Addis Ababa University

College of Health Sciences

School of Public Health

Long acting reversible contraceptive use and associated factors among women who receive abortion service in Hawassa public health facilities, Southern Ethiopia 2020.

By

Kassahun Ketema Karo

A research thesis submitted to the School of Public Health Department of Reproductive, Family and Population health for partial fulfillment of the degree of Master of public health.

January, 2021

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Assurance of Principal Investigator

All the gathered data was collected appropriately with all ethical considerations were followed in the process. All necessary comments and guidance was gained from my Advisors. The research findings and final thesis maintaining accuracy as much as possible were submitted in time.

Name of student: ---

Signature: ----------------------------date---------------------------------

Name of primary advisor: --

Signature: --------------------------- date: ----------------------------------

Name of secondary advisor --

Signature ----------------------------- date -------------------------------

Addis Ababa University

College of Health Sciences

School of Public Health

Declaration

This is to declare that the dissertation entitled; **'Long acting reversible contraceptive use and associated factors among women who receive abortion service in Hawassa public health facilities, southern Ethiopia'** was done by kassahun ketema and offered for partial fulfillment of the Requirement of the Degree of Master of Public Health in Reproductive and family health followed the rule of the university and fit the necessary standards.

Approved by the Board of Examiners:

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Internal Examiner	Date	Signature
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External Examiner	Date	Signature
______________________	____________	__________
Advisor	Date	Signature
______________________	____________	__________
Chairperson (Department head)	Date	Signature

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List of Acronyms and abbreviations

AOR	Adjusted odd ratio
CI	Confidence interval
D &C	Dilation and curettage
HMIS	Health management information system
IPAS	International package assistance service
IUCD	Intrauterine contraceptive device
LARC	Long acting reversible contraceptive device
MSIC	Marie stop international clinic
MVA	Manual vacuum aspiration
NGO	Non-governmental organization
PAC	post abortion care
PAFP	post abortion family planning
RCT	Randomized control trial
RH	Reproductive health
RTIs	Reproductive tract infections
SPSS	Statistical package for social science
SNNPR	Southern nation and nationalities of people representative
WHO	World health organization

Abstract

Background: One component of post abortion care is preventing repeat abortions by providing family planning counseling and contraception. Provision of long-acting reversible contraceptive methods has a higher potential to interrupt the continuous cycle between abortion and unplanned pregnancies that result in reduction of maternal morbidity and mortality.

Objective: To assess utilization of long acting reversible contraceptive and associated factors among women who receive abortion service in Hawassa public health facilities, southern Ethiopia.

Methods: Facility based cross-sectional study design using quantitative method was implemented in Hawassa public health facilities, southern Ethiopia. Three hundred ninety six study participants were included and proportionally allocated to the two public hospitals and 4 public health centers. The data was collected by interview using pretested structured questionnaire. Data entry was done using Epidata 3.1 version then data was cleaned and export to SPSS for data analysis. Frequency and median were displayed through tables and words. Bivariate and multivariable logistic regressions were used to analyze the association factors of the dependent variable using odd ratio and 95% confidence interval. P value < 0.05 during multi variable analysis considered as significance.

Result: A total of 396 women came to the facility for abortion services were interviewed in this study with 96.4% of response rate. The overall utilization of long acting reversible contraceptive was 20.5% [16.4-24.8]. Decision making by both partners on long acting reversible contraceptive methods (AOR=3.3; 95% CI [1.56-7.09]), history of abortion (AOR=3.93; 95% CI [1.48-10.4]), counseling on family planning after abortion procedure (AOR=3.01; 95% CI [1.43-6.33]) and grand multiparous (AOR=6.68; 95% CI [2.28-19.5]) were associated with post abortion long acting reversible contraceptive utilization.

Conclusion: Parity, previous abortion history, partners a companion decision making and time of counseling had significant association with post abortion long acting reversible contraceptive utilization. Programs that support male involvement should be supported and initiated to improve family planning utilization among abortion women.

Key words: PAFP utilization, LARC, Ethiopia.

1. Introduction

1.1. Background

Even if there is a yearly increment of contraceptive use worldwide (1) and a lot of contraceptive method options a million of women who do not want a child or want to post pone child birth are not using contraception (2). In low income countries around half of sexually active women want to avert pregnancy but from these women 17% not use any contraceptive while 9% use the less effective traditional methods (3). Minimize the risk of anemia from repeated pregnancy and birth and decrease the depletion of maternal nutritional reserve are the advantage of contraceptive methods (4).

Use of family planning method with in the first 48 hour after abortion is called post abortion family planning. Post-abortion family planning programs must be provided to all women equitably without discrimination such as their age, marital status, or ethnicity and the programs should be cover abroad range of women's health concerns, including management of reproductive tract infections (RTIs), prenatal care and investigation and treatment of infertility (5).

To interrupt continuous cycle of repeated unplanned pregnancy and subsequent termination of pregnancy giving post abortion family planning is crucial. When no contraception method is used the ovulation return within in a days and unintended pregnancy occurs a result of this again repeated abortion occur that could be contribute for risk of maternal mortality and morbidity (6). LARC is a kind of contraceptive that include IUCD and implant which has a capable of being reversed , not user dependent and have no repeated follow up so it avoid depletion of time and money for users as well as for the government (7, 8).

Intra uterine contraceptive device and implant are long acting reversible contraceptive methods that prevent pregnancy for 12 years and 3-5 years respectively (9). LARC methods are advisable for the women with Diabetes, obesity, epilepsy and physical or intellectual impairment to regulate their fertility (10) and has advantage of substituting tubal sterilization for the women who not desire more children, cost effective for the first 5-6 years, no need of surgery and not difficult for reversal (11).

1.2. Statement of the problem

Globally about 295,000 women lost their life during and following pregnancy and the huge of these deaths (94%) occurred in low- income countries in 2017 (12). In many low and middle income countries, death rates related to unintended and unplanned pregnancy are often high and have an impact on reproductive-aged women(13). Every year 620,296 induced abortions and 103,648 women were done and treated for complications of abortions respectively in Ethiopia (14). All women should receive counseling and contraception services following an induced or spontaneous abortion to avoid unintended pregnancies in their future, which reduces about 230 million births yearly across the globe (15, 16). However, LARC use among post abort women was low in developed and developing countries (17, 18).

The main cause of unintentional pregnancy and induced abortion is unmet demand for family planning. Beyond 40% of pregnancies are unplanned, owning to non-use of contraception globally(19). Huge numbers of unintended pregnancy occur due to low level of contraceptive utilization. In Ethiopia approximately above 95% of unintended pregnancies happen in those of women who don't use any method of contraception(20).

A countries with low contraceptive coverage like Ethiopia the use of long acting reversible contraceptive methods significantly increase contraceptive prevalence rate(21). If family planning need was fully met, 75% of unsafe abortions could be averted. If one fourth of women using short acting contraceptive shift to long acting reversible contraceptive, within 5 years period greater than 1.8 million unintended pregnancies would have been prevented in Sub-Saharan African countries (19, 22).

Low utilization of LARC is related with multi factorial. Evidence from different countries put a lot of determinants such as characteristics of population, socioeconomic status, counseling services, knowledge, health professional bias to method and health facility related factors are contributing for poor utilization of LARC (10, 23, 24).

Ethiopian government has given special emphasis on long term and permanent methods by implementing different strategies like providing the service freely, expanding health institution, integrating and linking family planning service with the other RH service (4). In spite of this amount of effort has been made uptake of IUCD and implant in SNNPR was 1.5% and 7.7% respectively (25). Factors that influence LARC adoption varies among countries recommend the essentiality of further researches in study area to identify barriers to use. There is also a limited evidence about the prevalence specifically LARC after abortion in the study area. Therefore, it is important to understand the factors and dynamics within specific context to mitigate poor uti lization of LARC after abortion and this study have aims to assess the prevalence and factors associated with LARC utilization among post abortion women in Hawassa public health facilities.

1.3. Significance of study

The result of the studies will be used as an input for local health authorities, different NGO sectors and plan makers found in Hawassa city to identify factors that affect the use of long acting reversible contraceptive. In addition it may initiate other researchers to done further investigation in the future in the study area.

2. Literature review

2.1. Post abortion use of LARC

A study done in three Asia countries(Bangladesh, India and Nepal) found that the up took of IUCD and implant were 12% and 1% respectively (17).

A cross sectional study done in New Zealand by using a collective data source from National statics and from the medical record found that there is an increment of LARC up took from 20.3% to 49.5% (26). A cross sectional study done at MSIC in Australia found that up took of LARC was 27.4 % (24). A cross sectional study conducted in Indian states found that IUCD up took was 11.4% (27).

