

# Factors that Influence Post-Abortion Family Planning Utilization in the Harari region, Harar, Ethiopia 2021

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# ABSTRACT

**Introduction:** Abortion is expulsion of a fetus from the uterus before it has reached the stage of viability, usually about the 20th week of gestation. It may occur spontaneously or induced.

**Methods and materials:** Institutional based cross-sectional study design was conducted from September 1<sup>st</sup> - November 27<sup>th</sup>, 2021. All reproductive aged women who came for abortion care service formed the sampling frame. The Sample size was 385.Purposive Sampling Techniques was used to select the participants. IBM SPSS software package version 20.0 (Armonk, NY: IBM Corp) was used to assess the association between the dependent and independent variables.

**Result:** The overall Post-abortion contraception acceptance among the study participants in this study was 70.39 %. Among the rest who decline the care majority of them gave a reason for not using, fear of side effect followed by wanted child. This study indicated that the odds of being use post abortion family planning were 4 times higher among younger than old age (AOR=4.14; CI 95% 1.40–7.85; P=0.013). The odds of post-abortion family planning utilization was 3 times higher among who attended secondary educational level than those who is illiterate [AOR= 2.93 (95%CI: 1.57, 10.01)]. Client whose abortion procedure was performed using a MVA method were 4 more likely to use post abortion family planning than those whose abortion procedure was done using both method (AOR=4.13, 95% CI: 2.27,6.98, P=0.001).

**Conclusion:** Post-abortion family planning utilization is low in Jugal hospital, Harar which is 70.39%. Age, educational status and type of abortion procedure were predictors of post-abortion family planning service utilization. The findings suggest that it is preferable to approach young ladies by creating a connection with educational institutions and strengthening family planning health education. Longer-term follow-up research with greater qualitative is essential to better understand reasons for objections to Post abortion family planning.

Key words: Post-abortion; Contraceptive use; Associated factor; Cross sectional study; Ethiopia

# INTRODUCTION

Abortion is the removal of a fetus from the uterus before it reaches viability, usually around the 20th week of pregnancy. It can happen naturally or be provoked [1]. According to the World Health Organization (WHO), around 800,000 women will die each year as a result of abortion-related complications, accounting for 19.6% of all maternal fatalities [2], whereas 6.9 million women in developing countries are at risk of unsafe abortion complications [3]. Ethiopia has one of the highest maternal mortality rates in the world, with a rate of 412 per 100,000 live births [4]. More over a

third of pregnancies in Ethiopia are unintended, with an estimated 620,300 induced abortions done each year. Around half of them worked outside of health-care facilities [5]. Family planning is an effective method of preventing abortion, as it prevents 32 percent of maternal deaths [6]. PAFP (post-abortion family planning) is the practice of beginning family planning measures right after an abortion [7]. It is a component of abortion care that increases contraceptive use and reduces unintended pregnancies and risky abortion [8]. WHO guidelines recommend waiting at least six months for her body to regain its strength and organize itself for a safe pregnancy [9].

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**Received:** 03-Nov-2022, Manuscript No. JWH-22-19932; **Editor assigned:** 04-Nov-2022, PreQC No. JWH-22-19932 (PQ); **Reviewed:** 18-Nov-2022, QC No. JWH-22-19932; **Published:** 26-Nov-2022, DOI: 10.35248/2167-0420.22.11.614

**Citation:** Jamie AH, Gebremedhin ES (2022) Factors that Influence Post-Abortion Family Planning Utilization in the Harari region, Harar, Ethiopia 2021. J Women's Health Care 11(11):614.

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According to studies conducted in underdeveloped countries, the use of post-abortion family planning ranged from 15.5 to 90.6 percent [10-18]. Residence, higher mother education level, occupation, spontaneous abortion, getting post abortion family planning counseling, strong knowledge of family planning, and availability of family planning were all linked factors in several Ethiopian studies [13,19,20]. In the Hararri region, there are few studies that show the prevalence and associated aspects of postabortion family planning services. The goal of this study was to find out how common post-abortion family planning services are in the Hararri region, as well as the factors that influence them.

# METHODS AND MATERIALS

#### Design, area, and timeframe of the research

At Jugal hospital in Harar town, 525 kilometers east of Addis Ababa, an institutional-based cross-sectional study was conducted. The research took place from September 1st to November 27th, 2021.

#### Population and sampling technique

During the study period, all reproductive-aged women who sought abortion care at Jugal hospital in Harar town formed the sampling frame. The Sample size was calculated by using single population proportion formula, considering P value 64.8 percent which found in similar study done in Northwest Ethiopia and after adding 10 percent non-respondent rate, the sample size was 385. Purposive Sampling Techniques which all clients who sought abortion services were selected consecutively till sample is fulfilled was utilized [21].

#### Data collection

Data was gathered using a standardized questionnaire that was created after a thorough examination of the literature. The questionnaire was written in English first, and then translated into the local tongue. Pretesting was carried out by 5% of the sample size in Amir Nur health center, which was not included in the study, prior to the main trial. The questionnaire was adjusted as needed based on the results of the pretest. After their clinical visit was done and while ready to leave the hospital, clients were interviewed by trained 4 BSc. Midwives. Socio-demographic variables, reproductive performance, previous abortion history, prior knowledge and use of any contraceptive techniques, and interest in future fertility were all included in the inquiries.

