Post-abortion Family Planning Utilization and Associated Factors among Women Seeking Abortion Service: Cross-sectional Study

Dereje Woldemichael

Arsi University College of Health Sciences

Gebi Agero

Arsi University College of Health Sciences

Aman Jima

Arsi University College of Health Sciences

Bedasa Woldemichael (✉ bedasawold@gmail.com)

Arsi University <https://orcid.org/0000-0002-1085-7847>

Research

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Abstract

Background: Ethiopia is one of the developing countries with a high prevalence of unintended pregnancy and unsafe abortion. The aim of this study was to assess the utilization of post-abortion family planning and associated factors among women seeking abortion service in Asella Town health facilities, 2019.

Methods: A facility based cross-sectional study design was conducted among women who came for abortion service from July 15 to October 15, 2019. Two hundred seventy-six participants were included using systematic random sampling technique. Both descriptive and logistic regression analyses were conducted. In multivariate analysis, variables which had a p-value < 0.05 was considered as significantly associated with the outcome variable.

Results: Postabortion family planning utilization among study participants was 146 (53.7%) (95% CI=47.4, 59.2). Formal education (AOR=4.45; 95% CI: (1.18, 16.74)), previous history of abortion (AOR=0.35; 95% CI: (0.14, 0.85)), positive attitude to towards family planning (AOR=2.62; 95% CI: (1.09, 6.27)) and counseled on post abortion family planning utilization (AOR=3.12; 95% CI: (1.30, 7.51)) were significantly associated with post abortion family planning utilization.

Conclusions: In this study, nearly fifty percent of the respondents did not utilize Postabortion Family Planning (PAFP). Educational status, history of pervious abortion, a decision when to have a child, attitude toward PAFP utilization and counseling about PAFP were significantly associated with post-abortion family planning utilization. The health care providers who give abortion service should give counseling for all women who get abortion service. More accents should be given to misperception of PAFP to change the negative attitude of utilization of PAFP.

Background Of The Study

Post abortion family planning (PAFP) is the initiation and use of family planning methods at the time of management of an abortion or before fertility returns after the abortion[1]. Using PAFP reduce unintended pregnancies which was main cause of abortion [2, 3].

Globally, in 2015-2019 women aged 15-49, there were 121 million unintended pregnancies annually, corresponding to a global rate of 64 per 1,000. Sixty-one percent of unintended pregnancies (73.3 million) ended in abortion, corresponding to a global rate of 39 per 1,000 [4]. According to 2010 to 2014 report, around 45% of all abortions worldwide were unsafe. Almost all of these unsafe abortions took place in developing countries. Around 7 million women are admitted to hospital every year in developing countries, as a result of unsafe abortion[5, 6]. Each year between 4.7%-13.2% of maternal deaths can be attributed to unsafe abortion and the risk of dying from an unsafe abortion was the highest in Africa [7].

Ethiopia is one of the developing countries with a high prevalence of unintended pregnancy. In Ethiopia, more than one-third (38%) of pregnancies were unintended [8] and in Oromiya region unintended

pregnancy was 33.8% [9]. Of the national cases, about 620,300 induced abortions were performed and 103,600 women were received treatment for complications from induced abortion [8].

The provision of post-abortion contraceptive services helps as one of safeguarding of the reproductive health of the women through break the cycle of repeated unwanted pregnancies [10]. However, three out of four [1] and 23 % [11] women left the health facility without a contraceptive method after receiving abortion care study worldwide and 10 countries in Asia and sub-Saharan Africa respectively. Also, studies done in Ethiopia showed that of the women who got abortion service, about 21.5-29.1% women were left the health facility without a contraceptive method [8, 12, 13]. This putting women at increased risk of another unwanted pregnancy and possibly another abortion [2, 14]. Other study done Addis Ababa city showed that the magnitude of repeat induced abortion was 33.6% [15]. Ethiopia had set a comprehensive strategy of abortion care which improves access of information and methods for uptake of post-abortion family planning to address this challenge. And, it authorizes health care providers to offer safe abortion and post abortion care mainly PAFP services for women who want it [16]. Despite these efforts, still, service data revealed a low rate of uptake of contraception after abortion care in most health facilities [17]. Therefore, this study aim to assess post-abortion contraceptive utilization and associated factors among women who were seeking abortion service at Asella Town health facilities.

