (2)

During 2010–2014, an estimated 8.2 million induced abortions occurred each year in Africa. This number represents an increase from 4.6 million annually during 1990–1994, mainly because of an increase in the number of women of reproductive age, as of 2010–2014, the annual abortion rate varies slightly by sub region, ranging from 31 per 1,000 women of reproductive age in Western Africa to 38 per 1,000 in Northern Africa; rates in Eastern, Middle and Southern Africa are close to the regional average of 34 per 1,000. The unintended pregnancy rate in Africa as a whole is 89 per 1,000 women aged 15–44; in Eastern Africa, the rate is 112 per 1,000 women in 2010 – 2014, an estimated 21.6 million unintended pregnancies occur each year in Africa; of these, nearly four in 10 (38%) end in abortion. (3)

Thirty-eight percent of pregnancies were unintended in Ethiopia in 2014, a slight decline from 2008 (42%). Thirteen percent of unintended pregnancies ended in induced abortion in 2014, an increase from 2008, when 10% ended in induced abortion. The number of women who obtain post abortion care has also increased, and the abortion rate rose from 22 per 1,000 women of reproductive age in 2008 to 28 per 1,000 in 2014. The increase in the abortion rate is partly attributable to declining fertility preferences, but is likely also due to increased access to safe abortion services. (4) Therefore, meeting the unmet need for family planning is an effective intervention to reduce unintended pregnancy and induced abortion.

A decade after revising its abortion law, Ethiopia has achieved major progress in making safe abortion a reality for many women in the country. The proportion of abortions that occur outside of health facilities has declined dramatically, suggesting that women with unintended pregnancies now have greater access to safe abortions than they did in 2008. (4)

Family planning counseling and services focus on the planning of when to have children, and the number of births; primarily concerned with providing information and advice about the use of contraception. It seems self-evident that increased access to and use of contraception among women who have experienced an abortion, would lower the incidence of unintended pregnancy and, in turn, women's recourse to unsafe abortion, thereby putting the lives of women at less risk of lifelong injury or death.

Promoting the use of contraceptive methods to prevent unwanted pregnancies and repeated Abortion is one of the most effective strategies to reduce maternal morbidity and mortality. If pregnancy occurred and abortion is committed, provision of proper post abortal care services following it is one of the strategies recommended.

Unmet need for family planning is one of the primary causes of induced abortion. Post abortion women are at risk of pregnancy almost immediately. All post abortion women should receive voluntary post abortion family planning counseling and should be offered FP services at the site of care, including a wide range of methods. Post abortion family planning uptake is high (50– 80%) when quality services are offered before discharge. (5)

The level of post-abortion contraceptive acceptance was as high as 90.6%. In one of the institution in Addis Ababa, Ethiopia in 2015 when a cross sectional study was done. (6)

## 1.2 Statement of the problem

The World Health Organization (WHO) estimates that, worldwide, almost 56 million Abortions both safe and unsafe take place every year, around 25 million unsafe abortions were estimated to have taken place worldwide each year with 97% of these performed in developing countries. (7) About 47,000 (13%) maternal deaths per year are thought to be due to abortion complications, one in eight pregnancy-related deaths. (7)

Thirty-eight percent of pregnancies were unintended in 2014, a slight decline from 2008 (42%). Thirteen percent of unintended pregnancies ended in induced abortion in 2014, an increase from 2008, when 10% ended in induced abortion. (4)

According to the EDHS 2016 report among sexually active unmarried women, 55 % are using a modern method and among currently married women 35 % are using a modern method. Among currently married women, the most popular methods are injectable (23 %), implants (8 %), IUCD,

and the pill (2 % each). The most commonly used methods among sexually active unmarried women are injectable (35 %), implants (11 %), the male condom, and emergency contraception (4 % each). (8)

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. (4) The goal should be increasing the total contraceptive coverage because both married and unmarried sexually active women are currently practicing safe abortion as termination of unplanned pregnancy.

Therefore, this study showed the utilization of family planning after safe abortion service provided and their acceptance of long acting reversible contraception which are effective way of preventing unintended pregnancy in women which can be achieved by addressing their reproductive health right at population level.

### 1.3 Significance of the study

It was important to assess the status of usage of modern contraceptives among clients who undergone safe abortion service only since the number of clients who came for safe abortion service increased dramatically after the revision of abortion law in Ethiopia. Identifying factors related to post abortion family planning utilization especially LARC, will have a greater contribution in the effort to tackle unplanned conception.

This study provides baseline data for future studies and findings of this undertaking are expected to guide our counseling methods especially designed for such care.

## 2. Literature review

Over the past two decades, the health evidence, technologies and human rights rationale for providing safe, comprehensive abortion care have evolved greatly. Despite these advances, an estimated 25 million abortions continue to be performed unsafely each year, resulting in the death of an estimated 47,000 women and disabilities for an additional 5 million women. (7) It is shown that out of 227 Million pregnancies occurring in the world annually, about 99 million are estimated to be unintended of these 50 % end up in abortion. Almost every one of these deaths and disabilities could have been prevented through sexual education, family planning, and the provision of safe, legal induced abortion and care for complications of abortion. In nearly all developed countries, safe abortions are legally available upon request or under broad social and economic grounds, and services are generally easily accessible and available. (1)

Initiation of long acting reversible contraceptives immediately post abortion has shown reduced incidence of births and repeated abortions in the next 2 years and beyond, than the short acting ones. (9)

Unintended pregnancy has become a public concern and is capturing a great deal of attention because of its high prevalence rate in continent. Unintended births are those occurring two or more years sooner than desired, or not wanted at all. Recently, the observed unintended pregnancy rates are highest in Africa 89 per 1000 women higher than other regions except Latin America and Caribbean which is 96 per 1000 women. (3)

In sub Saharan Africa, it is estimated that 14 million unintended pregnancies occur every year, with almost half occurring among women aged 15-24 years. This goes together with a low contraceptive prevalence rate in the less developed countries when compared with developed countries.

A study done in Ethiopia showed that 33.3% sexually active women reported that their most recent pregnancies were unintended. (10) Another cross sectional study conducted in Ethiopia

among the 907 patients seeking abortion services in Adigrat, zonal hospital, Tigray Region, Ethiopia revealed that nearly 70 percent of the pregnancies were unintended. (12)

Unintended pregnancies (mistimed and unwanted) pose important public health risks, and their pernicious consequences have been documented in many studies. (2) For example, existing evidence shows presence of a relationship between unintended childbearing and several adverse health outcomes such as maternal depression, anxiety (11), poor psychological wellbeing and poor utilization of ANC or delivery care. (12)

Safe abortion service is the termination of pregnancy by a skilled health care provider with proper equipment's and in an environment with required medical standards. (2) In countries where women have access to safe services, their likelihood of dying from complications of unsafe abortion is very minimal. In developing countries, the risk of death following complications of unsafe abortion procedures is several hundred times higher than that of an abortion performed professionally under safe conditions. Abortion can either be legal or illegal depending on the country laws. Studies, however, show that in most of Sub-Saharan Africa countries, abortion is still illegal unless it is performed for health reasons, and women therefore resort to illegal and unsafe abortions. (1)

In Ethiopia according to article 551 termination of pregnancy by a recognized medical institution within the period permitted by the profession is not punishable where: Pregnancy results from rape or incest , continuation of the pregnancy endangers the life of the mother or the child or the health of the mother or where the birth of the child is a risk to the life or health of the mother , fetus has an incurable and serious deformity and the pregnant woman, owing to physical or mental deficiency she suffers from or her minority(18 age less ) , is physically as well as mentally unfit to bring up the child. (13) In most of the countries It is only permitted to save the life of the mother.

