Kokeb et al. J Fam Med Dis Prev 2015, 1:4
ISSN: 2469-5793

Journal of
Family Medicine and Disease Prevention

Original Article: Open Access

Utilization of Post Abortion Contraceptive and Associated Factors among Women who Came for Abortion Service: a Hospital Based Cross Sectional Study

Lealm Kokeb[1], Endeshaw admassu[1], Hiwot Kassa[2]* and Tewodros Seyoum[1]

[1]*Department of Midwifery, University of Gondar, Ethiopia*

[2]*Department of Nursing, University of Gondar, Ethiopia*

***Corresponding author:** *Hiwot Kassa, Department of Nursing, College of Medicine and Health Sciences, University of Gondar, Gondar, Ethiopia, Tel : +251-913-206-265, E-mail: hiwotkassa21@gmail.com*

Abstract

Introduction: Worldwide as well as in Ethiopia abortion is one of the top lead causes of maternal death. Unwanted pregnancies which end up in abortion occur due to contraception method non use or misuse. To decrease unintended pregnancies and avoid repeated abortions advancing immediate post abortion contraception is crucial.

Objective: To assess utilization of post abortion contraceptive and associated factors among women came for abortion service in health institutions at Debre Marcos town, North West Ethiopia 2014.

Methods: Institutional based cross-sectional study was undertaken in 6 health instutions in Debre Markos town from august 2014 to October 2014. Four hundred fourteen study participants were included and systematic random sampling technique was used. The data was collected by using Interview based pre-tested questionnaire. The data were coded and entered into Epi info version 3.4.3 and exported to spss 20 versions for analysis. Frequency distribution Bivariate and multivariate logisticregression were done.

Results: The rate of the post abortion contraceptive utilization among 414 clients was (59.2%). Married women [AOR: 0.56, 95% CI: (0.34, 0.90)], counselled post abortion family planning [AOR: 4.2, 95% CI: (2.55, 6.94)], secondary school educational level [AOR: 1.86, 95% CI: (1.01, 3.45)] women in higher educational level [AOR: 1.99, 95% CI: (1.15,3.44)] were variables significantly associated with the post abortion contraceptive utilization.

Conclusion and recommendation: post abortion contraceptive utilization was low as compared to other studies. Being married, secondary and higher education and post abortion family planning counselling were found to be factors associated with post abortion contraceptive utilization. Post abortion Family planning use is low, hence emphasis should be given to increase the rate to the maximum since most pregnancies which end up with abortion are untended.

Keywords

Contraceptive utilization, Ethiopia, Post abortion

Abbreviations and Acronyms

CAC: Comprehensive Abortion Care, CI: Confidence Interval, CPR: Contraceptive Prevalence Rate, HC: Health Centre, IUCD: Intra uterine Contraceptive Device, MA: Medical Abortion, MMR: Maternal Mortality Rate, MVA: Manual Vacuum Aspiration, NGO: Non-Governmental Organization, OR: Odds Ratio, PAC: Post Abortion Care, PAFP: Post Abortion Family Planning, RH: Reproductive Health, SAC: Safe Abortion Care, UOG: University of Gondar, WHO: World Health Organization

Introduction

Worldwide maternal mortality continues to be the concern in advance. Each year, approximately 500,000 maternal deaths had occurred worldwide. Among 99% of these deaths occur in developing countries from which Sub-Saharan Africa accounts for 50% of the maternal death burden [1]. The World Health Organization (WHO) estimates that, worldwide, almost 20 million unsafe abortions take place each year.

On 80,000 maternal deaths per year are thought to be due to abortion complications, accounting for about 13% of all maternal deaths in the world [2].

The World Health Organization (WHO) estimates that every year, nearly 5.5 million African women have an unsafe abortion. In Eastern Africa it is estimated that 18% of all maternal deaths are the result of complications of poorly performed abortions (WHO 2011) [3].

In Ethiopia, The induced abortion rate was estimated to be 23 per 1,000 women in reproductive age group in 2008, and 101 per 1,000 was rate of unintended pregnancy [4]. The high proportion of unintended pregnancies contributes to one of the highest maternal mortality ratios in 676 maternal deaths per 100,000 live births. Family planning reduces maternal mortality by enabling women to prevent conception [5].