A study done in five Africa countries (Ethiopia, Ghana, Nigeria, South Africa and Zambia) found that the up took of IUCD and implant were 6 % and 16% respectively(17). A study done in Kenya (Kisumu) found that up took of IUCD and implant were 1% and 7% respectively (28) and a cross sectional study done among women who came for abortion service at Kenya national hospital got that IUCD up took was 10% (29).

A cross sectional study done at MSIC in Ghana found that up took of LARC was 33.6% (30) and another study done in Ghana found that LARC up took among post abort women was below 10% (18). A cohort study conducted in Nepal found that LARC up took was 11% (31) . A study done in Ethiopia (Amhara, Oromia, Tigray and SNNPR region) found that post abortion LARC up took was 35.5% (32). A cross sectional study done in Addis Ababa from medical recorded of a women who used abortion service found that up took of LARC was 12% (33).

2.2. Factors influencing post abortion LARC use

2.21. Socio demographic characteristics

There are several factors that determine women utilization of Post abortion LARC. These factors are different from place to place. A cross sectional study done in Australia at MSIC found that factor for immediate LARC provision was women age 30 years or older (24) . A cross sectional study conducted in Ghana at all MSIC found that younger clients were more likely preferred long term family planning method (30) but a cross sectional study done in Dessie did not show a significant association with age (34).

A cross sectional study carried out in Addis Ababa reveled that age group from 25-29 were more likely utilize LARC (33). A cross sectional study conducted in Gambella showed that age group from 25-29 and 30-34 were more likely utilizing post abortion family planning (35). In relation to husband education a study done in Nepal found that women whose husband had no formal education was less likely up take LARC. A study done in Pakistan(36) and studies done in (37) and(38) did not show a significant association.

A cross sectional study done in Ghana at all MSIC found that married women were significant association with post abortion family planning up take (30). A cross sectional study conducted in Addis Ababa (33) and studies done in (39) and (40) found that married women were more likely up take post abortion family planning. A study done in Debremarkos showed that the married women were less likely up take post abortion contraceptive (41) .

A cross sectional study done in Addis Ababa found that secondary or higher education had higher odds of LARC adoption (33) and a cross sectional study conducted in Gambella found that those with elementary, secondary and tertiary & above had higher odds of utilizing post abortion family planning (35). A cross sectional study conducted in Ghana at all MSIC found that less educated were more likely choosing long-term family planning methods (30).

A study done in Ghana at all MSIC found that Muslim or Christian believers were less likely up take LARC (30). In relation to occupation a study done in a Pakistan, women's occupation status showed significant associations with the uptake of contraception (36). A cross sectional

study done in Bhardar (42) and a study conducted at Dessie found that occupation had no significant association with post abortion family planning utilization (34).

2.22. Reproductive and contraceptive history

A cross sectional study carried out in Ghana at all MSIC (30) and Addis Ababa (33) were found that those women who had more number of children were more likely up take LARC. In relation to abortion history a study done in Australia at MSIC found that women who had previous abortion history were more likely utilize LARC (24). A cross sectional study conducted in Addis Ababa found that not having a previous abortion were less likely uptake long acting contraception (33).

A cross sectional study conducted in Ghana at MSIC that a women who had previous use of contraceptive method were more likely up take LARC (21) similarly a cross sectional study conducted in shire town (43) and studies conducted in (44) and (45) found that a women who had prior history of contraceptive use were higher odd of utilizing contraceptive. A study done in Addis Ababa found that previous use of contraceptive before the abortion decrease LARC acceptance (46).

A cross sectional study done in Australia at MSIC found that abortion methods predict immediate LARC provision (24) that was similar to a finding of a study done in the six Indian states that a women who used abortion service with a surgical method were more likely up take IUCD (27). A cross sectional study carried out in Ghana found that a women who underwent medical abortion were more likely preferred long term methods (30). Furthermore, a study done in eight countries found no significant difference in long acting and permanent method up took between a woman receiving D& C and those seeking MVA (17).

A previous studies (47), (48), (49) and (24) found that a women with higher parity had higher LARC up take. A cross sectional study done in mainland china found that a women with no or only one child and want a child less than two years were less likely utilize LARC (27). A study done in Jimma found that a woman planned to have a child with in two years were more likely uptake LARC (50).

With regard to intention to have a child a study done in Amhara region found that the desire to have greater number of children was the main factor for poor utilization of family planning (51). A cross sectional carried out at Kenya national hospital found that desire to pregnant in the future not significantly associated with IUCD uptake (29).

In relation to decision making on family planning a study in Dessie found that a women who made independent decision had more likely up take post abortion family planning (34). Similarly a study done in Addis Ababa (52) and Burayu (53) found that a women who made independent decision had higher odd of utilizing post abortion family planning. In relation to status of pregnancy a study done in western Kenya found that a women who had unintended pregnancy were more likely adopt post abortion contraceptives (54). Also a study done in Gonder found that a women who had unintended pregnancy had a greater odd of having post abortion contraceptive intention (55).

2.23. Personal factors

A Study conducted in Mekelle city, found that respondents believe that use of LARC result in irregular bleeding and pain with insertion and removal related with implants (56). While a study done in Addis Ababa and Nekemte found that it was not used due to fear of side effects and due to miss conception about it (57).. In relation to knowledge about LARC a study done in Silti District (58) and Mekelle found that a women with good knowledge were more likely use long acting family planning (49). A study done in Debre Berhan town found that a women who had source of information about LARC from health professionals were more likely use LARC (59). A study done in Mizan (60) and Addis Ababa (57) found that a women who had information about LARC were more likely utilize than those who hadn't get information before.

In relation to knowledge on fertility return time after abortion a study done in Tigray (61) , Addis Ababa (62) and Egypt (63) found that the respondents mentioned the fertility return within two weeks were 26.9 %, 26.7% and 13.8% respectively.

2.24. Institutional factor

A study done in eight countries found that a women treated in tertiary hospital had more likely utilize long acting and permanent contraceptives(17). A cross sectional study done in the six Indian states found that lower uptake of intrauterine contraceptive device in primary health facilities (both private and public facilities)(27). With regard to counseling a cross sectional studies done in Dessie (34) and Burayu Oromia region (53) found that a women who did not counseled were less likely utilize post abortion family planning. In relation to time of counseling a study done in Tigray found no significant association with post abortion contraceptive uptake (61). A study done in western Kenya found that higher proportion of women who were counseled after abortion procedure used post abortion method than a women who were counseled before abortion procedure (54).