Methods

Study area, Design and Population

Facility based cross-sectional study design was conducted from July 15 to October 15, 2019, in Asella Town. Asella is the administrative Town of Asri Zone and located 175 kilo meters to Southeast capital city of Ethiopia, Addis Ababa. The total population of the Town was 110,433 and 24,406 of them was women of child bearing age [18]. According to the Town health office 2019 report, in the Town there are one referral hospital, two health centers, two private hospitals and two nongovernment clinics [19]. A woman who came for abortion service was systematically selected and included in study. However, woman who was critically sick and unable to give the response was excluded.

Sample size determination and Sampling procedure

The sample size was determined using stat calc of Epi Info statistical software Version 7. A 95% confidence level, power of 80%, and an assumption of the ratio of unexposed to exposed equivalent to one was assumed for the calculation. Based on this, the sample size was calculated to be 384. After correction formula was applied and adding 5% non-response rate the final sample size was 279. The women who got the abortion service for the 3 consecutive months, on average, were (N=871) in health facilities which included in the study. From the seven health facilities, four were included in the study. Those were one government Hospital, which was selected purposely because it is the only government hospital in Asella Town, and other study areas were selected by lottery methods one government health center, one private hospital and one NGO clinic. The sample size was allocated proportionally by population size formula based on their client load of three months antecedent for each health facility.

The study participants were selected using the systematic sampling technique with the interval of three. The woman who came for abortion service on the first day of data collection was considered as the first respondent and then, each respondent corresponding to the skip interval was selected.

Data collection tool and data collection procedure

Data were collected using structured and pre-tested questionnaire. The tool contained information related to socio-demographic characteristics, health service, reproductive health and personal factors. The questionnaire was initially prepared in English language and then translated into Afan Oromo and Amharic languages. It was translated back to English language to check for any inconsistencies and understandability. One day training was given for both data collectors and supervisors. The training consisted of the purpose of the study, enumeration procedures, and how to conduct interview. After data collection, all completed questionnaires were checked for completeness and cleaned manually.

Data processing and analysis

Data were checked for its completeness, cleaned and entered using Epi Info version 7 and then exported in SPSS version 21 for analysis. Data were analyzed using descriptive statistics and logistic regression. Descriptive statistics such as frequency, mean and standard deviation were computed. From logistic regression, bivariable and multivariable were used. All variables with P-value <0.05 in bivariable analysis were moved to multivariable regression to control confounding effect. Adjusted odds ratios along its 95% confidence interval (95% CI) were used to measure the strength of associations. Variables at p-value < 0.05 in multivariable logistic regression have been considered as significant association with utilization of post abortion of family planning.

Results

Socio-demographic of participants

A total of 279 participants were interviewed with the response rate of 272 (97.5%). One hundred thirty (48.2%) women were aged between 26-35 years. The mean age and standard deviation of the respondents were 27.3 ± 5.7 years. Regarding education 235 (86.4%) had formal education. More than two-third of the respondents live in household with ≤ 5 family sizes. About monthly income, 118 (43.4%) of respondents had 2000-4000 Ethiopian Birr. Nearly, 46.0% of the respondents got service at nongovernment organization health facilities (See Table).

Reproductive characteristics

Two hundred forty-four (89%) women were gravid 1-3 and 154 (56.6%) nulliparous. More than half 148 (54.4%) of the participants did not have a desire to have a child in the nearby future (see Table -2).

Knowledge and Attitude toward post abortion family planning

Less than half (44.5%) of the participants had good knowledge and 182 (66.9%) had a positive attitude on postabortion family planning (Figure-1).

Utilization of PAFP and Service Received

Utilization of post abortion family planning among women who seek abortion care was 146 (53.7%) (95% CI=47.4, 59.2). Regarding counseling of post abortion family planning 165 (60.7%) women who seek abortion care were counseled and 107 (39.3%) did not.