Untended pregnancy is a major global issue for millions of women and Abortion is an issue, which affects every country in the world and countries where abortion is criminal act [6]. Ethiopia, the coverage of family planning among married women were 27% with around 25% of unmet need [7]. Post abortion family planning utilization remains a better and sensitive time to provide better realization to

Citation: Kokeb L, Admassu E, Kassa H, Seyoum T (2015) Utilization of Post Abortion Contraceptive and Associated Factors among Women who Came for Abortion Service: a Hospital Based Cross Sectional Study. J Fam Med Dis Prev 1:022

Received: October 19, 2015: **Accepted:** December 10, 2015: **Published:** December 14, 2015

ClinMed International Library

the women and partner that family planning measures can save their time, pain and resources. Provision of post abortion counselling and contraception is also needed to meet the service standard [8]. However, most of the researches so far in our country focus on general abortion care.

Research areas regarding the post abortion family planning utilization among abortion clients remain untouched. Therefore, this study aimed to assess prevalence and factors associated with post abortion family planning utilization among women came for abortion service.

Methods

Study Design and period

An institutional based cross-sectional study was conducted from August to October 2014.

Study Area

The study was conducted in Debre Markos town, Located in north western Ethiopia, in Amhara National Regional State, East Gojjam zone, at a distance 300 km from Addis Ababa, and 265 km from Bahirdar the regional capital. There is one referral hospital, 7 health posts, one governmental Referral Hospital, three health centers and 2 reproductive health based NGO clinics found in the town. These health institutions gave comprehensive abortion health service for Debre Markos town and surrounding population including reproductive health services, abortion and family planning activity, for reproductive age group.

Study population

All women came for abortion care service in Debre Markos health institutions during data collection period.

Sample size determination

The sample size is determined by using single population proportion formula. The utilization of post abortion contraceptive utilization which was conducted in Addis Ababa was 57%.

N = Sample size

Z α/2 = Confidence interval = 95%

d = Margin of error = 5%; P = prevalence of post abortion contraceptive = 57%

$n = z\ \alpha/Z^2 \times P(1-p)/d^2$

$= (1.96)^2 \times 0.57(1-0.57)/(0.05)^2$

= 377

non response rate of (10%) = 37

The total sample size of the study is 414 of women seeking abortion care.

Sampling procedure

All Health insitutions who give abortion service were included from public and Ngo in Debre Markos town. The sampling allocation was based on the two months average number of client flow for abortion services in each of the health institution. All Health insitutions who give abortion service were included from public and Ngo in Debre Markos town. The data collection period took three months in the health institutions. The allocated sample for each institution was collected from August to October and the allocated sample divided for each institution for three months. The systematic random sampling method was used to select the study participants.

Study variables

Dependent variable: Post abortion contraceptive utilization

Independent Variables: Socio-demographic variables: (age, religion, marital status, occupation, educational level, residence); Previous historyvariables: (parity, fertility plan, FP use history, previous abortion history, previous visit of Health insitutions); Present history variables: (post abortion FP counselling , reason for current abortion, method used for abortion, condition of current pregnancy)

Data collection procedures

The questionnaire wasprepared in English and then translated in to Amharic. The data was collected via One BSc nurse. The data was collected after the woman get the abortion care service.

Data quality

A Pre-test was conducted on fifteen participants in Amanuel Health centre district before the actual data was collected. Data collectors and supervisor received a half day training regarding the questionnaire interviewing techniques, purpose of the study, confidentiality and importance of privacy. Confidentiality of the study participants were kept during distribution and data collection periods. The principle investigator checked the collected data for completeness, accuracy, clarity and consistency through the data collocation period and the necessary corrections was made on the field.

Data analysis

The data was entered into Epi-info version 3.5.4 package and then exported to SPSS version 20 statistical software packages. Multiple logistic regressions were used to analyse the association between PAFP utilization and various socio-demographic and reproductive health variables. Odds ratio and confidence interval were used to measure the strength of associations. The results were considered statistically significant at $P \leq 0.05$.