2.3. Conceptual Framework of the Study

Conceptual framework on post abortion LARC uptake and associated factors

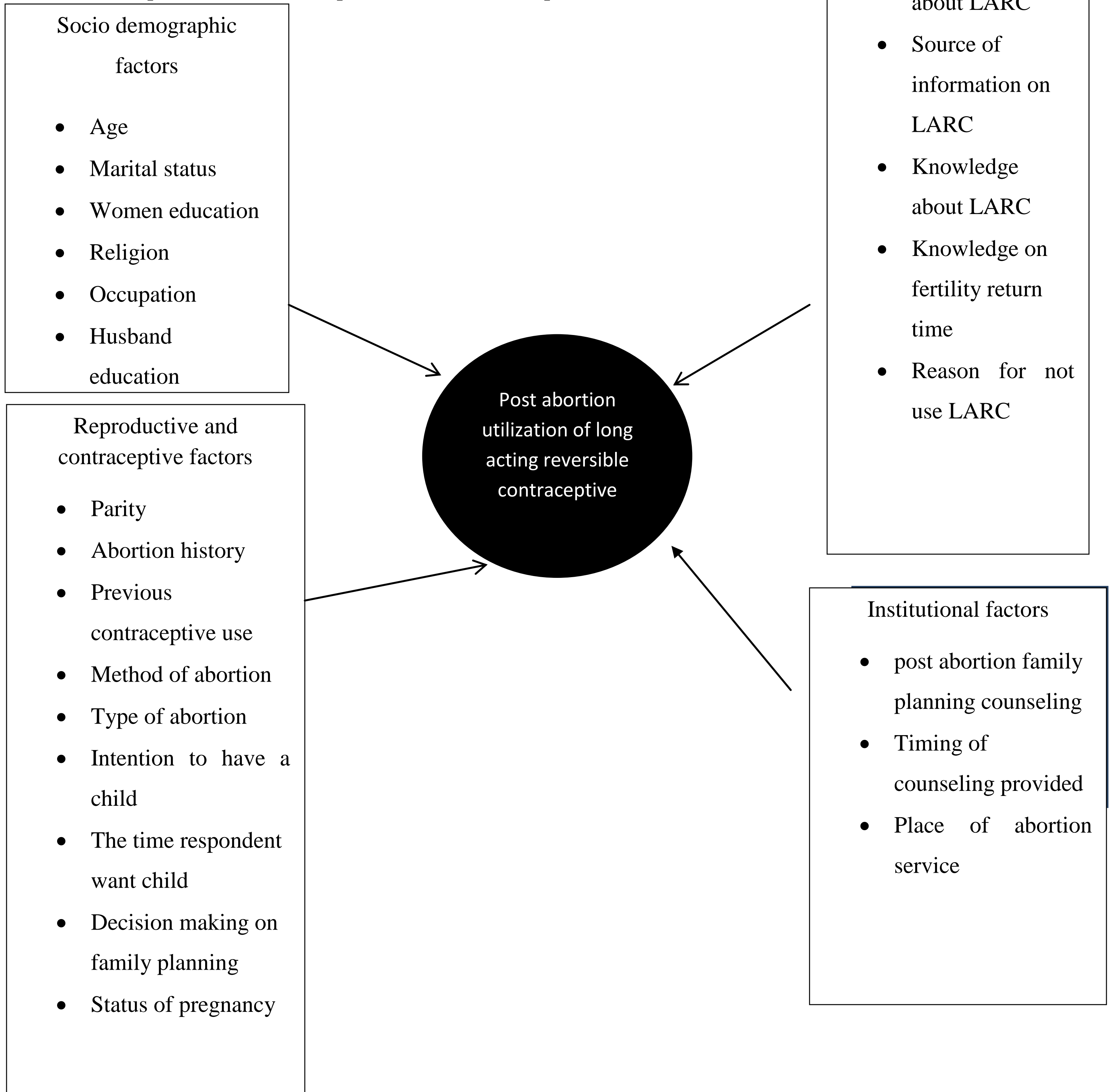

Figure1. Conceptual framework on post abortion long acting reversible utilization and factors. (adapted from the reviewed literatures).

3. Objective of the study

3.1. General objective

The general objective of this study was to assess utilization of LARC and associated factors among women who receive abortion service in Hawassa public health facilities, Southern Ethiopia from May 7– August 7, 2020.

3.2. Specific objectives

- To determine the magnitude of LARC utilization among women who receive abortion service in Hawassa public health facilities, May 7– August 7, 2020.
- To identify factors associated with utilization of LARC among women who receive abortion service in Hawassa public health facilities, May 7– August 7, 2020.

4. Methods and Materials

4.1. Study area

This study was carried out at public health facilities in Hawassa city. Hawassa is the capital city of SNNPR and located 273 km from Addis Ababa and covers an area of 50 square kilometers. According to central statistical agency report of Ethiopia, the total population of the city was estimated to be 359,358 (49% males and 51% females). The city has consisted of 8 sub cities and 32 kebeles. There are three public hospitals (1 Comprehensive Specialized Hospital, 1 General hospital and 1 primary hospital), 10 public health centers and 17 public health post. The city also consists of 12 private hospitals, 30 private clinics and 45 pharmacies. (Hawassa city Administration Annual health sector reports on health and other health related issues, unpublished)

4.2. Study design

Facility based cross-sectional study design using quantitative method was implemented.

4.3. The study period

The study was conducted from May 7– August 7, 2020.

4.4. Population

4.4.1. Source population

Source population comprises all of reproductive age women who receive abortion service in Hawassa public health facilities during study period.

4.4.2. Study population

All reproductive age women who receive abortion service in Hawassa selected public facilities during study period.

4.5. Inclusion and exclusion criteria

4.51. Inclusion criteria

All reproductive age women who receive abortion service in Hawassa selected public health facilities.

4.52. Exclusion criteria

A woman with severe abortion complication like septic abortion and shock need emergency life treatment so they are not involved in this study.

4.6. Sample size determination

For first objective the sample size was determined with single population proportion formula and considers the following assumption:

P= proportion of women utilize LARC after abortion = 0.19(46)

q= proportion of women not utilize LARC after termination of pregnancy=0.81

d= desire precision = 4%, Z α/ 2 at = 1.96 at 95% Confidence interval

n=sample size

n = Z α/22×P (1-p)/d2= 370

Considering 10% of non -respondent rate and the final sample size is 411.

Table 1: Sample size determination for the specific objective using EpiInfo version 7.2

For specific objective the sample size was calculated using Epi info version 7.2 by referring previous similar literatures by using proportion of LARC use after abortion among non-exposed and for each factors ratio of unexposed to exposed= 1:1,Confidence interval= 95%, Power= 80% and Non response rate=10% was considered. Here, the two factors are the highest sample size from over all 10 calculated factors.

Variable	P2 (%)	AOR	Ratio of unexposed to exposed	Confidence interval%	Power %	Sample size	10% of non-response rate
Method of abortion	60	2.26	1	95	80	250	278
Number of living children	3.2	4.59	1	95	80	274	304

Out of the three sample sizes calculated for the study, the largest sample size 411 was taken to ensure adequate sample size for all objectives of study.

4.7. Sampling procedure

From public health facilities three public hospitals and eight health centers were providing abortion service in the study area. Two public health hospitals and four health centers were randomly selected. The sample size for each selected health facility was allocated proportionally based on two month case load of abortion from each facilities and consecutively every woman who visited health facilities were interviewed until the allocated number of study subjects for each facility was reached.

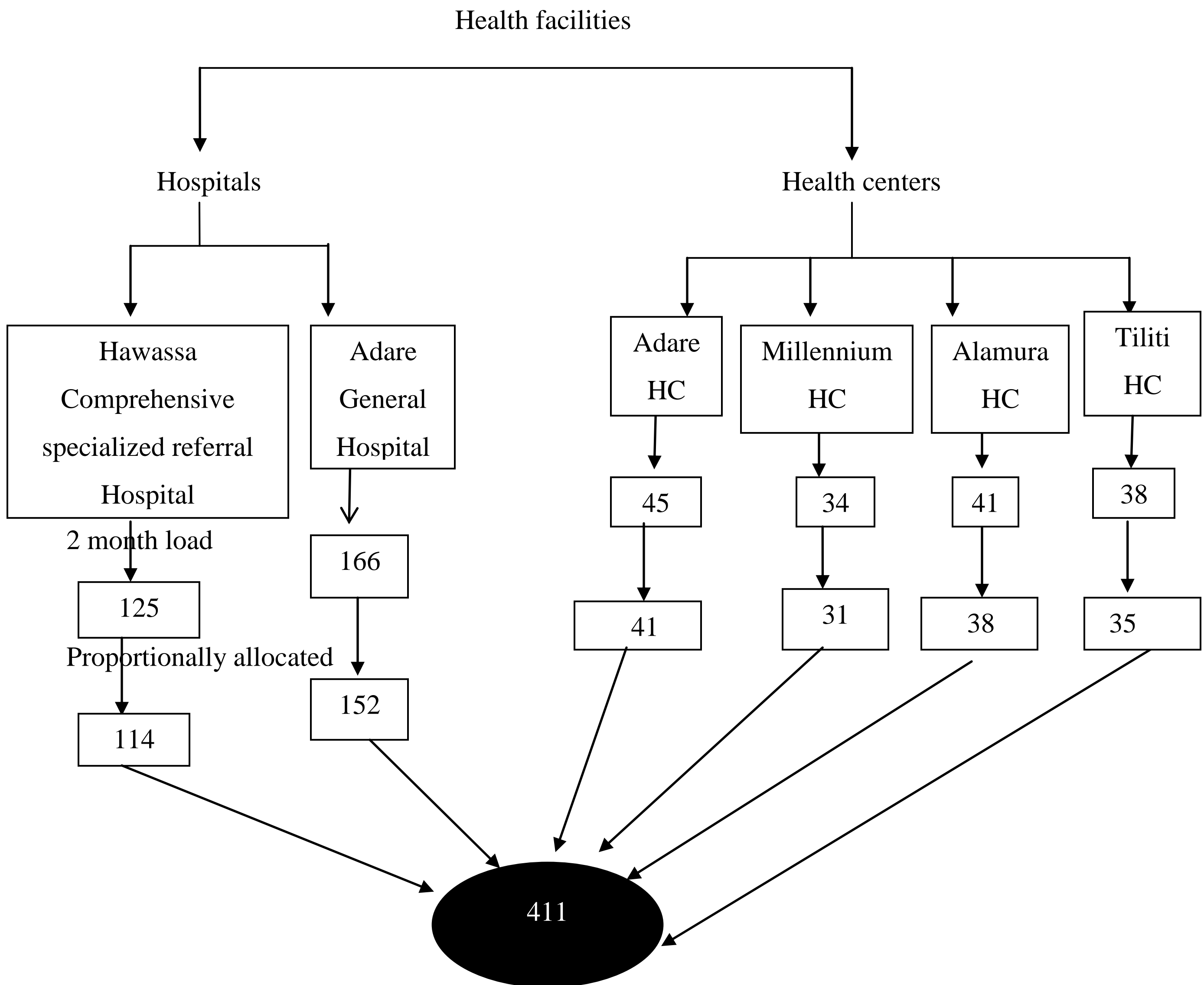

Figure 2. Schematic presentation of sampling procedure of health facilities.