Factors associated with utilization of PAFP

In bi-variate analysis, variables which had a P-value < 0.05 were educational status, time to reach health facility, history of abortion, decision to have a child, discussion with the partner /husband, knowledge about PAFP, attitude toward PAFP and counseled on PAFP. PAFP utilization were moved to multivariate model. In multivariate analysis, women who had formal education were 4.45 times more likely to uptake PAFP compared to women who had not formal education (AOR=4.45; 95% CI: (1.18, 16.74)). Women who had no history of abortion were (AOR=0.35; 95% CI: (0.14, 0.85)) less likely to utilize PAFP compared to women who had previous history of abortion. In addition, women who had positive attitude were 2.62 times (AOR=2.62; 95% CI: (1.09, 6.27)) more likely to utilize PAFP compared to women who had poor attitude. Moreover, women who counseled on PAFP utilization were 3.12 times (AOR= 3.12; 95% CI : (1.30, 7.51)) more likely to utilize PAFP compared to their counterparts (see Table-3).

Discussion

The use of post-abortion contraceptive is very important for preventing unintended and repeated abortion. However, this study revealed that the prevalence of the utilization of postabortion family planning is 53.7%. Similar result was also reported in Desse (47.5%) [20] and Debre Markos (59.2%) [21].

As compared to the studies conducted in Shire Town (61.5%) [22], Gambella (74.4%) [23], Central Town of Tigray (80.4%) [12] and Addis Ababa city (68.8%) [24], this finding is lower. This might be due to the respondents of the studies done in central Town of the Tigray (97.8%) and Addis Ababa; they 80% were counseled and most of them had high educational status as compared to this study. The other possible reason might be due various misconceptions about family planning services difference among study settings.

The current study was higher than the study conducted in Debrberhan (45.8%) [25] and Kenya (31%) [26]. The Debrberhaan study design was a cohort study which could be a reason for the discrepancy from of current study. For the Kenyan study, the possible reasons might be cultural and the health care system difference between the two countries.

Concerning the factors affecting post-abortion family planning utilization educational level, history of abortion, women decision when to have child, positive attitude toward PAFP and counseled on PAFP was found to be significantly associated to use post-abortion family planning after getting the service.

In the current study, educational level of study participants statistically had significant association with PAFP utilization: women who had formal education were more than four times more likely to utilize PAFP methods as compared to those who did not have formal education. This finding is consistent with studies done in Gambella [23], Shire Town [11], Debre Markos [21] and Addis Ababa city [17]. There are the fact that educated women can access information, have more knowledge about reproductive health right and could pass informed decisions about their child desire with carrier development put aside.

Respondents who had not history of abortion were less likely to use post abortion family planning than women who had previous history of abortion. This result was in line with the study done in Addis Ababa city [27] and Luanda (Angola) [28].

Respondents who were counseled on post abortion family planning were more likely to utilize post abortion family planning than respondents who were not counseled. Similarly, the studies conducted in Gambella [23], Debre Markos[21] and Shire Town[22] showed that women who had counseled was significantly associated with postabortion contraceptive utilization. Also, a study conducted on women in low income countries showed that postabortion counseling had an effective tool to increase the usage of contraceptives [4]. This clearly indicated that postabortion family planning counseling make real difference on postabortion contraceptive utilization. Limitation of this study was that cross-sectional design was used and therefore we cannot report cause and effect.

Conclusions

In this study nearly fifty percent of the respondents did not utilize PAFP. Educational status, history of pervious abortion, decision when to have a child, attitude toward PAFP utilization and getting counseling about PAFP were significantly associated with post-abortion family planning use. About two-fifth of the respondants did not counseled. The health care providers who give abortion service should give counseling for all women who got abortion service. More accents should be given on misperception of PAFP to change the negative attitude of utilization of PAFP. Educational empowerment of women has to be still focused on as women who had education more likely to prevent unintended pregnancy and its consequences.

Abbreviations

PAFP: Postabortion Family Planning; WHO: World Health Organization; ANC: Antenatal Care; COR: Crude Odd ratio; AOR: Adjusted Odd Ratio, ETB: Ethiopian birr; NGO: Nongovernmental Organization;

Declarations

Ethical Consideration

Ethical clearance was obtained from Arsi University, college of health sciences ethical review committee. Then, official letter of cooperation was written to health facilities. Information about the study was given to the participants, including purpose and procedures, potential risk, benefit and ensures the right of participants to withdraw from the study at any time. Informal consent was obtained from participants before starting the interview. In order to protect the confidentiality of information name and other identification was not included in a questionnaire.

Consent for publication

Verbal consent was obtained from the study participants after clarifying the aim of the study because there is no any specimen taken from the respondent. The respondents had the right to respond fully or partially to the questionnaire. All the information given by the respondents was used for research purposes only, and confidentiality was maintained by omitting the name of the respondents.