Ethical consideration

Ethical clearance was obtained from the Ethical review board of the University of Gondar, department of midwifery. Communication with the head of each health institution and department head was made through formal letter obtained from the University of Gondar. After the purpose and the objective of the study had informed, verbal consent was obtained from each study participantand participants' anonymity and confidentiality was kept. Participants were informed about the right not to participate in or withdraw from the study at any stage.

Result

Socio-demographic characteristics

A total of four hundred and fourteen (414) women came from abortion care service were interviewed from three health centres making response rate of 100%. The majority of the respondents (41.3%) women's were in the age group 20-24. From those women's participated 358 (86.5%) were orthodox followed by 9.4% 266 (64.1%) were single from the respondents 365 (88.2%) attended formal education from elementary to higher education. Regarding of the occupation 129 (31%) women's was employed (Table 1).

Previous and current obstetric and contraceptive History

The study revealed that among the four Hundred fourteen respondents, More than two third of 298 (72%) respondents were reported that they never give birth and (12.3%) had a history of previous abortion. The majority of the respondents 352 (84.8%) had sources of information for the different family planning services. Majority of the respondents 300 (72.5%) had unwanted, unplanned and unsupported among this 230 (55.6%) were terminate the pregnancy by Tablet/pill. 29 (7%) occurrence of pregnancy is while taking contraceptive. The respondents (52.9 %) got post abortion contraceptive counselling in both public and NGO insitutions (Table 2).

Utilization of post abortion contraceptive

From 414 participants 245 (59.2%) utilized post abortion family planning. Respondents reasons for not using family planning method before or after abortion were divorce (4.6%), live separately with their

Table 1: Socio-demographic characteristic of women who came for abortion care service in Debre Markos health institutions 2014 (n = 414)

Variables	Frequency	Percentage
Age		
15-19	73	17.6
20-24	171	41.3
25-29	110	26.6
30-34	47	11.4
35-39	13	3.1
Marital status		
Married	128	30.9
Divorced/ Widowed	20	4.8
Unmarried	266	64.3
Residence		
Urban	315	76.1
Rural	99	23.9
Occupation		
Employed	129	31.2
Students	91	22
House maids	85	20.5
Unemployed /job seeker	66	15.9
Farming	43	10.4
Educational level		
illiterate	49	11.8
Elementary	136	32.9
Secondary	119	28.7
Higher Education and above	110	26.6

Table 2: Previous and current obstetric and contraceptive history of women who came for abortion care service in Debre Markos health insitutions 2014

Variables	Frequency	Percentage (%)	Percentage
Ever given birth			
Yes	116	28	28
No	298	72	72
Condition of current pregnancy			
Wanted, planned and supported	39	9.4	7
Wanted but un planned	75	18.1	18.1
Unwanted, unplanned and un supported	300	72.5	72.5
Kind of clinic choose			
Public	244	58.7	58.2
NGO	170	41.3	41.1
Method to terminate Pregnancy			
Tablet/pill	230	55.6	55.6
MVA	160	38.6	38.6
Both	24	5.8	5.8
Prior information for FP			
Yes	351	84.8	84.8
No	63	15.2	15.2
Occurrence of Pregnancy while using contraceptive			
Yes	29	7	7
No	385	93	93
Post abortion contraceptive counselling			
yes	219	52.9	52.9
No	195	47.1	47.1
History of previous abortion			
Yes	51	12.3	12.3
NO	363	87.7	87.7

husband or partner (13.8%), prefer natural family planning method (9.7%), Religion opposition (8.9%), wish to give birth soon 24 (5.8%) and 31 (7.5%) due to rape/nosex (Table 3).

Factors associated with post abortion contraceptive utilization

On Bivariate analysis age, marital status, educational status, occupation, type clinic choose, history of previous abortion, post abortion family planning counseling variables had associated with utilization of post abortion contraceptive. Married, secondary school, higher education and post abortion family planning counselling were the only variables that showed significant association on multivariate logistic regression. Respondents received post abortion contraceptive counselling were 4 times more likely to have post abortion contraceptive [AOR: 4.2, 95% CI: (2.55, 6.91)] use as compared to women who did not get the post abortion contraceptive counseling (Table 3).