4.8. Data collection tool and data collection procedure

Data were collecting using a structured questionnaire of face to face exit interview on those women who received abortion service by three men (two degree holder midwives and one diploma nurse) and seven women (two degree holder midwives and five diploma nurses) over three months and there are two supervisors. The questionnaire was initially prepared in English latterly converted to Amharic language. Two day training was given for data collectors and supervisors then collected data were reviewed daily for completeness, accuracy, clarity and consistency by a supervisors and a principal investigator. Pre-testing of the questionnaire was done on 5% of total sample size at different health facility that was not part of study in Hawassa city.

4.9. Study Variables

4.91. Dependent Variable (Yes, No)

- Post abortion implant or IUCD utilization

4.9.2. Independent variables

- Socio-demographic characteristics: Marital status, age, women education, occupation, religion and husband education.
- Reproductive factors: parity, abortion history, previous contraceptive use, type of abortion, method of abortion, intention to have a child, the time respondent want child, decision making on family planning and status of pregnancy.
- Institutional factor: Place of abortion service, counseling and time of counseling.
- Personal factors: Reason for not utilize LARC, knowledge about LARC, information about LARC and source of information about LARC.

4.10. Operational Definitions.

Post abortion LARC utilization is use of IUCD or implant after abortion by women before being discharge.

Knowledge was measured by the total of number of correct answers to 10 items with minimum score of 0 to and maximum of 10 items. LARC as “high” those who knew 80% and above, “moderate” those who knew 60-79% and “low” those who knew less than 60 % (60).

4.11. Data analysis procedures.

Data entry was done using Epidata 3.1 version then data were cleaned and export to SPSS for analysis. Different frequency tables and graph were used for data presentation. Binary logistic regression was run to check whether predictor variable is associated with outcome variable by determine the OR at 95% CI and those variables having P-value < 0.25 during the bivariate logistic regression analysis were selected as a candidate for multi variable logistic regression. Finally p-values < 0.05 during the multi variable analysis was taken as statistical significance. The degree of association was expressed using adjusted odds ratio (OR) with 95% C-I.

4.12. Ethical Consideration

Ethical clearance was obtained from School of Public Health Research Ethical Review Committee. The support letters were obtained from respective offices. The benefit and minimal risk of research like wastage of time and distress was explained to the participant. Written informed consent was obtained from participants before interview them. Participants were informed that their participation is purely voluntary and if you have still discomfort, you have a right to withdraw from the study at any time. The information that was provided kept strictly confidential.

4.13. Dissemination of the result

The result of this thesis will be given to Addis Ababa University School of Public Health Department of Reproductive, Family and Population health. The findings will also be disseminated to Hawassa city administration health office and non-governmental organizations (NGOs) working on the improvement of maternal and child health in Hawassa.

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5. Result

5.1. Socio-demographic characteristics of respondents

A total of 396 women came to the facility for abortion services were interviewed in this study with 96.4% of response rate. 272(68.7%) age distribution of respondents was between 20-30 years old. The median and inter quintile range was 26(23-30) years. One hundred seventy two (43.5%) of women and 82(38%) of husbands attended secondary education. Majority 109(27.5%) of respondents was housewife and more than half of respondents 216(54.5%) were followers of protestant religion.

Table 2. Socio demographic characteristics of study participants Hawassa city, south Ethiopia, 2020(n=396)

Variables	Frequency(n)	Percent (%)	LARC utilization		
			NO	Yes	COR
Age					
less than 19	31	7.8	23	8	1
20-24	114	28.8	89	25	0.8(0.29-2.02)
25-30	158	39.9	126	32	0.73(0.29-1.78)
>30	93	23.5	77	16	0.58(0.23-1.58)
Educational level of respondents					
No formal Education	37	9.3	30	7	1
Primary	135	34.1	105	30	1.22(0.49-3.06)
Secondary	172	43.5	143	29	0.87(0.35-2.16)
College and Above	52	13.1	37	15	1.73(0.63-4.8)
Husband educational level(n=216)					
No formal education	14	6.5	10	4	1
Primary	70	32.4	57	13	0.57(0.15-2.1)
Secondary	82	38	69	13	0.47(0.13-1.73)
College and Above	50	23.1	42	8	0.48(0.12-1.9)
Occupation of respondents					
Unemployment	61	15.4	48	13	1
Student	65	16.4	55	10	0.67(0.27-1.67)
Government employee	85	21.5	67	18	0.99(0.44-2.21)
House wife	109	27.5	84	25	1.1(0.51-2.34)
Private employee	76	19.2	61	15	0.9(0.4-2.08)
Marital status of respondents					
Single	170	43	130	40	0.72(0.18-2.9)
Married	216	54.5	178	38	0.5(0.12-2.01)
Divorced and widowed	10	2.5	7	3	1
Religion of respondents					
Protestant	216	54.5	172	44	1
Orthodox	102	25.8	81	21	1.01(0.57-1.81)
Muslim	55	13.9	44	11	0.98(0.47-2.04)
Catholic	23	5.8	18	5	1.09(0.38-3.08)

5.2. Reproductive history of study participants

The majority 258(65.2%) of participants gave 1-4 births. About 33(8.3%) of respondents had history of abortion. Among those, 28(84.9%) of participants had history of one abortion. More than half of the women 286(72.2%) said that the pregnancy was unintended and about 332(83.8%) were induced type of abortion. From total of women, 290(73.2%) women abort through medication.

Table 3. Reproductive history of study participants of Hawassa city, south Ethiopia, 2020 (n = 396)

Variables	Frequency(n)	Percent
Parity		
0	104	26.2
1-4	258	65.2
>4	34	8.6
History of abortion		
Yes	33	8.33
No	363	91.67
Number of previous abortion(n=33)		
1	28	84.9
≥ 2	5	15.1
Was a current pregnancy intended		
Yes	110	27.8
No	286	72.2
Current type of abortion		
Induced	332	83.8
Spontaneous	64	16.2
Current method of abortion		
Medical	290	73.2
Surgical	106	26.8
Intention to have a child		
Yes	372	93.9
No	24	6.1
The time respondent want child(n=372)		
< 1year	52	14
1-2 year	72	19.3
> 2 year	148	39.8
I don't know	100	26.9

5.3. Contraceptive history and information about LARC

From the total, 261(65.9%) women said that they have been used at least one form of contraceptive previously and 361(91.16%) heard about long acting reversible contraceptive method. From those who heard LARC methods, 148 respondents (41%) have heard information from more than one source (combination of media, health professionals and friends). Among the respondents, 350(88.4%) got post abortion contraceptive counseling and from this 222(63.4%) were after abortion procedure. One hundred eighty nine (47.7%) of respondents have said they decided for long acting contraceptive by themselves.147(37.1%) of respondents got service from general hospital.

Table 4: Contraceptive, information and facility related variables, Hawassa city, South Ethiopia, 2020 (n=396)

Variables	Frequency	Percent (%)
Previous use of contraceptive		
Yes	261	65.9
No	135	34.1
Heard about LARC method		
Yes	361	91.16
No	35	8.84
Source of information(n=361)		
Media(TV or radio)	44	12.2
Health professionals	123	34.1
Friends	46	12.7
More than one source(Combination of the above)	148	41
Counseling		
Yes	350	88.4
No	46	11.6
Time of counseling(n=350)		
After abortion procedure	222	63.4
Before abortion procedure	128	36.6
Decision maker on the use of family planning		
Her self	189	47.7
Husband	121	30.6
Both	86	21.7
Place of abortion service		
Health centers	140	35.4
General Hospital	147	37.1
Referral hospital	109	27.5

5.4. Utilization of post-abortion contraceptive and reason for not using LARC

From the total respondents, 291 (73.5%) of women were utilized contraceptive after they got abortion service. Among these, post abortion long acting reversible contraceptive accounts 20.5 % (95% CI [16.4-24.8%]). The remaining 53% were used different methods; 148 (37.4%) injectable, 58 (14.6%) pill and 4 (1%) condom. Respondents who didn't utilize long acting reversible contraceptive after post abortion service have reported different reasons. Those reasons were fear of side effect 144 (45.7%), infrequent or no sexual intercourse 92 (29.2%), wished to give birth 55 (17.4%), religion 15 (4.8%) and 9 (2.9%) had no reason.