Women may start hormonal contraception at the time of surgical abortion, or as early as the time of administration of the first pill of a medical abortion regimen. Following medical abortion, an intrauterine device (IUD) may be inserted when it is reasonably certain that the woman is no longer pregnant.

Impressive gains in contraceptive use have resulted in reducing the number of unintended pregnancies, but have not eliminated the need for access to safe abortion. An estimated 33 million

contraceptive users worldwide are expected to experience accidental pregnancy annually while using contraception. (3) Some of the accidental pregnancies are terminated by induced abortions, and some end up as unplanned births.

The majority of women who seek an induced abortion do so to end an unplanned or unwanted pregnancy, and therefore are motivated to control their own fertility. Women who undergo abortions for therapeutic reasons may also desire to prevent a future pregnancy that would pose a risk to their health. Finally, some women rely on abortion because they do not find any of the locally available methods of contraception acceptable or effective. In all of these cases, women have specific contraceptive needs that should be addressed.

Family planning counselling is widely accepted as an essential element of induced abortion services. Given the elective nature of the procedure, there are frequently more opportunities for providing family planning. However, there are needs unique to women in induced abortion or menstrual regulation settings that managers need to take into consideration in order for counselling and services to be effective.

A study done in Tigray, from 2007 to 2009 to assess safe abortion care (SAC) monitoring framework showed that, slightly more than 30% of all women who received abortion services left the facility with a contraceptive method, which latter on increase to 78 % after the implementation of SAC model. (14)

The usage of contraception is essential in reducing the number of unintended or unwanted pregnancies, which are causes for abortion. Two-thirds of unwanted pregnancies in the developing countries occur among women who are not using any method of contraception. (3)

From a study done in Addis Ababa, on clients presented for abortion related services, only 57% were using contraceptive prior to their visits for post-abortion care service. Women seeking safe termination were relatively young, single and employed. Among them, short-term methods of contraception were common and almost one third reported one or more previous abortion care services. (15)

The common cause for induced abortion is unintended or unwanted pregnancy due to varied Reasons. The most frequent reply given as the reasons for failure to avoid unintended pregnancy among women who had unintended pregnancies were inadequate knowledge on avoiding

unwanted pregnancy (70.6%), husband or partner disapproval (11.6%), method failure (11.1%) and difficulty accessing contraceptive methods (4.4%). (16)

A study done in St. Paul hospital in 2015, in clients came for post abortion care both spontaneous and induced abortion, 90.6% of them adopted modern contraception post-abortion and 19% received long acting reversible contraceptives. (6)

In a study done in jimma town Ethiopia in 2012, Ever use of modern contraception was reported by 67% of the women having first trimester induced abortion and 21% of the women having second trimester induced abortion. Young girls and young women accounted for a disproportional share of first and especially second trimester abortions and they reported contraceptive use was strikingly low. Based on these findings, they argue that there is grave need for making contraceptive information and services available to all Ethiopian women, irrespective of age.

Ethiopia took an important step towards addressing women's sexual and reproductive health rights in 2005 where the country implemented a liberal abortion law. However, to ensure women full right to control their fertility, it is essential that both safe abortion and modern contraception is available, accessible and affordable for all women.

The contraceptive prevalence rate (CPR) for currently married women age 15-49 in Ethiopia is 36% with 35% using modern methods, Fifty-eight percent of sexually active unmarried women use contraceptive methods, with 55% using modern methods. Unmet need for family planning among married women has declined over time, from 37% in 2000 to 22% in 2016., in Ethiopia. (8)

A cross-sectional study, done among reproductive age women in Harar Town, showed that 96% of respondents knew at least one modern contraceptive method. Among women who had sexual encounters, 37.5% reported to be current users of modern contraceptives, 26.8 % said had used methods sometimes in the past and the rest 37.7% had never used contraceptives. Among these respondents, 33.3% reported that their resent pregnancies were unintended. (17) Despite greater contraceptive prevalence in Addis Ababa (45% vs. 15% country-wide) and better access to family planning services, many pregnancies were still unwanted or mistimed, and one in ten married women living in Addis Ababa reported unmet need for family planning (10%). High

demand for abortion-related services and repeated abortions in the city underscored the role of abortion in fertility aspirations of women in Addis Ababa. While abortion services are safe and relatively accessible in the capital city, improvements in access and availability of abortion services should not be deterrent factors to strengthening FP services. Lack of access to modern contraceptives in population that desire smaller families can lead to repeat abortions. (18) A study done in Addis Ababa zuriya Finfinnee zone, 88.5% percent women accept PAFP which is similar with the study done in three regions (Amhara, Oromia, and SNNPR) of Ethiopia. From this study women seeking safe termination were 87% young, 45.8% single, and 37.7% unemployed. Those reported pregnancies were untended, and respondents gave varies reason; 43.5% insisted, 11%, maternal condition or unable to cope with current pregnancy, and 9.2% Rape. (19)

In one study done in Addis Ababa, the post abortion contraceptive acceptance rate was higher than other studies done in Ethiopia. Higher parity, being married and a housewife were independent predictors of modern contraceptive method acceptance. Induced abortion, higher parity and being student were significant predictors of adoption of LARC. (6)

### 3. Objectives

#### 3.1 General objective

To assess utilization of modern contraceptives after safe abortion service for unintended pregnancy in SPHMMC

#### 3.2 Specific objectives

1. To determine the prevalence of modern contraceptive acceptance after provision of safe abortion care for unintended pregnancy.
2. To identify associated factors for choice of modern contraceptive especially LARC.

## 4. Methodology

### 4.1 Study area and period

The study was conducted from September 1<sup>st</sup> till December 31<sup>st</sup>, 2018 at SPHMMC, Addis Ababa, Ethiopia which is one of the tertiary level hospitals in the country and the pioneer hospital in establishing the comprehensive abortion care service and doing exemplary work in the field of improving family planning, located in the Western Addis Ababa, Ethiopia.

St. Paul's Hospital was upgraded to a medical college in 2007. Currently, it is involved in teaching both undergraduate and post graduate students. Recently, the establishment of "MICHU" clinic has greatly revolutionized safe abortion and family planning services provided in the hospital. More than 100 women get safe abortion service in the hospital every month on top of the post-abortion care provided for spontaneous abortions. Fellowship program in family planning recently started and already excel the service by one step ahead

### 4.2 Study Design

This was a facility based cross-sectional study.