Table 3: Bivariate and multivariate analysis out put on factors associated with post abortion contraceptive utilization among women who came for abortion service in Debre Marcos health institution, 2014

Variables	PAFP Users(#)	PAFP None users(#)	COR (95% CI)	Adjusted OR (95% CI)
Age				
15-19	48	25	0.15 (0.04, 0.62)	
20-24	112	59	0.15 (0.04, 0.59)	
25-29	56	54	0.28 (0.07, 1.10)	
30-34	26	21	0.24 (0.06, 0.99)	
> 35	3	10	1.00	
Marital Status				
Unmarried	168	98	1	1
Married	61	67	0.22 (0.07, 0.71)	0.56 (0.34, 0.90)
Divorced/Widow	16	4	0.429 (0.139, 1.31)	2.79 (0.82, 9.46)
Educational level				
Illiterate	30	19	1	1
Elementary	81	55	0.99 (0.53, 1.87)	1.85 (0.99, 3.47)
Secondary	78	41	1.89 (1.03, 3.445)	1.86 (1.01, 3.45)
Higher Education	56	54	1.83 (1.07, 3.12)	1.99 (1.15, 3.44)
Occupation				
Employed	78	51	1.71 (0.83, 3.47)	
Students	54	38	1.31 (0.58, 2.99)	
House maids	30	43	0.55 (0.28, 1.07)	
Unemployed	53	24	0.79 (0.41, 1.53)	
Farmers	30	13	1	
Kind of clinic				
Public	189	116	1.54 (0.99, 2.39)	1.07(0.65, 1.76)
NGO	56	53	1	1
PAFP counselling				
Yes	83	28	2.58 (1.59, 4.58)	4.2 (2.55, 6.91)
NO	162	141	1	1

Discussion

In this study post abortion contraceptive utilization was 59.2%. Which is lower than study done in Brazil (97.4%), Nepal (83%) and Tanzania (89%). The disparity may be in Brazil (27%) respondents had history of previous abortion as compared to this study (12%). However, in Nepal eighty percent respondents have good knowledge and previous practice of contraceptives. The Tanzania study design was cohortand it is different from the current study. The other possible reasons might below counselling, cultural difference, desire to have more children, lack of availability of all contraceptive methods all the time, judgmental approach of health care provider, miss conceptions rumours on family planning methods [8,9,10]. However, the study done in Kenya (31%) is lower than this study finding. The probable reason for this could be the study include only the private clinics but our study included public and NGO clinics [11]. Similarly post abortion contraceptive utilization was low in Tigray (31%), this could be due to lack of awareness on contraceptive methods and poor set up of service delivery system (family planning service was not integrated with abortion care services in the tigray [12]. On the other hand, this finding was consistent with studies conducted in Guraghe (56.5%) And Addis Ababa (57%) the possible reason might be the time closeness, study design and study set up [13,14]. Even though the percentage of women who use PAFP is greater than the women who didn't use, we cannot say it is satisfactory because most of the women who came to get abortion care service had unintended/unplanned pregnancy, they all need to use contraception to avoid similar incidents.

Marital status was one factor that associated with PAFP utilization. In contrary, study done in Addis Ababa showed that marital status had not statistically significant association with using post abortion care services utilization. Married women were 44% less like to use post abortion contraceptive compared to unmarried women [14]. The possible reason could be Married women involve their partner and there may be partner disapproval. Two-sided decision is not as easy like single and also married women less likely to fear unwanted pregnancy than unmarried. unmarried have strong desire to use contraceptive due to fear of cultural out cast out cast and social discrimination [14,15].

Women with Higher and secondary Education have 2 times more likely to utilize post abortion contraceptives as compared to those who are unable to read and write. This study is supported by a study

done in Pakistan, Tanzanian and Adissababa. This might be educate individuals can acesss information and the will have more knowledge about reproductive health right. As a result they will pass informed decisions. Furthermore, educated women's are more concerned about their carrier development and they would put their child desire aside [15,16,17].

Respondents who got post abortion contraceptive counselling were 4 times more likely to utilize post abortion contraceptive compared to women who did not get the counseling. The current study in line with study done in Kenya which stated that women received contraceptive counselling were five times more likely to adopt a modern contraceptive method. This clearly indicated that post abortion Family planning counselling will make real difference on post abortion contraceptive utilization [11].