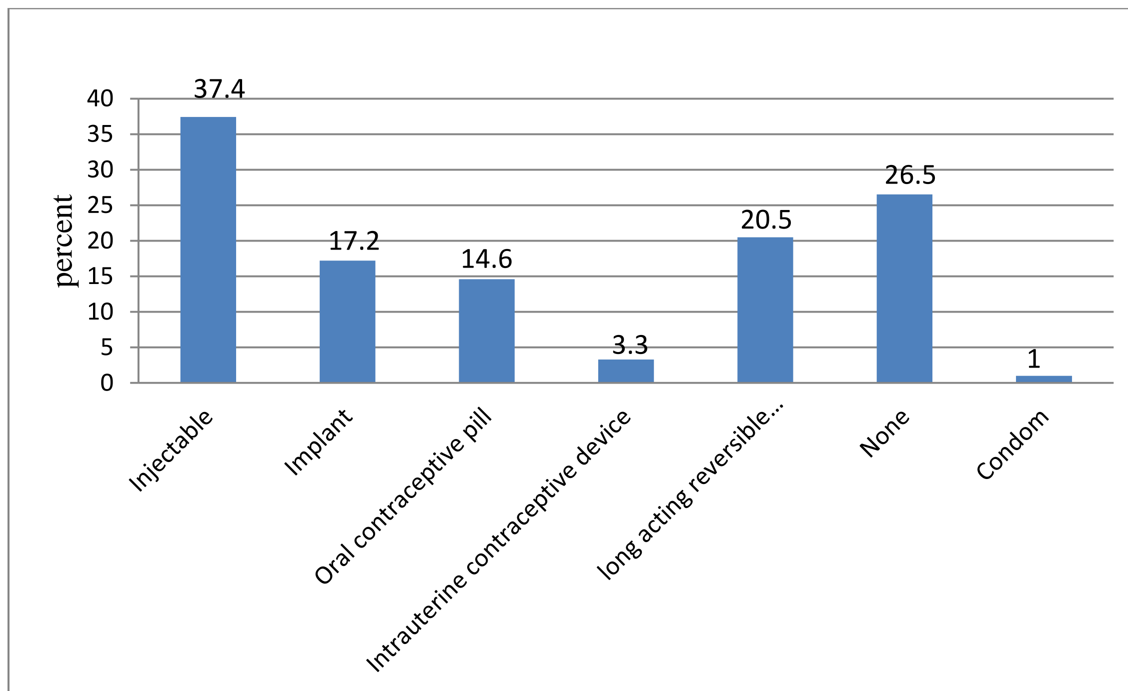

Figure 3: Types of contraceptive used by respondents after abortion in Hawassa city, south, Ethiopia 2020(n=396).

5.5. Knowledge of study participant about long acting reversible contraceptive method and knowledge on fertility return time

Regard to knowledge on fertility return time after abortion the respondents mentioned that soon (within two weeks) 118 (29.8%), one month 27 (6.8%), two up to three month 54 (13.6%) and don't know197 (49.8%).

Three hundred four (76.8%) of the women were aware of that IUCD can prevent pregnancies for 12 years and 137 (34.6%) were not aware IUCD is not appropriate for female at risk of acquiring sexual transmitted infection. In this study 258 (65.2%) and two hundred thirty eight (60.1%) of the women aware of that IUCD have no influence on sexual intercourse and it results in immediate pregnancies after removal, respectively. 258 (65.2%) of women aware of that implants result in immediate pregnancy after removal and 306 (77.3%) were aware that implants prevent pregnancies for 3-5 years. Two hundred ninety nine (75.5%) of the women were aware that implant require minor surgical procedure during insertion and removal and 277 (69.9%) were knew that implant not interfere with sexual intercourse. 278 (70.2%) of women aware that IUCD not cause cancer and two hundred eighty two (71.2%) were knew that IUCD not prevent sexual transmitted disease.

Table 5. Knowledge of study participants about LARC of Hawassa city, South Ethiopia, 2020 (n = 396)

Variables	Knowledge	
Knowledge statement on LARC	True %	False %
IUCD can prevent pregnancies for 12 years.	76.8	23.2
IUCD not appropriate for women at high risk of STIs	65.4	34.6
IUCD not interfere with sexual intercourse or desire	65.2	34.8
Implant can prevent pregnancies for 3-5 years	77.3	22.7
IUCD reverse pregnancy quickly when removed	60.1	39.9
Implant require minor surgical procedure during insertion and removal	75.5	24.5
IUCD cannot cause cancer	70.2	29.8
Implant reverse pregnancy quickly when removed if the women need to be pregnant	65.2	34.8
Implants not interfere with sexual intercourse or desire	69.9	30.1
IUCD not prevent sexual transmitted disease	71.2	28.8
Knowledge level	Frequency	%
High Knowledge	127	32.1
Moderate knowledge	246	62.1
Poor knowledge	23	5.8

5.6. Factors affecting post abortion long acting reversible contraceptive utilization.

Bivariate logistic regression was performed to assess factors association with post abortion long acting reversible contraceptive utilization. The result revealed that on the regression: Place of abortion service, the time respondent want child, previous use of contraceptive, decision maker on contraceptive use, time of counseling, method of abortion, type of abortion, history of abortion, knowledge and parity were p value < 0.25.

In multivariable logistic regression variables with p value < 0.25 on bivariate logistic regressions were included in the model. Decision maker, history of abortion, time of counseling and parity were associated with post abortion long acting reversible contraceptive utilization.

The decision maker on contraceptive use was significantly associated with utilization of long acting reversible contraceptives among post abortion women's. The decision made by both partners on the utilization of LARC were 3.3 times more likely utilize LARC as compared to the decision made by themselves(AOR=3.3; 95% CI [1.56-7.09]). Abortion history was also found to be significantly associated with long acting reversible contraceptive utilization. Those women who had a history of previous abortion were 3.93 times more likely utilize the long acting reversible contraceptive as compared to their counterparts(AOR=3.93; 95% CI [1.48-10.4]).

The utilization of long acting reversible contraceptive was also significantly associated with time of counseling provided. Those women who were counseled on family planning after abortion procedure have 3 fold odds of receiving long acting reversible contraceptive than those women who counseled before procedure(AOR=3.01;95% CI[1.43-6.33]). The other variable that was found to have association was parity. The use of LARC was 6.68 times greater in grand multiparous women compared to their counterpart (AOR= 6.68; 95% CI [2.28-19.5]).

Table 6: Factors associated with post abortion long acting reversible contraceptive utilization among abortion services user in Hawassa public health institutions , South Ethiopia, 2020 (n = 396)

Variables	LARC utilization		Unadjusted and adjusted OR 95 % Confidence Interval	
	No	Yes	COR	AOR
Place of abortion service				
Health centers	106(75.7%)	34(24.3%)	1	1
General hospital	120(81.6%)	27(18.4%)	0.70(0.39-1.23)	0.54(0.26-1.14)
Specialized referral hospital	89(81.7%)	20(18.3%)	0.70(0.38-1.3)	0.63(0.28-1.45)
The time want child(n=372)				
<1year	42(80.8%)	10(19.2%)	1	1
1-2 year	61(84.7%)	11(15.3%)	0.75(0.29- 1.94)	1.27 (0.4-3.98)
>2year	121(81.8%)	27(18.2%)	0.93(0.41- 2.09)	2.13(0.77-5.89)
I don't know	72(72%)	28(28%)	1.63(0.72- 3.69)	2.72(0.95-7.74)
Ever use of contraceptive				
Yes	197(75.5%)	64(24.5%)	2.25(1.26-4.03)	1.83(0.85-3.92)
No	118(87.4%)	17(12.6%)	1	1
Decision maker on FP				
Her self	165(87.3%)	24(12.7%)	1	1
Husband	94(77.7%)	27(22.3%)	1.98(1.08- 3.61)	1.45(0.67-3.12)
Both	56(65.1%)	30(34.9%)	3.68(1.99-6.82)	3.3(1.56-7.09)*
History of Abortion				
Yes	17(51.5%)	16(48.5%)	4.3(2.07-8.98)	3.93(1.48-10.4)*
No	298(82.1%)	65(17.9%)	1	1
Knowledge level				
High	79(62.2%)	48(37.8%)	2.18(0.76- 6.28)	2.14(0.56-8.09)
Moderate	218(88.6%)	28(11.4%)	0.46(0.15-1.34)	0.51(0.13-1.94)
Low	18(78.3%)	5(21.7%)	1	1
Method of abortion				
Medical	239(82.4%)	51(17.6%)	1	1
Surgical	76(71.7%)	30(28.3%)	1.85(1.1- 3.1)	1.4(0.68-2.89)
Time of counseling(n=350)				
After abortion procedure	163(73.4%)	59(26.6%)	2.72(1.47- 5.04)	3.01(1.43-6.33)*
Before abortion procedure	113(88.3%)	15(11.7%)	1	1
Type of abortion				
Induced	257(77.4%)	75(22.6%)	2.82(1.17- 6.8)	2.24(0.75-6.69)
Spontaneous	58(90.6%)	6(9.4%)	1	1
Parity				
0	89(85.6%)	15(14.4%)	1	1
1-4	212(82.2%)	46(17.8%)	1.28(0.68- 2.42)	1.23(0.56-2.69)
>4	14(41.2%)	20(58.8%)	8.47(3.53- 20.3)	6.68(2.28-19.5)*