### 4.3 Source Population

All women clients came for abortion care.

#### 4.3.1 Study Population

Include all women who received safe abortion care service in SPHMMC in the study period.

### 4.4 Inclusion and exclusion criteria

#### 4.4.1 Inclusion criteria

women visited the hospital for safe abortion care services during the study period who were willing and gave written consent to participate in the study was included.

#### 4.4.2 Exclusion Criteria

1. Women who came seeking for abortion care services due to spontaneous abortion.
2. Those who have planned and wanted pregnancy but terminated for maternal medical condition or fetal congenital anomalies were excluded from analysis.

#### 4.5 Sample Size and Sampling Techniques/Procedure

##### **Sample size**

No sample size calculation was conducted as all patients on the study period were included in the study.

##### 4.5.1 Sampling Technique/Procedure

All patients seeking safe abortion care at sampling units during exit from abortion care service was included in the study at SPHMMC during the study period. Those who did not fulfill the inclusion criteria were excluded from the study.

#### 4.6 Data collection procedure and instrument

A structured questionnaire written in English which is a validated tool and customized for this study was used. Data collectors or interviewers were trained nurses, midwives, medical interns and gyn./obs. Residents. They were trained on the questionnaire, interviewing techniques, purpose of the study, and importance of privacy, discipline approach towards clients during the interviewees and keep confidentiality.

Before conducting the main study, a pre-test was performed, completeness and consistency of questionnaires were supervised, monitored and completed by primary investigator.

The instrument contained five sections: socio demographic data, reproductive health related, abortion related, modern family planning and post abortion family planning related data

#### 4.7 Data processing and analysis

The data was entered into Epi-info version 3.5.4 after the data entry and cleaning the data was exported to SPSS version 20 for further analysis in relation to the outcome. Descriptive statistics was done and frequencies, percentages, cross tabulation, graphs and tables were performed. Bivariate logistic regression analysis for each independent variable was done and variables showing p-value <0.25 was taken for multivariate logistic regression analysis and then significance was declared for variable having p-value < 0.05.

#### 4.8 Data Quality Assurance and Management

Training was given to data collectors. Pre-test was done using the questionnaire to ensure whether the questionnaires were understood by both clients and providers. Accordingly, modifications were performed and the modified was used during the interview. The interviews were conducted at a private place in the health care delivery unit to ensure good discussion site for both the data collectors and clients. Close supervision, by the principal investigator, was made during data collection. Questionnaire was checked for completeness on regular basis by the principal investigator.

#### 4.9 Result Dissemination Plan

The final copy of this paper will be submitted to SPHMMC department of obstetrics and gynecology, public health department, ministry of health. There will be presentation of the research outputs to the college community and other concerned bodies. Manuscript will also be prepared and sent for publication to reliable national and international journals.

#### 4.10 Ethical Considerations

Formal letter was obtained from the college's ethical review committee. Informed consent was obtained from each study participants after the objectives of the study are explained. Confidentiality of participants was maintained during data collection, processing and dissemination

#### 4.11 Variables of the Study

**Dependent Variable:**

Post safe abortion contraceptive acceptance and type of modern contraceptive chosen.

### **Independent Variable:**

- Socio-demographic characteristics:  
(Age, religion, marital status, occupation, educational level & place of residence.)
- Reproductive health variable:  
(gravidity, Parity, fertility plan, number of living children)
- Abortion related variable:  
(method used for abortion, gestational age, reason for current abortion, previous abortion history)
- Modern contraceptive variable:  
(knowledge about contraception, history of FP use)
- Other factor variable:  
(partner involvement, satisfaction in service.)

#### 4.12 Operational Definitions

**Acceptance of modern FP:** use of modern contraceptive method among clients for abortion care in the health care facility.

**Abortion:** Termination of pregnancy before twenty-eight weeks of gestation.

**Post–Abortion Contraception:** Use of contraceptives immediately after any abortion care procedure.

**Safe abortion:** Abortions performed by qualified persons using correct techniques and under sanitary conditions.

**Medically indicated safe abortion:** those pregnancies terminated for maternal or fetal indications before 28 weeks of gestational age.

**Unintended pregnancy:** pregnancy that is either mistimed or unwanted.

**Post Abortion Care:** Abortion care given to whom seeking care after initiation / induction of an abortion.

**Comprehensive Abortion Care:** Abortion care service, which includes both safe, and post abortion care.

**Safe abortion care model:** encompasses three elements that contribute to reductions in abortion related mortality: safe induced abortion, prompt treatment of complications of unsafely performed abortion, and post abortion contraception to reduce unintended pregnancies and repeat unsafe abortion.

**Attitude:** A favorable or unfavorable attitude towards any modern contraceptive methods.

**Contraceptive Prevalence Rate:** Total number of 15-49 years of age women who are currently using contraceptive methods or percent of fertile age women of currently using modern FP methods per total number of women in this age group.

**Knowledge:** Awareness about any one or more of modern contraceptives at the time of the study gained through information or exposure to FP education or any information source.

**Modern contraception:** Oral hormonal pills, injectable, intrauterine devices (IUDs), implants, male condoms, female condoms, other barrier methods (such as diaphragms, the cervical cap and spermicidal), emergency contraception, sterilization (male and female).

**Long acting reversible contraceptive:** it includes implant and intrauterine contraceptive device.

## 5. Result

A total of 550 women received safe abortion care from September to December 2018, out of which 440 (80 %) were included in the study, 110 (20%) women were not included since the pregnancy was intended and terminated for fetal or maternal indication.

Most of the respondents were young, Orthodox Christians, attended primary or secondary school, and single. The mean ( $\pm$  SD) age of the respondents was 22.31( $\pm$ 4. 48) years and the majority 236, (54%) of the respondents were in the age group of 19-24 years. 74(17%) of the respondents are teenagers. The majority of the respondents were urban dwellers from Addis Ababa (75%) and 255, (58%) were employed (Table 1).

Table 1 demographic characteristics of the respondents

Characteristics of the respondents	N (%)
<b>Age group (yrs.)</b>	
Less than 19	74 (17 )
19 _ 24	236 ( 54 )
25_ 34	120 ( 27 )
Greater than or equals to 35	10(2 )
<b>Place of residence</b>	
Addis Ababa	330 (75)
Outside Addis Ababa	110 (25)
<b>Level of education</b>	
Illiterate /can't write and read	41 (9)
Primary school completed	166 (38)
secondary school completed	113 (25)
preparatory school completed	40(9)
College graduated	80(18)
<b>Religion</b>	
Orthodox	302(69)
Muslim	86(19)
Protestant	52(12)
<b>Occupation</b>	
Employed	255(58)
Un employed	10(2)
Student	140(32)
House wife	35(8)
<b>Marital status</b>	
Single	355(81)
Currently Married	71(16)
Separated/divorced	14(3)

Majority 270 (61 %) of the respondents were at second trimester. Among all the women who visited SPHMM during the study period, more women 440 (80%), came to the hospital for safe

abortion service after having an intended pregnancy. Around 415 (94.3%) undergone medical abortion. 331 (75%) of the respondents were nulliparous and about 9% (38) had more than one live birth. Out of the listed reasons for abortion 332 (75%) of had abortion due to having unplanned or unwanted pregnancy while rape and incest account 10% each. (Table 2).