### Data processing and analysis

IBM SPSS software package version 20.0 (Armonk, NY: IBM Corp) was used to entering, cleaning and analyzing. First descriptive statistics of percentages and frequency distribution using tables was carried out to explore the socio demographic characteristics. Logistic regression was used to assess the association between the dependent and independent variables. All factors with P<0.05 in bi-variate logistic regression analysis were further entered into multi-variate model to control confounding effects. Adjusted odds ratio (OR) with 95% confidence interval (CI) and P values was calculated. P< 0.05 considered statistically significant.

#### Ethical considerations

Ethical approval for this study was obtained from Harar Health Science College Ethics and Research Committee (Ref. Number HHSC-96/2021). Permissions from appropriate authority were obtained to conduct the study and informed written consent was taken from all study participants.

## RESULT

#### Socio-demographic characteristics

In this study 385 mothers participated, among them greater than one third (41.30%) of them were in age category of 25-39. Greater than two third (69.61%) of them were urban residents. Greater than half (58.18%, 56.36%) of them were not married and attends primary school respectively. Majority of them were un-employed, see Table 1.

#### Characteristics related with reproductive health

Among a total participants, slightly greater than quarter (26.49%) of them used family planning ever, slightly greater than half (51%)of them gave birth, quarter 25%) of them had previous abortion history. four fifth (80%) of clients had induced abortion and for majority abortion was done and/or completed by nurses or midwives by using MVA methods. All of the study participants had received counseling on family planning Table 2.

#### Magnitudes of post abortion family planning utilization

The overall Post-abortion contraception acceptance among the study participants in this study was 70.39 %. Among the rest who decline the care majority of them gave a Reason for Not Using, fear of side effect followed by wanted child, see Table 2.

Variable	Category	Frequency	Percent
	Less than 18	12	3.12
Age in years         19-24           31-35         31-35		118	30.65
		159	41.30
		62	16.10
	≥36	34	8.83
D 1	Urban	268	69.61
Kesidence	Rural	117	30.39
	Married	161	41.82
Current marital status	Not married	224	58.18
	illiterate	97	25.19
	Primary school		56.36
Educational status	Secondary school	63	16.36
	Higher education	Frequency         Percent           12         3.12           118         30.65           159         41.30           62         16.10           34         8.83           268         69.65           117         30.39           161         41.82           224         58.18           97         25.19           217         56.30           63         16.30           8         2.08           113         29.35           272         70.65	2.08
	Employed	ol         63         16.36           on         8         2.08           113         29.35	29.35
Occupation	Not Employed	272	70.65

 Table 1. Socio-demographic characteristic of the respondents.

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#### Factors of post-abortion family planning utilization

Variables considered for multivariate logistic regression analysis were those with a p-value<0.5 in bi-variate analysis and those significantly associated with bi-variable analysis were; age, current marital status, educational status, past FP usage, type of pregnancy (planned) and type of abortion procedure. After controlling confounding variables using multiple logistic regressions; age, educational status and type of abortion procedure were significantly associated with post-abortion family planning utilization.

This study indicated that the odds of being use post abortion family planning were 4 times higher among younger than old age (AOR=4.14; CI 95% 1.40–7.85; P=0.013). The odds of postabortion family planning utilization was 3 times higher among who attended secondary educational level than those who is illiterate [AOR=2.93 (95%CI:1.57, 10.01)]. Client whose abortion procedure was performed using a MVA method were 4 more likely to use post abortion family planning than those whose abortion procedure was done using both method (AOR=4.13, 95% CI: 2.27,6.98, P=0.001), see Table 3

Variable	Category	Frequency	Percent
	Yes	187	48.57
Have you ever been counseled by HP health about FP	No	198	51.43
Line on the LED?	Yes	102	26.49
Have you ever used FP:	No	283	73.51
I I and a strong strong himship	Category         Frequency           Yes         187           No         198           Yes         102           No         283           Yes         102           No         283           Yes         199           No         283           Yes         199           No         283           Yes         98           ion         186           Yes         98           ion         287           Yes         98           rvice         No         287           Yes         98           rvice         No         287           Yes         77         0           No         308         287           Yes         77         0           Induced         308         308           Medication         95         MVA           MVA         187         308           Medication         95         MVA           Male         161         5           General practitioner         89         4           Yes         359         359 <td>51.69</td>	51.69	
riave you ever given birth:	No	186	48.31
Have you grow had a history of shortion	Yes	98	25.45
Have you ever had a history of abortion	No	287	74.55
Have you over receive shortion are corrise	Yes	98	25.45
Have you ever receive abortion care service	No	287	74.55
W/as this answer as along a	Yes	77	20.00
was this pregnancy planned	No	308	80.00
Time of abortion	Spontaneous	77	20.00
туре от аботноп	Induced	308	80.00
	Medication	95	24.68
Type of abortion procedure	MVA	187	48.57
	Both	103	26.75
Saw of comico provider	Male	161	41.82
Sex of service provider	Female	224	58.18
Profession of corridor provider	Nurse / Midwifery	296	76.88
Profession of service provider	General practitioner	89	23.12
	Yes	359	93.25
Have you hear about PAFP method	No	26	6.75
	Friends	41	10.65
	Husband	10	2.60
Source of information	Health Provider	299	77.66
	Mass media	35	9.09
	Yes	385	100.00
Do you get Post-abortion counseling	No	0	0.00
	Yes	271	70.39
Have you willingness to start PAFP	No	114	29.61
	fear of side effect	34	29.82
	Infrequent sex	11	9.65
Infrequent sex11Partner opposition15	15	13.16	
If No ,Reasons for refusal	Inconvenient to use	11	9.65
	Want of children	31	27.19