* Backward logistic regression with p-value < 0.05

6. Discussion

This study aimed on determine the post abortion long acting reversible contraceptive utilization and factors that associate with long acting reversible contraceptive utilization. The overall utilization of LARC was 20.5%. Parity, previous abortion history, partners a companion decision making and time of counseling had significant association with utilization of LARC methods.

In this study the utilization of LARC was 20.5% which was greater than both studies done in Kenya 8 % (28) and Gabon 9.3 % (64). This variation might be due to a study done in Kenya fee was charged for implants and IUCD but in this study provided free of charge. However, lower than that of studies done in Australia and Ghana showed 27.4%(24) and 33.3%(30) respectively. This difference might be due to variation in culture, better access of service and sector of facility. Both studies were done at MSIC so NGO clinics have higher retention of post abortion LARC utilization than government. From one-quarter of all abortions throughout Australia around a third of all abortions are undertaken in its centers.

Women who were grand multiparous were 6.68 times more likely utilize LARC than nulliparous women. This finding was supported by a study done in Shire, found that a women who were grand multiparous women were 7.9 times more likely utilize contraceptives than nulliparous women (43). Also the above findings were supported by studies done in Addis Ababa (46) and Gabon (64). The reason might be motivation of those women with high parity to make certain that they didn’t conceive again in the near future could be higher compared to their counterpart (46) and also this might be due to grand multiparous women might want to limit the number of children.

This study found that women who had a previous abortion history had 3.93 times more likely utilize LARC than a woman with no previous abortion history. This finding was supported by studies done in Bhardar (42), Guinea (65) and Australia (24). This can be explained by majority of the women with history of abortion had unintentional pregnancy, so they desire to use contraception to prevent unintentional pregnancy (34).

A woman who made decision with their partner on long acting reversible contraceptive had 3.3 times more likely utilize LARC than decision made by themselves but a study in Dessie found that those women who made decision independently had two times more likely use post abortion family planning than decision made by both partners(34). Similarity a study done in Addis Ababa(52) and Burayu (53) support this finding. This difference might be due to the husband had a supportive attitude toward LARC.

The other variable which show strong association with LARC utilization were those women counseled on family planning after abortion procedure had 3 times more likely utilize long acting reversible contraceptive than their counterpart. This finding was supported by a study done in western Kenya(54). The possible reason could be a woman had less anxiety and fear after procedure so women are confident to make decision to utilize LARC.

Even though type of abortion not becomes significant in this study, there is an increment of long acting reversible contraceptive use in those of women who had induced abortion than women who had spontaneous abortion. This finding were supported by study done in Gabon which found that women who had induced abortion were more than two times more likely utilize long-acting contraceptives methods compared to their counterpart (64). Similarly the study were done in Addis Ababa found that a women who had induce abortion were 2.9 times more likely use long acting reversible contraceptive method than a women who had spontaneous abortion (46). The possible reason could be the drive of a women to make certain that they did not conceive again in the near future might be higher for those women who had induce abortion than a women who had spontaneous abortion(46).

There is an increment of LARC use in those women who had previous use of contraceptive than a woman who didn’t had previous use of contraceptive. This finding was supported by a study done in Debremarkos which found that a women who had ever used of contraceptives were two times more likely use long acting than those who didn’t had ever used of contraceptives (66). Also, another study found that a woman who had ever used contraceptive were greater than seventeen times more likely to use long acting than those who didn’t had ever used of contraceptive(67). This could be due to women who had used contraceptive previously might have frequent and detail discussion with service providers on the methods they were using(66).

7. Strength and Limitation of study

7.1. Strength

- To minimize recall bias the interview was held immediately after they leave the abortion room.

7.2. Limitation

- Social desirability bias due to women self-reports answers in manner that will favorable by others on abortion history.
- Not representative for general population since the study was only done in urban setting.
- The data collectors were the health care providers who directly provide the service so bias might occur.
- Although most data collectors were women due to the sensitivity of information, only female data collectors might be needed.
- The study has not considered variables like commodity access, stock out and cause of abortion.

8. Conclusion

The overall utilization of long acting reversible contraceptive was 20.5 % [16.4-24.8%] and 26.5% leave the facility without use of any contraceptive method. Parity, previous abortion history, partners a companion decision making and time of counseling had significant association with post abortion long acting reversible contraceptive utilization. From those of women's who came for abortion service 72.2 % was unintended pregnancy and 8.3% had history of abortion.

9. Recommendation

Recommendation for health care providers

- Health care providers should provide counseling to women after abortion procedures. This is a better time because anxiety and stress are reduced after treatment.
- Health care providers should provide health education on the purpose of contraception and have to tell that abortion is last option for nulliparous women.

Recommendation for stakeholders

- Programs that support male involvement should be supported and initiated to improve family planning utilization among comprehensive abortion care women.

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Annex

Annex 1. Participant information sheet and informed volunteer consent form

My name is………………..I am working as a data collector for the study being conducted in this facility by kassahun ketema who is studying for her Master's degree at Addis Ababa University, school of public health .

Study title: Use of long acting reversible contraceptive and associated factor among women who receive abortion service in Hawassa public Health facilities.

The purpose of the study**:** The principal aim of this study is to write a thesis as a partial fulfillment of the requirement for Degree of Master of Science in public Health at Addis Ababa University Moreover, the finding of this study will be used as an input for facility health manager and other stakeholder to identify factor that hinder the use of LARC in the facility.

Benefit and risk: It is expected the study participant will lose small amount of time approximately 20 or 30 minutes of their working time in responding to interview and distress due to some question which recall their past view or situation.

Confidentiality: The information that you provide me will be kept strictly confidential. There will be no information that will identify you in particular. The findings of this study will be general for the study community and will not reflect any thing particular of individual persons. No reference will be made in oral or written reports that could link participants to the research.

Rights: Participation for this study is fully voluntary. You have the right to declare to participate or not in this study. If you have still discomfort, you have right to withdraw from the study at any time. Beside this, if you want to ask any unclear idea, I am happy to give you further elaboration and you are not obliged to answer any question you do not wish to answer.

Contact Address: If there are any questions or enquires any time about the study or the procedure please contact me through the address Principal investigator: ketemakassahun32 @gmail.com or mobile phone number 0932210012.

Declaration of informed voluntary consent

I have clearly understood the purpose of the research, procedures, the risks and benefits, issues of confidentiality, the rights participating and the contact address for any queries. I have been given the opportunity to ask questions for things that may have been unclear. It will be inform that I have the right to with draw from the study at any time or not answer any question that I do not want. Therefore, I declare my voluntary consent to participate in this study with my initials (signature) as indicated below.

Name and signature of participant--date-----------/--------/------

Name and signature of data collector-----------------------------------date-----------/----------/-----

N.B; This is to be signed face to face in the presence of data collector.