**Table 2 Reproductive Characteristics of the Respondents**

<b>Reproductive Characteristics</b>	<b>N(%)</b>
<b>Parity</b>	
Nulliparous	331( 75)
Primi parous	71(16)
Above primi parous	38 (9)
<b>Previous abortion</b>	
Yes	22(5)
No	418(95)
<b>Gestational age</b>	
First trimester	170(39)
Second trimester	270(61)
<b>Method of abortion</b>	
Medical abortion	415(94.3)
Manual vacuum aspiration	15(3.4)
Dilatation and evacuation	10(2.3)
<b>Reasons for abortion</b>	
Rape	45(10)
Incest	44(10)
Maternal medical conditions	16(4)
Maternal due to minor age	3(1)
Unplanned and unwanted pregnancy	332(75)

About 3/4<sup>th</sup> of the women had history of using a modern contraception prior to presenting for abortion-related services. From this, majority (82%) were using short acting as last modern family planning method. About (406) 92% of respondents have heard or had information about one form of modern family planning methods (Table 3).

Table 3. Contraceptive characteristics of women before receiving safe abortion care service

Contraceptive Use	N (%)
<b>Ever use of modern family planning method</b>	
Yes	334(76)
No	106 (24)
<b>Method of family planning used</b>	
Pills	74(22)
Injectable	106(32)
IUCD	9(3)
Implants	50(15)
Condom	37(11)
Emergency contraceptive	58(17)
<b>Have you ever discontinued the family planning method</b>	
Yes	143(32)
No	297(68)
<b>Type of family planning ever heard</b>	
Short acting	137(35)
Long acting	25(6)
Both short and long acting	209(51)
All types	35(9)

About 417 (94.8%) of women adopted one of the modern methods of contraception post abortion. Short acting contraceptives were chosen by (111) 25% while (304) 69 % of the clients received LARC. Most of the reasons mentioned by the respondents why they choose a specific method is duration of action and comfort (Table 4).

Table 4. Post safe abortion contraceptive characteristics of the respondents.

Post safe abortion contraceptive use	N (%)
<b>Accepted contraceptive after Safe abortion care</b>	
Yes	417 (94.8)
No	23(5.2)
<b>Method of contraceptive after abortion</b>	

None	23 (5.2)
Pills	31(7.1)
Injectable	69(15.7)
IUCD	28(6.3)
Implants	276(62.7)
Condom	10(2.3)
Emergency contraceptive	1 (0.23)
Female sterilization or tubal ligation	1 (0.23)
<b>Accepted a post abortion long acting reversible contraceptive method</b>	
Yes	304( 69)
No	113 (31)
<b>Why do you choose this method</b>	
Long acting	217(52)
Short acting	34(8)
I think I am comfortable	88(21)
Because of low side effect	5(1)
Used it before	5(1)
Simple to use	51(12)
Other	15(4)

More than two third of women left the facility with the different contraceptive method they had previously been using, Specifically 64 (60%), of women who had previously been using injectable left with implants, 41 (55 %) of women who had previously been using pills left with implants, 36 (74% ) of women who had previously been using implants left with implants and 23 ( 61% ) of women who were using condom previously left the institution with implant and 65 (61 %) of women start to use implant who were not using any form of contraceptive before the service (Table 5). Additionally, according to figure 1 below, injectable user before was 106 and after abortion, it's found 69, implant user before abortion were 50 while after abortion moved to 276. None user of contraceptives after abortion moved from 106 to 24.

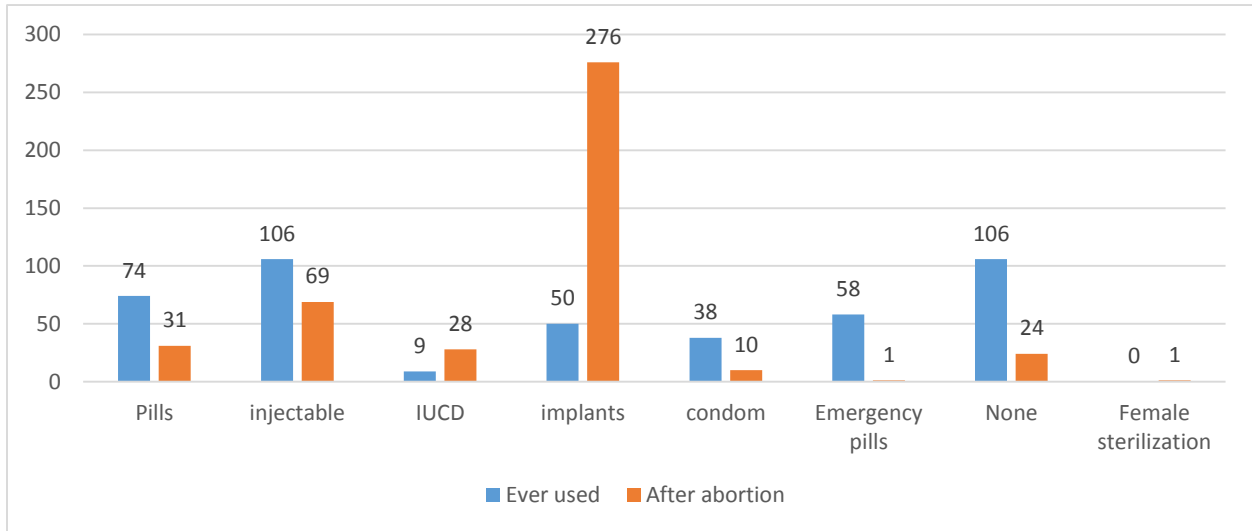
Table 5. Pre and post abortion contraceptive methods among women who received abortion care.

**Contraceptive used after safe abortion**

Contraceptive ever used before abortion

	pills	injectable	IUCD	implant	Condom	Emergency pills	None	Female sterilization	Total
Pills	14(19%)	12(16%)	5(7%)	41(55%)	0	0	2(3%)	0	74(100%)
Injectable	7(7%)	23(22%)	9(8%)	64(60%)	3(3%)	0	0	0	106(100%)
IUCD	1(11%)	1(11%)	4(44%)	3(33%)	0	0	0	0	9(100%)
Implants	0	5(10%)	3(6%)	36(74%)	3(6%)	0	1(2%)	1(2%)	50(100%)
Condom	0	11(29%)	0	23(61%)	2(5%)	1(2.5%)	1(2.5%)	0	38(100%)
Emergency pills	5(9%)	5(9%)	0	44(76%)	1(2%)	0	3(5%)	0	58(100%)
None	4(4%)	12(11%)	7(7%)	65(61%)	1(1%)	0	17(16%)	0	106(100%)

Figure1: Contraceptives use before and after abortion



Binary logistic regression was done to see the association of each independent variable with the outcome variable. Age, Residential area, Religion, Occupation, Level of income, Marital status, Gestational age, method of abortion and reason for abortion have passed to multivariate analysis using the cutoff point below 0.25 ( $p < 0.25$ ) criteria with the acceptance of modern family planning methods. Multivariable logistic regression showed that being House wife, (AOR 0.05, 95% CI, 0.01\_0.26), and level of income (AOR 0.01, 95% CI, 0.00\_0.10) had statistically significant association with the odds of adopting any modern method of contraception after safe abortion. Age, Residential area, occupation, religion, gestational age and method of termination and reason for abortion were not significantly associated with the odds of leaving the post-abortion care services with a modern family planning method during multivariate analysis (Table 6).