Availability of data and materials

The datasets that used in this study for analysis and other information are available currently on the hands of corresponding author. Therefore, I can provide it if requested.

Declaration of interest

There were no conflicts of interests for any of the authors.

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Author Contributions:

DW, GA & AJ conceived and designed the study. BW, DW GA & AJ performed analysis and interpretation of the data. BW, GA & AM assisted the analysis. BW & DW prepared the manuscript. GA & AJ critically reviewed the manuscript. All authors read and approved the final manuscript.

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Tables

Table-1: Socio-demographic characteristics of utilization of postabortion family planning among women who seek abortion care services in Asella Town, Southeast Ethiopia 2019.

Variables	Categories	Frequency	Percent
Age (in years)	15-24	48	17.6
	25-34	131	48.2
	35-44	93	34.2
Residence area	Urban	174	64.0
	Rural	98	36.0
Educational status	No formal education	37	13.6
	Formal education	235	86.4
Occupation	Housewife	124	45.6
	Employee	90	33.1
	Student	49	18.0
	Unemployed	9	3.3
Monthly income	<2000 ETB**	85	31.3
	2000-4000 ETB**	118	43.4
	>4000 ETB**	69	25.3
Marital status	Married	179	65.8
	Single	78	28.7
	Divorced/widowed	15	5.5
Time to reach health facility	≤30 minute	173	63.6
	>30 minute	99	36.4
Type of health facility	Public	72	26.5
	Private	75	27.5
	NGO*	125	46.0

*NGO-nongovernment organization; **ETB-Ethiopian birr

Table-2: Reproductive characteristics of utilization of post abortion family planning among women seek abortion care services in Asella Town, Southeast Ethiopia, 2019.

Variable	Category	Frequency	Percent (%)
Gravidity	1-3	242	89.0
	≥4	30	11.0
Parity	0	59	21.7
	1-3	154	56.6
	≥4	59	21.7
History of abortion	Yes	49	18.0
	No	223	82.0
Gestational age in weeks	>12 Weeks	106	39.0
	≤12 Weeks	166	61.0
Decision when to have child	Both	55	20.2
	Husband	176	64.7
	Women	41	15.1
Discussion with partner / husband	Yes	81	29.8
	No	191	70.2

Table 3: Multivariable logistic regression of factors associated with utilization of PAFP among women seeking abortion care services in Asella Town, Southeast Ethiopia, 2019

Factors		Utilization of PAFP		COR(95% CI)	AOR (95% CI)
		Yes	No		
Educational status	No formal	25	12	1	1
	Formal	101	134	2.76 (1.33, 5.77)	4.45(1.18, 16.74)*
Time to reach health facility	≤30	113	60	3.77(2.24,6.35)	1.52 (0.64, 3.60)
	>30(minute)	33	66	1	1
History of abortion	Yes	16	33	1	1
	No	113	110	0.47(0.20, 0.88)	0.35 (0.14, 0.85)*
Decision when to have child	Both	39	16	1	1
	Husband	90	86	2.33(1.21, 4.47)	1.94(0.68, 5.51)
	Wife	17	24	3.44(1.47, 8.06)	4.67(1.25, 17.54)*
Discussion with partner	Yes	63	18	4.55(2.507, 8.27)	2.45 (0.83, 7.29)
	No	83	108	1	1
Knowledge about PAFP	Good	84	37	3.26(1.97,4.00)	1.33 (0.49, 3.57)
	Poor	62	89	1	1
Attitude toward PAFP	Positive	106	76	1.74(1.05, 2.90)	2.62 (1.09, 6.27)*
	Negative	40	50	1	1
Counseled on PAFP	Yes	89	28	5.46(3.20, 9.34)	3.12 (1.30, 7.51)*
	No	57	98	1	1

Significant at $P < 0.001 = ***$; at $P < 0.01 = **$ and $P < 0.05 = *$, AOR= Adjusted Odds Ratio; CI=Confidence Interval; COR= crude odd ratio

Figures

Figure 1

Knowledge and Attitude toward post abortion family planning utilization among women who seek abortion care in Asella Town, Southeast Ethiopia, 2019

Figure 1

Knowledge and Attitude toward post abortion family planning utilization among women who seek abortion care in Asella Town, Southeast Ethiopia, 2019