Thank you for your cooperation

Annex 2. English version questionnaires for client interview

Instruction- Interview

Name of facility_____________

Data collector name____________

Part 1. Socio-Demographic characteristics

No	Question	Response	Skip pattern
101	How old are you?	--------------------------	
102	What is your current Marital Status?	1. Single 2. Married 3. Divorced 4. Widowed	
103	What is your Religion?	1. Orthodox 2. Muslim 3. Protestant 4. Catholic 5. Other ………	
104	What is your level of Educational	1. Illiterate 2. Primary education (1-8) 3. Secondary education (9-12) 4. College and above	
105	What is your current occupation?	1.Merchant 2.House wife 3.Government employee 4.Private employee 5. Student 6.Unemployee 7.Other(specify)	

106	If you have husband, what is your husband educational status?	1. Illiterate 2. Primary education (1-8) 3. Secondary education (9-12) 4. College and above	

Part 2. Reproductive health and facility related characteristics

201	Did you have children? (Include both a given birth to a boy or girl who was born alive but later died and any baby who cried or showed signs of life but did not survive)	1. Yes 2. No	If your answer No go to question number 204
202	If "yes" for Q.no 202, how many children do you have?	------------------------------	
203	Do you want to have children?	1. Yes 2. No	
204	When do you want to have a child?	1.Within one year 2.Within one-two year 3. Above two year 4. I don't know	
205	Do you have previous abortion history?	1. Yes 2. No	If your answer No go to question number 207
206	If your answer "yes" for Q. no 205 how many times?	---------------------	
207	Which type of abortion was this terminated pregnancy?	1. Induced 2. Spontaneous	

208	Which method of abortion was used to terminate this pregnancy?	1.Medical 2.MVA 3. D&C or D&E	
209	Was the terminated pregnancy intended?	1.Yes 2.No	
210	A place from where women take the abortion service?	1. Health center 2. General hospital 3. Referral specialized hospital	
211	Who make a decision on the use of family planning?	1. My self 2. Husband 3. Both	

Part 3. Information about long acting reversible family planning method

301	Have you ever heard about long acting reversible family planning method?	1. yes 2. No	If no skip to question no 303
302	From where did you hear about long acting reversible family planning method?(multiple answer is possible)	1. Television or Radio 2. Magazines/newspaper 3. Health professionals 4. Friends 5. Others specify………………	
303	When is the fertility return time after this abortion from the list below?	1. Soon(within two weeks) 2. One month 3. 2-3 month 4. Don’t know	

Part 4. Knowledge on long acting reversible contraceptive

401	The contraceptive that placed inside the uterus can prevent pregnancies for 12 years.	1.True 2. False	
402	The contraceptive that placed inside the uterus not appropriate for women at high risk of STIs.	1. True 2. False	
403	The contraceptive that placed inside the uterus not interfere with sexual intercourse or desire.	1. True 2. False	
404	The contraceptive that placed inside the upper arm can prevent pregnancies for 3-5 years	1. True 2. False	
405	The contraceptive that placed inside the uterus reverse pregnancy quickly	1. True 2. False	
406	The contraceptive that placed inside the upper arm require minor surgical procedure during insertion and removal	1. True 2. False	
407	The contraceptive that placed inside the uterus cannot cause cancer	1. True 2. False	
408	The contraceptive that placed inside the upper arm reverse pregnancy quickly when removed if the women need to be pregnant	1. True 2. False	
409	The contraceptive that placed inside the upper arm not interfere with sexual intercourse or desire.	1. True 2. False	
410	The contraceptive that placed inside the uterus not prevent sexual transmitted disease	1. True 2. False	

Part 5. Utilization of post abortion family planning and family planning history

501	Have you ever used any contraceptive?	1.Yes 2. No	
502	Do you have PAFP counseling?	1.Yes 2. No	If your answer No go to question number 504
503	At what time you received the counseling?	1.Before procedure 2.After procedure	
504	Have you received any contraceptive now?	1. Yes 2. No	
505	If "yes" for Q. no 504 Do you receive long acting reversible contraceptive device now?	1. Yes 2. No	If your answer No go to question number 507
506	If "yes" for Q. no 504 which method of contraception did you receive?	1. Natural 2. Condom 3. Pills 4. Injection/dipo 5. Implant 6. IUCD 7. Tubal ligation	
507	If u not use IUCD or implant? What is your reason?	1. Fear of side effect 2. Infrequent sex/No sex 3. Want to get birth 4. Religion opposed 5. No reason 6. Other(specify)	

Annex 3. የጥናቱ ተሳታፊዎች መረጃ መስጫ እና የፍቃድ ስምምነት መግለጫ ቅጽ

የጥናቱ ርዕስ፡ በኣዋሳ በሚገኙ የመንግስት ጤና ተቋማት ውስጥ ፅንስ የማቋረጥ አገልግሎት የወሰዱ እናቶች የረጅም ጊዜ የወሊድ መቆጣጣሪ (የማህፀንና በክንድ ስር የሚቀመጥ) አጠቃቀም ሁኔታ እና የማይጠቀሙ ከሆነ ምክንያቶች።

የጥናቱ አላማ፡- የዚህ ጥናት ዋና አላማ የአዲስ አበባ ዩኒቨርሲቲ ድህረ ምረቃ ድግሪ ሚሟያ የጥናት ምርምር ወረቀት ሲሆን ከዚህ በተጨማሪም የዚህ ጥናት ውጤት ለጤና ተቋማት ኃላፊዎችና ለሚመለከታቸው አካላት ግብአት በመሆን በተቋማት ውስጥ እንዳይጠቀሙ የሚያደርጋቸውን ምክንያት ይለያል፡፡

ሚስጥራዊነቱ፡-ለእኔ የሚሰጡት መረጃ ፈፅሞ ሚስጥራዊ ነው፡፡ምን አይነት መረጃ እርሶን በተለየ ሁኔታ ሊያጋልጥ አይችልም የትናቱ ውጤት በምንም አይነት ሁኔታ ግለሰቦችን ባነጣጠረ ሁኔታ አይደለም፡፡ምንም አይነት ማጠቀሻ በቃልም ሆነ በጽሁፍ ሀተታ ተሳታፊዎችን ከጥናትና ምርምር ጋር አያይዝም፡፡

መብቶች፡-በዚህ ጥናት ለመሳተፍ በሙሉ ፍቃደኝነትዎ ላይ የተመሠረተ ነው፡፡ በዚህ ጥናት ውስጥ የመካተትም ሆነ ያለመካተት ሙሉ መብት አሎት፡፡ በዚህ ጥናት ውስጥ ምቾት ካልተሰማዎት በየትኛው ጊዜ ራስዎን ማግለል ይችላሉ፡፡ተጨማሪ ማብራሪያዎችንም የሚስጥ ሲሆን መመለስ የማይፈልጉትን ጥየቄ እንዲመልሱ አይገደድም፡፡

አድራሻ፡ ስለ ጥናቱ ጥያቄ ካሎት በየትኛውም ጊዜ በጥናቱ አድራጊው በኩል ሊያገኙን ይችላሉ፡፡ካሳሁን ከተማ ኢሜል ketemakassahun32@gmailcom ተንቀሳቃሽ ስልክ 09 32 21 00 12.

የፍቃደኝነት ስምምነት መግለጫ

የተሳታፊዎች መረጃ ቅጽ አንብቤያለው ወይም ተነቦልኛል የጥናቱ አላማ ፤ሂደቱ ፣ጥቅም እና ጉዳቱ ሚስጥራዊነቱ ፣ የተሳታፊዎች መብት በግልጽተረድቻለሁ፡፡ ግልፅ ያልሆኑ ነገሮች ላይ እንዳልጠይቅ ሙሉ መብት ተሰጥቶኛል እንዲሁም በፈለኩ ጊዜ ከጥናት እንድወጣ ካስፈለገም ደሞ መመለስ የማልፈልገው ጥያቄ ያለመመለስ መብት እንዳለኝ ተነግሮኛል ስለሆነም በጥናት ውስጥ ለመሳተፍ የፋቃፈኝነት ስምምነት መግለጫ በፊርማዬ እንደሚከተለው አረጋግጣለሁ፡፡

የተሳታፊ ስም እና ፊርማ____________________________ቀን_____________________

የመረጃ ሰብሳቢው ስምና ፊርማ______________________ቀን_____________________

ስለትብብሮ እናመሰግናለን፡፡

የሚፈረመው መረጃ ሰብሳቢው ካሉት ፊት ለፊት ነው፡፡

እባክዎትን ቀሪውን የፊርማው ስምምነት ለተሳታፊው ይስጡት ስለትብብሮት እናመሰግናለን፡፡

Annex 4 .Amharic version questionnaires

የጤና ድርጅቱ ስም________________________________

የጠያቂው ስም___________________________________

ክፍል 1 ማህበራዊ እና ሥነ ሕዝብ መረጃ

ተ.ቁ	ጥያቄ	ምላሽ	መለያ
101			
102	የብጋቻ ሁኔታ ?	1. ያገባች 2. ያላገባች 3. የፈታች 4. ቧሏ የሞተባት	
103	ሀይማኖትሽ	1. ኦርቶዶክስ 2. ሙስሊም 3. ፕሮቴስታንት 4. ካቶሊክ 5. ሌላካለይጥቀሱ	
104	የትምህርት ደረጃ	1. ያልተማረ 2. የመጀመሪያ ደረጃ(1-8) 3. ሁለተኛ ደረጃ (9-12) 4. ኮሌጅ እና ከዚያ በላይ	
105	ስራሽ ምንድነው ?	1. ነጋዴ 2. የቤት እመቤት 3. የመንግስት ሠራተኛ 4. የግል ሠራተኛ 5. ተማሪ 6. ስራ አጥ	
106	ባል ካልሽ የባለቤትሽ የትምህርት ደረጃ ?	1. ያልተማረ 2. የመጀመሪያ ደረጃ 3. ሁለተኛ ደረጃ 4. ኮሌጅ እና ከዚያ በላይ	