Being House wives are 0.05 x less likely to use modern family planning methods than those who are employed. Being unemployed is 0.07 less likely to use family planning than those who are employed. Currently married are 3.5x more likely to use family planning than singles. Being paid greater than 5000.00 birr per months 0.01 x less likely to use family planning than those whose income less than 1000.00 birr per months.

The odds of adoption of a LARC was negatively associated with level of education: those who completed secondary school and college are 0.29x less likely to use long acting reversible contraceptive than those who are illiterates /can't write and read/. (Table 7)

Table 6. Association of variables with modern contraceptive acceptance after pregnancy termination among women who received safe abortion care at Saint Paul’s hospital from September to December, 2018.

Variables	Contraceptive acceptance		COR (95% CI)	AOR (95% CI)
	Yes	No		
<b>Age group (years)</b>				
< 19	67	7	1	1
19_24	229	7	3.41[1.15,10.08]	3.11[0.68,14.25]
25-34	112	8	1.46[0.50,4.21]	1.69[0.31,9.06]
Greater than or equals to 35	9	1	0.94[0.10,8.55]	0.10[0.00,3.12]
<b>Residential area</b>				
Addis Ababa	317	13	1	1
Outside Addis Ababa	100	10	0.41[0.17,0.96]	0.80[0.23,2.68]
<b>Level of education</b>				
Illiterate /can’t write and read	17	2	1	
Primary school completed	156	10	0.8[0.16,3.80]	
Secondary school completed	110	3	1.88[0.30,11.67]	
Preparatory school completed	39	1	2[0.17,22.97]	
College graduated	73	7	0.53[0.10,2.69]	
<b>Religion</b>				
Orthodox	291	11	1	1
Muslim	78	8	0.36[0.14,0.94]	0.34[0.09,1.21]
Protestant	45	4	0.45[0.13,1.48]	0.53[0.09,2.91]
<b>Occupation</b>				
Employed	245	10	1	1
House wife	30	5	0.24[0.07,0.76]	0.05[0.01,0.26]**
Student	135	5	1.10[0.36,3.29]	0.78[0.17,3.59]
Un employed	7	3	0.09[0.02,0.42]	0.07[0.01,0.55]**
<b>Level of income</b>				
Less than 1000 birr per month	232	14	1	1
1000 to 3000	158	4	2.38[0.77,7.37]	1.41[0.33,6.04]
3000 to 5000	21	1	1.26[0.15,10,11]	0.31[0.02,3.88]
Greater than 5000	6	4	0.09[0.02,0.35]	0.01[0.00,0.10]**

<b>Marital status</b>				
Single	334	21	1	1
Currently Married	70	1	4.40[0.58,33.26]	3.46[2.02,5.91]**
Separated/divorced	11	0	0.81[0.10,6.55]	1.30[0.05,2.88]
<b>Parity</b>				
Nulliparous	313	18	1	
Primi parous	69	2	1.98[0.44,8.75]	
Above primi parous	35	3	0.67[0.18,2.39]	
<b>Previous abortions</b>				
No	396	22	1	
Yes	21	1	0.85[0.11,6.66]	
<b>Gestational age</b>				
First Trimester	157	13	1	1
Second Trimester	260	10	2.15[0.92,5.02]	3.20[1.03,9.87]
<b>Method of abortion</b>				
Medication abortion	395	20	1	1
Manual vacuum aspiration	13	2	0.32[0.06,1.55]	0.10[0.01,1.14]
Dilatation and curettage	9	1	0.45[0.05,3.77]	0.55[0.03,9.38]
<b>Reason for abortion</b>				
Rape	38	7	1	1
Incest	42	2	3.86[0.75,19.77]	5.05[0.65,38.87]
Maternal medical condition	15	1	2.76[0.31,24.41]	2.13[0.03,13.0]
Maternal due to minor age	2	1	0.36[0.02,4.63]	0.55[0.01,18.24]
Unwanted and unplanned	320	12	4.91[1.82,13.23]	3.49[0.85,14.33]

\*\*P < 0.05

1 = Reference group.

Table 7. Bivariate and multivariate logistic regression analysis of factors associated with acceptance of long acting reversible contraceptives after pregnancy termination among women who received safe abortion care at Saint Paul's hospital from September to December, 2018

Variables	LARC acceptance		COR (95% CI)	AOR(95%CI)
	Yes	No		
<b>Age group (years)</b>				
< 19	55	12	1	1
19_24	158	71	0.48[0.24,0.96]	0.58[0.28,1.19]
25-34	84	78	0.65[0.30,1.39]	0.80[0.35,1.82]
Greater than or equals to 35	7	2	0.76[0.14,4.14]	0.71[0.11,4.33]
<b>Residential area</b>				
Addis Ababa	229	88	1	
Outside Addis Ababa	75	25	2.60[2.03,3.32]	
<b>Level of education</b>				
Illiterate /can't write and read	34	5	1	1
Primary school completed	120	36	0.49[.17,1.34]	0.47[0.16,1.34]
Secondary school completed	74	36	0.30[0.10,0.83]	0.29[0.10,0.84]**
Preparatory school completed	28	11	0.37[0.11,1.20]	0.33[0.10,1.11]
College graduated	48	25	0.28[0.09,0.81]	0.29[0.09,0.89]**
<b>Religion</b>				
Orthodox	209	82	1	1
Muslim	55	23	0.93[0.54,1.62]	0.82[0.46,1.46]
Protestant	40	8	1.96[0.88,4.36]	1.65[0.72,3.78]
<b>Occupation</b>				
Employed	181	64	1	
House wife	23	7	1.16[0.47,2.83]	
Student	96	39	0.87[0.54,1.39]	
Un employed	4	3	0.47[0.10,2.16]	
<b>Level of income</b>				
Less than 1000 birr per month	169	63	1	
1000 to 3000	117	41	1.06[0.67,1.68]	1.35[0.81,2.24]
3000 to 5000	15	6	0.93[0.34,2.50]	1.06[0.36,3.09]
Greater than 5000	3	3	0.37[0.07,1.89]	0.47[0.08,2.59]
<b>Marital status</b>				
Single	241	93	1	
Currently Married	50	20	0.96[0.54,1.70]	
Separated/divorced	13	0	-	
<b>Parity</b>				
Nulliparous	225	88	1	
Primi parous	51	18	1.10[0.61,2.00]	

Above primi parous	28	7	1.56[0.65,3.71]	
<b>Previous abortions</b>				
No	288	108	1	
Yes	16	5	0.83[0.29,2.33]	
<b>Gestational age</b>				
First Tm	107	50	1	1
Second tm	197	63	1.46[0.94,2.26]	1.39[0.87,2.20]
<b>Method of abortion</b>				
Medical abortion	292	103	1	1
Manual vacuum aspiration	6	7	0.30[0.09,0.92]	0.33[0.10,1.09]
Dilatation and curettage	6	3	0.70[0.17,2.87]	0.65[0.15,2.83]

\*\*P < 0.05

1 = Reference group.