Religious opposition

Injectable

Implant

IUCD

Pills

12

39

143

72

17

Table 2. Characteristics related with reproductive health.

What is your method of choice

10.53

14.39

52.77

26.57

6.27

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Variables Injury		COR With 95% CI	AOR With 95% CI	P value
Age	≤35	2.03(1.619,6.108)*	4.14 (1.40,7.85)**	0.013
	≥36	1	1	
Current marital status	Married	1	1	
	Un married	4.14 (1.40,7.85)*	1.66 (0.57.8.01)	0.061
Educational status	Un able to write & read	1	1	
	Primary school	2.02(1.25,6.18)*	1.03 (0.27,5.41)	0.092
	Secondary school	2.11(1.59,9.84)*	2.93 (1.57.10.01)**	0.020
	Higher education	1.03 (0.57.19.01)	2.93 (0.27.6.48)	0.121
Past FP usage	Yes	3.54(1.19,7.18)*	2.11 (0.07,11.11)	0.171
	No	1	1	
Pregnancy	Planned	1	1	
	Un planed	4.53(1.09,9.66)*	2.03 (0.27.9.19)	0.065
Abortion procedure	Medication	3.32(1.69,13.08)*	2.93 (0.29.16.98)	0.071
	MVA	2.21(1.04,11.17)*	4.13 (2.27,6.98)**	0.001
	Both	1	1	

#### Table 3. Bivariate and Multivariate analysis.

#### DISCUSSION

This study showed that the prevalence post abortion family planning acceptance was 70.39 %. Which is higher than studies done in Eretria, 26.4 %, Kenya 60.9%, Burkina Faso 65.7%, Bahir dar, Ethiopia 61%. However, it is lower than a study done in Asia and Sub-Saharan Africa (SSA) 77%, and another study done in Bahir Dar, Ethiopia 78.5% and India 81% [22-28]. This difference might be due methodological difference, like study setting, design, period, socio demographic and economic characteristics.

Regarding the type of post-abortion family planning methods utilized, the most commonly utilized post-abortion family planning was Implant 143(52.77%), IUCD 72(26.57%), Injectable 39(14.3%), pills 17(6.27%). Whereas the most commonly utilized post-abortion family planning in study conducted in Brazil, Pakistan, India, and Nepal was injectable 33.23%, implants 24.71%, oral contraceptive pills 23.42%, intrauterine devices 9.12%, and condom 7.43% [29-32]. This difference might be due to study period; because now a day's Ethiopian government initiate long acting reversible family planning method due to this reason in this study mostly used family planning was long acting methods.

This study showed that there is an association between Postabortion contraception acceptance and age. In this study age group  $\leq 35$  years were 4 times more likely to accept post-abortion family planning as compared with those aged  $\geq 36$  years, this is similar with studies done in Burayu town, Oromia, Ethiopia and Kenya [33,34]. The possible reasons may be that young women have a greater probability of having unintended pregnancy which will end up with abortion.

In this study Women with Higher and secondary Education have 3 times more likely to utilize post abortion contraceptives as compared to those who are unable to read and write. This study is similar with studies done in Pakistan, Tanzanian and Adis ababa. [35-37].

In this study the odds of post-abortion family planning utilization among women whose abortion procedure managed by MVA was 4 times higher compared to women managed by both medication & MVA. This finding is in line with the previous studies conducted in England and Wales and Pakistan [38,39].

## LIMITATIONS

Since the study was cross sectional and therefore temporal relationship is not known and another the stud only comprises only one public government hospital and not represent all health professionals in the Harar, Ethiopia.

## **CONCLUSION & RECOMMENDATION**

Post-abortion family planning utilization in Jugal hospital, Harar was low which 70.39 %. Age, educational status and type of abortion procedure were predictors of post-abortion family planning service utilization. The findings suggest that it is preferable to approach young ladies by creating a connection with educational institutions and strengthening family planning health education. Longer-term follow-up research with greater qualitative is essential to better understand reasons for objections to PAFP.

## CONFLICT OF INTEREST

The authors declare no conflict of interest.

## ACKNOWLEDGMENT

The authors gratefully acknowledge the study participants for their time and voluntary participation.

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#### Jamie AH, et al.

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