ክፍል 2. የስነ ተዋልዶ ጤናን በተመለከተ

201	ልጆች አሉሽ?(የሚያካትተው ተወልዶ የሞት እና ሲወለድ ያለቀሰ ወይም በህይወት የመኖረ ምልክት ያሳየ ግን ከሞተ ያልተረፈ)	1. አዎ 2. የለም	መልሶ 2 ከሆነ ወደ ጥያቄ ቁጥረ 204 ይሂዱ
202	አዎ ከሆነ መልስሽ ስንት ልጆች ?	----------------------	
203	ልጅ ቀጣይ መወለድ ትፈልጊያሽ?	1. አዎ 2. ኣልፈልግም	
204	አዎ ከሆነ መልስሽ መቼ ?	1. ከአንድ አመት ውስጥ 2. ከአንድ - ሁለት አመት 3. ከ ሁለት አመት በኋላ 4. አኔ እንጃ	
205	ከዚህ በፊት የጽንስ ማቋረጥ ነበርሽ ?	1. አዎ 2. የለም	
206	አዎ ከሆነ መልስሽ ስንት ጊዜ ጽንስ አቋረጥሽ?	------------------------	
207	ኣሁን የተቋረጠው ጽንስ ተፍልጎ እና ታቅዶ ነበር የተርገዘው?	1. አዎ 2. ኣይደለም	
208	ኣሁን የተቋረጠው ጽንስ የትኛው ኣይነት ነው ?	1. በፍላጎት በመሳረያ ወይም በሚዋጥ እንክብል የተደርገ ጽንስ 2. በመሳረያ ወይም በሚዋጥ እንክብል የተደርገ ሳይሆን በራሱ ሰኣት የወርደ ጽንስ	
209	የትኛውን የጽንስ ማቋረጫ መንገድ ነው የተጠቀምሽው ?	1. በአፍ የሚዋጥ እንክብል 2. MVA 3. D/C or D/E	
210	ኣግልግሎቱን የወሰድስሽው ከየት ነው ?	1. ጤና ጣቢያ 2. ጀነራል ሆስፒታል	

		3. ረፈራል ስፔሻላይዝድ ሆስፒታል	
211	የቤተሰብ ምጣኔ ለመጠቀም የሚወሰነው ማነው?	1. እኔ 2. ባል 3. ሁለታችንም	

3. ስለረጅም ጊዜ የወለድ መቆጣጠሪያ ዘዴዎች የተሳተፊዋ የመረጃ ምንጭ በተመለከተ

301	ስለረጅም ጊዜ የወለድ መቆጣጣሪያ መኖሩን ሰምተሽ ታውቂያለሽ?	1. አዎ 2. አላውቅም	መልሶ 2 ከሆነ ወደ ጥያቄ ቁጥረ 303 ይሂዱ
302	አዎ ከሆነ ከየት ሰማሽ ከአንድ በላይ መልስ መመለስ ይቻላል?	1. ከቴሌቪዥን ወይም ከሬዲዮን 2. ከመጽሄት(ጋዜጣ) 3. ከጤና ባለሞያ 4. ከጓደኛ 5. ሌላ ካለ ይጥቀሱ	
303	ከጽንስ መቋረጥ በኋላ እንደገና የሚረገዝበት ጊዜ መቼ ነው?	1. ወዲያውኑ(በሁለት ሳምንታት) 2. ከአንድ ወር በኋላ 3. ከ2-3 ወር 4. አላውቅም	

401	በማህጸን የሚቀመጥ የወሊድ መከላከያ ለ12 ዓመት እርግዝናን ይከላከላል	1.እውነት 2. ሀሰት	
402	በማህጸን የሚቀመጥ የወሊድ መከላከያ የአባላዘር በሽታ ላለባት መጠቀም ኣትችልም	1.እውነት 2. ሀሰት	
403	በማህጸን የሚቀመጥ የወሊድ መከላከያ የግብረስጋ ግንኙነት ወይም ፍላጎት ላይ ተጽዕኖ ኣይኖረውም	1.እውነት 2. ሀሰት	
404	በክንድ ቆዳ ውስጥ የሚቀበር የወሊድ መከላከያ ከ 3-5 አመት እርግዝናን ይከላከላል	1.እውነት 2. ሀሰት	
405	በማህጸን የሚቀመጥ የወሊድ መከላከያ ከወጣ በኃላ ወድያውኑ ማርገዝ ይቻላል	1.እውነት 2. ሀሰት	
406	ቆዳ ውስጥ የሚቀበር የወሊድ መከላከያ ለማስገባትና ለማስወጣት አነስተኛ ቀዶ ጥገና ያስፈልጋል	1.እውነት 2. ሀሰት	
407	በማህጸን የሚቀመጥ የወሊድ መከላከያ የካንሰር በሽታን አያስከትልም	1.እውነት 2. ሀሰት	
408	ቆዳ ውስጥ የሚቀበር የወሊድ መከላከያ ከወጣ በኃላ ወድያውኑ ማርገዝ ይቻላል	1.እውነት 2. ሀሰት	
409	ቆዳ ውስጥ የሚቀበር የወሊድ መከላከያ የግብረስጋ ግንኙነት ወይም ፍላጎት ላይ ተጽዕኖ ኣይኖረውም	1.እውነት 2. ሀሰት	
410	በማህጸን የሚቀመጥ የወሊድ መከላከያ የአባላዘር በሽታ ኣይከላከልም	1.እውነት 2. ሀሰት	

ክፍል 5. ከጽንስ ማቋረጥ በኃላ የወሊድ መቆጣጠሪያ ተግባርን በተመለከተ

ተ.ቁ	ጥያቄ	ምላሽ	መለያ
501	የወሊድ መቆጣጠሪያ ተጠቅመሽ ታውቂያለሽ?	1. አዎ 2. ኣልተጠቀምኩም	
502	ከፅንሱ ማቋረጥ በኋላ የወለድ መቆጣጠሪያ የምክር አገልግሎት አግኝተሻል?	1. አዎ 2. ኣላገኛሁም	መልሶ 2 ከሆነ ወደ ጥያቄ ቁጥረ 504 ይሂዱ
503	የምክር አገልግሎት ያገኘሽው መቼ ነው?	1. ከህክምናው በፊት 2. ከህክምናው በኋላ	
504	ከፅንሱ ማቋረጥ በኃላ አሁን የወለድ መቆጣጠሪያ ተጠቅመሻል?	1. አዎ 2. ኣልተጠቀምኩም	
505	ለጥያቄ ቁጥር 504 አዎ ከሆነ ለረጅም ጊዜ የሚያገለግለ ወሊድ መከላከያ(በማህፀን ውስጥ የሚቀመጥ ወይም በክንድ ስር የሚቀበር)ተጠቅመሻል?	1. አዎ 2. ኣልተጠቀምኩም	መልሶ 2 ከሆነ ወደ ጥያቄ ቁጥረ 507 ይሂዱ
506	ለጥያቄ ቁጥር 504 አዎ ከሆነ የትኛው አይነት?	1. በተፈጥሮ መንገድ 2. ኮንዶም 3. በአፍ የሚዋጥ እንክብል 4. መርፌ 5. በክንድ ስር የሚቀበር 6. በማህፀን ውስጥ የሚቀመጥ 7. የማህፀን ቱቦ ማስቋጠር	
507	በክንድ ስር የሚቀበርውን ወይም በማህፀን ውስጥ የሚቀመጠውን የወለድ መቆጣጠሪያ ካልተጠቀምሽ ለምንድነው ያልተጠቀምሽው?	1. ተጋዳኝ ችግሮችን መፍራት 2. በቁጥር ውስን ወይም ምንም የግብር ሥጋ ግንኙነት ኣለመኖር 3. ለመውለድ መፈለግ 4. ሀይማኖት ተቃርኖ 5. ሌላ ካለ ይጥቀሱ፡፡	