## 6. Discussion

This health institution based cross sectional study was done aiming to assess the prevalence of modern family planning methods in those clients who visited the center for safe abortion service due to unintended pregnancies. Since the revision of the Ethiopian law on safe abortion service in 2005 there is a dramatic increase in the number of clients getting the service free of fee at governmental institutions. St. Paul is one of the centers with high burden of clients for such procedure.

In total there were 550 clients who got the service of safe abortion from September to December 2018 out of which 80 % (440) of the service was given to those women came with unintended pregnancy. The rate of unintended pregnancy in Africa is as of 2010–2014, is as a whole is 89 per 1,000 women aged 15–44; in Eastern Africa, the rate is 112 per 1,000 women, one cross sectional study conducted in Ethiopia among the 907 patients seeking abortion services in Adigrat zonal hospital, Tigray Region, Ethiopia revealed that nearly 70 percent of the pregnancies were unintended (14). Unintended pregnancies (mistimed and unwanted) pose important public health risks, so preventing this unintended pregnancy by filling the gap in unmet need for modern family planning method is very much important.

According to our observation there was 94.8% of utilization of modern family planning methods among 440 clients with 69 % usage of long acting reversible contraceptives, this shows the high demand of modern family planning methods by the society. Overall, modern contraceptive use is growing but at a slow pace that has not kept up with the growing need for it However, the increase has been faster than average in groupings of countries in which the starting point was very low: Between 1990 and 2015, modern method use rose in the 48 least-developed countries, from 11% to 34%, and in Sub-Saharan Africa, from 8% to 25%. (3)

In one study done around Addis Ababa Finfinnee zureya, liyu zone, 88.5% percent women accepted PAFP and about 80 % of the clients came for safe abortion service.(19) In another study done in St. Paul Hospital in 2015, post abortion modern contraceptive acceptance was 90% in which most of the service provided at that study period was PAC, LARC acceptance rate was 19%, but in our study we found 69% of LARC acceptance with 62.7% of implants and 6.3% of IUCD, which shows the nature of service given being PAC or SAC for unintended pregnancy matters in adopting long acting reversible contraceptives.(6)

As some of the studies done in Ethiopia, this study also shows that 70 % of the women who came for the abortion service were below the age of twenty-five and about 80 % were not currently married, however a study done in three regional states of Ethiopia, showed that 53% of respondent were below age thirty and about 11% were unmarried. (20) This difference can be due to high sexual activities around urban settings than regional states. Unmarried young women have a greater probability of having unintended pregnancy which will end up with abortion.

In this study married women were found (AOR, 3.46[2.02,5.91]) 3.5 times more likely to accept post abortion modern family planning than singles. One of the reasons unmarried women do not use contraceptive since most of them have casual sex. Previous study also had similar type of conclusion on marital status. (21) In our finding Around 92 % of client's heard or had information about one of the method of modern family planning methods. Similarly, compared to the study done in Harar town, the status of contraceptive previous knowledge showed to be 96%, it is lesser and ever use of contraceptive is comparable. (22) But when compared to the nationwide hospital based survey done in 2007 in Ethiopia, previous contraceptive knowledge of post abortion clients is 87%. (20) History of previous abortion was reported about 22 (5 %) of the respondents in our study.

Those in the age group of 19 - 24 are (COR,3.41[1.15,10.08]) 3.4 times more likely to use modern family planning methods than less than 19 yrs. of age. This study indicates Women who had monthly income of greater than 5000 birr per month had significant negative association with the acceptance of any modern family planning methods (AOR, 0.01[0.00,0.10]), those who earns greater than 5000 birr per month had 0.01 times less likely to accept any of the modern family planning methods than who earn less than 1000 birr per month. There is a negative association between being house wife and acceptance of modern family planning methods (AOR, 0.05[0.01,0.26]), those who are a house wife are 0.05times less likely than those who are employed and those who are un employed are (AOR, 0.07[0.01,0.55]) are 0.07times less likely to use than those who are employed.

The most popular contraceptive method was implant in this study around 62.7% used it. From ever users of modern contraceptives, 32 % were using injectable and 15 % were using implant as the last contraceptive method prior to the abortion. This is in line with EDHS 2016 For sexually active unmarried women, the most popular methods are injectable (35%), followed by implants

(11%), The contraceptive prevalence rate (CPR) for currently married women age 15-49 in Ethiopia is 36%, with 35% using modern methods Fifty-eight percent of sexually active unmarried women use contraceptive methods, with 55% using modern methods in which injectable (21%) was the most commonly used method. (8)

Long-acting reversible contraceptive methods were received by nearly 69 % of the clients. This was higher than studies done in Addis Ababa, Ghana and Gabon which were 3% (23), 15% (24) and 9.3% (25) respectively and it's also higher than the study which was done at this hospital 4 year back with acceptance of LARC 19%, (6) also higher than the studies done in Gondar, Ethiopia and Australia which showed acceptance rate of LARC at 27% and 27.4% respectively (26), (27). Long acting reversible contraceptive methods are effective in reducing unintended pregnancies and have been shown to reduce future unintended pregnancies and repeat abortions among abortion clients. Consequently, effective contraceptive methods need to be made available, particularly LARC owing to their greater efficacy in avoiding unintended pregnancies and induced abortions. Increased advocacy for LARC by federal ministry of health, and by the hospital community in addition to the availability for all women free of charge at Saint Paul's hospital, might be the reason behind the higher uptake compared to the studies in Addis Ababa, Ghana and Gabon.

Majority of the clients choose LARC in our study may be due to the nature of the pregnancy which is unintended one, so most of them will try to avoid getting pregnant again within reasonable period of time by using the most effective method of modern family planning method.

In our study we found that those who completed secondary school (AOR, 0.29[0.10,0.84]) and college are (AOR,0.29[0.09,0.89]) 0.29 times less likely to use LARC than those who are illiterates respectively. There was no strong association which was found on the study between the method of abortion, gestational age and marital status, parity and level of income and the acceptance of long acting reversible contraceptives.

From this study, we can say till now the unmet need of modern family planning methods in Ethiopia is high, even though there is a decline in recent years, if we address this client in the society by different mechanisms at school, public gatherings and female unions, we can easily achieve their need of family planning and at the same time we will reduce the burden in terms of time consumption and reduced productivity as they will spend their time in managing the unwanted conceptions, not mentioning the psychological impact it will have on the client.