Conclusion

In the current study post abortion contraceptive utilization was low as compared to other study. Being married, secondary and higher education and post abortion family planning counseling had statistically significant association with post abortion contraceptive utilization in Debre Markos health instiutions. In conclusion much should be done by obstetric care providers to strength the post abortion contraceptive counseling and increase contraceptive utilization after abortion.

Acknowledgement

We are very grateful to the University of Gondar for the ethical clearance and financial support. We would like to aknowledge Debre Markos health institutions management and all study participants. Our gratitude also goes to supervisors, the data collectors and the staff at the health institutions.

References

1. Kumar V, Shearer J, Kumar A, Darmstadt G (2010) Neonatal hypothermia in low resource settinNPrata, P Passano, A Sreenivas, CE Gerdts - Maternal mortality in Developing countries. Women's Health 6:3113-27.
2. Ceylan A, Ertem M, Saka G, Akdeniz N (2009) Post abortion family planning counseling as a tool to increase contraception use. BMC Public Health 9: 20.
3. Abdella A, Fetters T, Benson J, Pearson E, Gebrehiwot Y, et al. (2013) Meeting the need for safe abortion care in Ethiopia: results of a national assessment in 2008.Glob Public Health 8: 417-434.
4. Singh S, Fetters T, Gebreselassie H, Abdella A, Gebrehiwot Y, et al. (2010) The estimated incidence of induced abortion in Ethiopia, 2008. Int Perspect Sex Reprod Health 36: 16-25.
5. Ashford L, Sedgh G, Singh S (2012) Making abortion services accessible in the wake of legal reforms. Issues Brief (Alan Guttmacher Inst) : 1-4.
6. Rahman A, Katzive L, Henshaw SK (1998) A global review of laws on induced abortion, 1985-1997. Int Fam Plann Persp 24: 56-64.
7. Aemro M, Mesele M, Birhanu Z, Atenafu A (2013) Dietary Diversity and Meal Frequency Practices among Infant and Young Children Aged 6-23 Months in Ethiopia: A Secondary Analysis of Ethiopian Demographic and Health Survey 2011.J NutrMetab 2013: 782931.
8. Khanal V, Joshi C, Neupane D, Karkee R (2011) Practices and perceptions on contraception acceptance among clients availing safe abortion services in Nepal. Kathmandu Univ Med J (KUMJ) 9: 179-184.
9. Ferreira AL, Souza AI, Lima RA, Braga C (2010) Choices on contraceptive methods in post-abortion family planning clinic in the northeast Brazil. Reprod Health 7: 5.
10. Rasch V, Yambesi F, Massawe S (2008) Medium and long-term adherence to postabortion contraception among women having experienced unsafe abortion in Dar es Salaam, Tanzania. BMC Pregnancy Childbirth 8: 32.
11. Onyango MA, Oguttu M, Barger M (2010) Predictive factors for uptake of Post-abortion care in western Kenya. African Journal of Midwifery and Women's Health 4:115-120.
12. Otsea K, Tesfaye S (2007) Monitoring safe abortion care service provision in mTigray, Ethiopia. Chapel Hill, NC: Ipas.
13. Tesfaye G, Oljira L (2013) Post abortion care quality status in health facilities of Guraghe zone, Ethiopia. Reprod Health 10: 35.
14. Melkamu Y, Belay T, Prata N, Holston M, Endrias T, et al. (2009) Characteristics Of women seeking abortion-related care in Addis Ababa, Ethiopia. Journal of Perinatology 29: 401-412.
15. Prata N, Bell S, Holston M, Gerdts C, Melkamu Y (2011) Factors associated with choice of post-abortion contraception in Addis Ababa, Ethiopia. Afr J Reprod Health 15: 51-57.
16. Azmat S, Hameed W, Ishaque M, Mustafa G, Ahmed A (2012) Post-abortion care family planning use in Pakistan. Pak J Public Health 2:4-9.
17. Michael E (2012) Use of contraceptive methods among women in stable Marital relations attending health facilities in Kahama district, Shinyanga Region, Tanzania. Muhimbili University of Health and Allied Sciences.