From those who choose LARC about 70% of the clients were less than 25 yrs. of age, sexually active women, and 97 (30%) are students, which indicates we can easily reach them by creating awareness about safe sexual practice and effective modern family planning methods like LARC at schools.

When we see ever use of contraceptives before the abortion service around 28 % uses condom and emergency post pill as one of modern family planning methods and we know with the perfect users the failure rate of this form of family planning methods, after the service only 2.6 % left the institution wishing to use both as one form of modern family planning methods. from this we can see how much impact we can achieve if we target these part of the society the students and unmarried ones.

Unmet need for currently married women age 15-49 is lowest in Addis Ababa (11%) and highest in Oromia region (29%). (8) From the reasons mentioned to get the safe abortion service most of it is due to the clients mentioned the pregnancy is unplanned and unwanted which is about 74%, reasoned mentioned as rape in about 10% the same as reasoned mentioned incest. In our study we didn't found a strong association between method of abortion, gestational age and reason for abortion and LARC acceptance.

## 7. Strength and limitations

### 7.1 Strengths

1. The study is conducted only on those who came for safe abortion service due to unintended pregnancy unlike most of the studies done on post abortion care.
2. The study showed us how much gap identified in the unmet need of modern family planning methods in the sexually active unmarried women, specifically long acting reversible contraceptives.
3. The study was done at exit interviews after completely getting the service which avoids any discomfort created on the respondents.

### 7.2 Limitations

1. It was done on one institution only.
2. Didn't assess the women's prospectively we do not know the patterns of use or continuation or discontinuation of the methods.

## 8. Conclusions

Over all, the acceptance of modern family planning methods after safe abortion care in St. Paul hospital is higher than most of the literatures. Marital status, occupation and level of income has an association with usage. Long acting reversible contraceptive utilization also had association with the level of education, those who are in higher educational level tend to use LARC less than the illiterates, which indicates the need of integration of reproductive health to the educational system. The higher utilization of LARC in St. Paul is an indication of the counselling and dedication of the providers in improving the acceptance.

## 9. Recommendations

1. Even though the proportion of women who accepted modern contraceptive method after safe abortion is high, Addis Ababa Regional health office and MOH should emphasize on family planning education with the aim of decreasing the incidence of unintended pregnancy.
2. Health facilities should promote modern contraception methods especially focusing on long term contraceptive like Implant and IUCD which can protect against unintended pregnancy and abortion through involving themselves in mass medias and community outreach services.
3. As most of the clients are young and above secondary school completed providing focused RH and family planning awareness creation activities especially on LARC in schools by integration of teachers, parents ministry of education and MOH or RHO and other stake holders will enable them to prevent unwanted pregnancy and abortion.

Further, a research which assesses follow up discontinuation rates of contraceptive methods after discharge of the clients.

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## Annex 1

### **Introduction:**

Greeting: my name is \_\_\_\_\_. I'm comprehensive abortion care service provider in this institution. This questionnaire is prepared to conduct a study on utilization of family planning and choice determinants after safe abortion service at St. Paul hospital. Thank you for agreeing to talk to me today. As part of a research study, we're interviewing clients at this Hospital to learn more about your background characteristics, knowledge of family planning methods, whether you use a family planning method and how you make your contraceptive preferences. The information you share with us will be helpful to increase and sustain access, demand and utilization of high quality post safe abortion contraceptive services offered by the institution.

Confidentiality and consent: "I'm going to ask you some personal questions related to contraceptive use and abortion. There is not necessarily any right or wrong answer. I would like to ask you share your views as freely and completely as possible. We will protect the confidentiality of your responses to the best of our ability. Your name will not be written on this form and will never be used in connection with any of the information you tell me.

This interview is voluntary. Your decision on whether or not to participate in the interview will not affect the health care you receive at this institution. You do not have to answer any questions that you do not want to answer, and you may end this interview at any time you want to. However, your honest answers to these questions will help us improve our understanding of the problem/gap on the services. We would greatly appreciate your participation in this interview. It will take about 10 minutes. Would you be willing to participate in this interview? If yes, continue with the interview otherwise stop here.

(Signature of interviewee certifying that informed consent had been given written by respondent).

Annex 2 ለደንበኛ ቃለ-መጠይቅ ለማድረግ ስምምነት

ጤና ይስጥልኝ ስሜ -----ይባላል። እኔ በዚህ ተቋም የጠቅላላ የጽንሰ ማቋረጥ እና የወሊድ አገልግሎት ሰጪ ባለሙያ ነኝ። ይህ መጠይቅ የተዘጋጀው ከጽንሰ ማቋረጥ በኋላ ስላለው የቤተሰብ ምጣኔ አገልግሎት ዳሰሳ ጥናት ነው። እርስዎን እና ሌሎች ተገልጋዮችን በዚህ ጤና ተቋም ላይ በጥናቱ ተሳታፊ እንዲሆኑ እንጋብዝዎታለን።

ዛሬ እኔን ለማናገር ፍቃደኛ ስለሁኑ አመሰግናለሁ። እንደ የምርምር ጥናት አካል, ለደንበኞች ቃለ መጠይቅ እያደረግን ነው። በዚህ ሆስፒታል ውስጥ የቤተሰብ ምጣኔ ዘዴን እና የወሊድ መቆጣጠሪያዎ አማራጮችን እንዴት እንደሚጠቀሙ የበለጠ ለማወቅ ፡ የቤተሰብ ፕላን እቅድ ዘዴዎችን መተግበሩን እርስዎ የሚያጋሩን መረጃ ተቋሙ የሚሰጠውን አገልግሎት ወደ ከፍተኛ ጥራት ያለው የወሊድ መከላከያ እና የእርግዝና መከላከያ አገልግሎት አሰጣጥ ከፍ ለማድረግ, ለመጠየቅና ለመጠቀም አስፈላጊ ይሆናል።

ከወሊድ መከላከያ አጠቃቀም እና ከጽንሰ ማቋረጥ ጋር የተያያዙ አንዳንድ ጥያቄዎችን እጠይቅዎታለሁ የሚሰጡን መረጃም ሚስጢራዊነት የተጠበቀ ነው። የሚሰጡኝ መልስ ትክክል ወይም ትክክል ያልሆነ የለም። መልስ የግዴ መስጠት የለብኩም አመለካከትዎን በነፃነት እና በግልፅ እንዲያደርጉ እወዳለሁ። የምላሾቻችንን ሚስጢራዊነት በተቻለ መጠን እንጠብቃለን። ስምዎ በዚህ ቅጽ ላይ አይጻፍም, እና ከነገሩን ማንኛውም መረጃ ጋር አይገናኝም።

ይህ ቃለመጠይቅ በፈቃደኝነት ነው። በቃለ መጠይቁ ላይ ለመሳተፍ ወይም ላለመሳተፍ ውሳኔዎ በዚህ ተቋም ውስጥ በሚገኙት የጤና እንክብካቤ ላይ ምንም ተጽእኖ አይኖረውም። መመለስ የማይፈልጉትን ጥያቄዎች መመለስ የለብዎትም, እናም ይህን ቃለ-መጠይቅ በፈለጉት ጊዜ ሊያቆሙት ይችላሉ። ይሁን እንጂ ለነዚህ ጥያቄዎች ትክክለኛ መልሶች በአገልግሎቶቹ ላይ ስላለው ችግር / ከፍተኛ መረዳታችንን እንድናሻሽል ይረዳናል። በዚህ ቃለመጠይቅ ውስጥ ስለተሳትፎ በጣም እናመሰግናለን። መጠይቁ 10 ደቂቃዎች ይወስዳል

በዚህ ቃለ መጠይቅ ለመሳተፍ ፈቃደኛ ይሆናሉ ? አዎ ከሆነ, ወደቃለ መጠይቁ ቀጥል መልስዎ አይደለም ከሆነ እዚህ ጋር አቁሙ። ለሰጡን ጊዜ እናመሰግናለን። መልካም ቀን

በቃለ የተነገረው በቃለ-መጠይቅ የተስማሙ እንደሆነ የሚያረጋግጥ የቃለ መጠይቅ ፊርማ-----

Annex 3

**QUESTIONNAIRE.**

<b>QUESTIONER</b> for post- safe abortion clients to assess utilization of family planning and choice determinant factors at SPHMMC.			
<b><u>SOCIO DEMOGAPHIC VARRIABLE</u></b>			
<b>MRN NO.</b>			
<b>Serial no.</b>	<b>Question</b>	<b>Response</b>	<b>Remark</b>
101	What is your age?		
102	What is your religion?	1. Orthodox 2. Muslim 3. Protestant	
103	Where is your current residence?	1.Addis Ababa 2.out side Addis	
104	What is your current marital status?	1.single 2.Currently married 3. Separated/divorced	
105	Is your husband/partner living with you now?	1. Yes 2. No	
106	What is the level of annual income or month in birr?	1.less than 1000 per month. 2.1000- 3000 3. 3000-5000 4. greater than 5000.	
107	What is the level of education of your husband/partner?	1. Illiterate /can't write and read	

		<ul style="list-style-type: none"> <li>2. Primary school completed.</li> <li>3. secondary school completed</li> <li>4. preparatory school completed</li> <li>5. College graduated.</li> </ul>	
108	What is your level of education?	<ul style="list-style-type: none"> <li>1. Illiterate /can't write and read</li> <li>2. Primary school completed</li> <li>3. secondary school completed</li> <li>4. preparatory school completed</li> <li>5. College graduated.</li> </ul>	
109	What is your current occupation?	<ul style="list-style-type: none"> <li>1. Employed</li> <li>2. House wife</li> <li>3. Student</li> <li>4. Unemployed</li> </ul>	

**REPRODUCTIVE HEALTH VARIABLES**

201	How many time you become pregnant?		
202	The number of children born alive		

203	The age of the last child?		
204	Do you need to have additional child?	1.Yes 2. No	
205	For question no 204 your answer is no, what is the reason		
206	For question 204 your answer is yes when do you want to have?	1.within one year 2. 1- 2 years 3. 3-5 years 4.after 5 years 5. After 10 years 6. never 7. I don't know.	
207	Is the current pregnancy planned?	1 Yes 2.No.	

**FAMILY PLANNING RELATED VARIABLE**

301	Have you ever heard about any family planning methods?	1. Yes 2. No	
302	If yes, to Q. 301 which method of family planning have you ever heard? (First let the respondent describe and then	1. Pills 2. Injectable / Depo 3. IUCD	

	ask the respondent by reading the choices) multiple response question	4. Implant 5. Condom 6. Emergency contraception 7. Female sterilization /Tubal ligation / 8. Male sterilization /Vasectomy / 9. Others /specify/	
303	Have you ever used any method of family planning?	1.yes 2. No 3. Sometimes	
304	If yes, to question 303, Which method of family planning you used? Multiple response	1. Pills 2. Injectable / Depo 3. IUCD 4. Implant 5. Condom 6. Emergency contraception 7. Female sterilization /Tubal ligation / 8. Male sterilization /Vasectomy / 9. Others /specify/	
305	For question no 303, your answer no or sometimes what is the reason?	1. infrequent sex or no sex 2. want to have child 3. don't want to use 4. partner opposition 5. religious opposition 6. not knowing the method	

		7. not knowing where to find 8. fear of side effect 9. inconvenience to use 10. no reason 11. others	
306	Who decides to use family planning in the household?	1. Husband/partner 2. Wife 3. Both	
307	Have you ever discontinued the family planning method?	1. yes 2. No	
308	If your answer for question 307, is yes what is the reason?	1. want to get pregnant 2. because of side effects 3. partner influence 4. other /specify.	
309	Do you have planned to use family planning from now onward?	1. yes 2. No	
310	If your answer for question 309, is no what is the reason?		

**ABORTION RELATED VARIABLES**

401	Have you ever had abortion previously	1. Yes 2. No	
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402	If your answer for question no. 401, is yes how many times with the current one?		
403	what is the reason for the current safe abortion service?	<ol style="list-style-type: none"> <li>1.Rape</li> <li>2.Incest</li> <li>3.Maternal medical conditions</li> <li>4.Fetal condition/anomaly</li> <li>5.Maternal due to minor age.</li> <li>6.Unplanned and unwanted pregnancy /specify reason.</li> </ol>	
404	Do you think safe abortion care service is important?	<ol style="list-style-type: none"> <li>1.Yes</li> <li>2.No</li> <li>3. I don't know</li> <li>4. Sometimes</li> </ol>	
405	If your answer for question 404, is no what is the reason?		
406	What is the gestational age at the time of abortion.	<ol style="list-style-type: none"> <li>1.first trimester</li> <li>2. second trimester</li> </ol>	
407	Which method of abortion did u get	<ol style="list-style-type: none"> <li>1. medical method</li> <li>2. manual vacuum aspiration</li> <li>3. dilatation and evacuation.</li> </ol>	
408	After abortion care service did you use post abortal family planning	<ol style="list-style-type: none"> <li>1.yes</li> <li>2.no</li> </ol>	

409	If your answer for question no 408, is yes what type of family planning method did you get?	1. Pills 2. Injectable / Depo 3. IUCD 4. Implant 5. Condom 6. Emergency contraception 7. Female sterilization /Tubal ligation / 8. Male sterilization /Vasectomy / 9. Others /specify/	
410	why do you choose this method ?		
411	if your answer for question 408, is no what is the reason.		
412	If your answer for question no 408, is yes do think you got enough information and knowledge about the methods	1.yes 2.no	
413	If your answer for question no 412, is no why do you think the reason specify ..		
414	Is your partner/husband know that you take post abortal family planning	1.yes 2.no	

415	If your answer for question no 414, is no what is reason?		
416	are you satisfied with the service you had today?	1. Yes 2. No	
417	if the answer to above question 416, is no what is the reason?		