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CLINICAL ARTICLE

Post-abortion contraceptive adoption in Ethiopia

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Synopsis

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The national family planning guideline recommends couple counseling but in this study, only 34.4% of abortion care clients received couple counseling on contraception methods.

Abstract

Objective: To assess the effect of couple counseling on modern contraception adoption among abortion clients.

Methods: A cross-sectional study was conducted between October 2019 and May 2020 at the abortion clinic of Saint Paul's Hospital Millennium Medical College, Addis Ababa, Ethiopia. Abortion care clients were interviewed using Open Data Kit. Logistic regression was used to assess predictors of modern contraception adoption.

Results: During the study period, a total of 326 abortion care clients were interviewed and 112 (34.4%) received couple counseling. Of the 112, 89 (79.5%) adopted modern contraception. The odds of using a modern contraceptive method was 2.34 times higher among women whose partner approved (AOR 2.34; 95% C.I 1.05 – 5.22) compared to those without partner approval. The odds of using a modern contraceptive method was 1.78 times higher among women who believed they had partner support (AOR 1.78; 95% C.I 1.03 – 3.10) compared to women without support

Conclusion: Few women received couple counseling for contraception. Partner approval and a woman's belief that her partner supports her contraception decision associated with contraception adoption.

1 INTRODUCTION

According to the National Demographic and Health Survey in 2016, the total fertility rate (TFR) in Ethiopia was 5.5 births per woman, and 22% of married women had an unmet need for family planning (1). The total demand for modern contraception has increased from 45% in 2000 to 58% in 2016 [1].

Given the high unmet need for contraception, as well as the increasing numbers of abortions occurring in health facilities in Ethiopia, post-abortion contraceptive counseling and provision is an ideal time to extend services to women who are in need of contraception and are interacting with the health system [1-3].

If the need for modern contraceptive methods was fulfilled in Ethiopia, estimates show unintended pregnancies would decrease by 89–92% [3]. In low-income countries, the use of family planning would reduce unintended conceptions by more than two-thirds and prevent about seventy percent of maternal deaths per year [4].

In the absence of contraceptives, fertility following induced abortion resumes in the first three weeks, and can promptly lead to additional induced abortion. This highlights the value of providing family planning counseling to all women who present for comprehensive abortion care [5].

Post-abortion family planning (PAFP) includes voluntary contraceptive counseling to reduce future unplanned conceptions and repeat abortions [6]. Abortion care service may be a woman's first point of entry to the health care system. It provides an opportunity to counsel and provide Family planning services to women who are otherwise not reached by health services [7].

The family system in many low-income countries is patriarchal with males being the main source of income and also often the decision-makers in the household. For this reason, males need to be encouraged to accompany their partners during family planning visits so that they can receive information that enables them to sensibly partake in contraception use and decision making [7, 8]. This study was designed to assess the effect of couple counseling on modern contraception adoption among post-abortion clients in a referral and teaching hospital in Ethiopia.

2 METHODS

This cross-sectional study was conducted at the abortion clinic of Saint Paul's Hospital Millennium Medical College (SPHMMC), Addis Ababa, Ethiopia, among abortion care clients between October 1, 2019, and May 31, 2020. Ethical approval of and clearance for the study was obtained from the Ethical Review Board of SPHMMC before the start of data collection. Informed consent was obtained from all women who were interviewed. SPHMMC is the second-largest hospital in Ethiopia and is known for its abortion clinic which is locally called "Michu clinic" or 'comfort' clinic. SPHMMC is the first hospital in Ethiopia to have Family Planning Fellows who provide family planning and comprehensive abortion care services at Michu clinic. Michu is the only clinic in Ethiopia that provides 2nd-trimester surgical abortion D&E (Dilatation and Evacuation) service. At this clinic, D&E services are given up to the gestational age of 24 weeks and beyond 24 weeks up to 28 weeks oxytocin or Misoprostol is used to induce abortion. The method of pregnancy termination is based on the woman's choice after informing her of the pros and cons of medical and surgical methods. On average, eight clients visit the abortion clinic each day. The clinic is open 24 hours a day and 7 days per week and all the services are provided free of charge.

Abortion care clients admitted to the clinic were given family planning counseling by first-year residents. Because the national family planning guideline recommends counseling to be given with their partner, clients were advised to bring their partners as much as possible and if he was not at the facility with her, she was given the option to communicate with him through a phone call in between the counseling session. The national guideline recommends that family planning counseling should be given following the REDI model (rapport, exploration, assisting in a decision-making process, and Implementation) (7). For consistency in counseling, a printout of the national family planning counseling guideline was laminated and displayed at the desk of the counseling physician.

All abortion care clients were screened for inclusion in the study, and those that met the inclusion criteria were invited to participate. All invited participated in the study. The exclusion criteria were patients who had hysterectomy as a complication of abortion, those seeking abortion service after a rape, women with major psychiatric disorders precluding interviews, and clients who were pregnant after casual sex. Casual sex was

operationalized as a type of sexual intercourse which happened only at one incident and if their relationship discontinued after that incident. Those who were pregnant from casual sex were excluded from the study because they may not have the chance to communicate with the male partner during or after post-abortion counseling or it could have been transactional in nature and when the motive is only to benefit materially. Assuming that clients bring their partners randomly, a convenience sampling method was used to interview, whereby every consecutive eligible client was interviewed. The sample was calculated using single population formula, $n = \frac{Z^2 p(1-p)}{w^2}$, where Z is Z-score is percentage, and w is width (precision). According to a study done in Ethiopia, 25% of women who were counseled with their partner adopted a contraception method [9]. This proportion was taken to calculate the sample size. Assuming a precision of 5% and 95% confidence limit a sample size of 288 was calculated. A total of 326 clients were interviewed.

Data were collected through an exit interview at the Michu clinic and abortion ward by first-year residents who were not involved in the counseling. Variables that have been found to be associated with contraceptive usage in previous research as well as factors deemed important by the study team, including age, marital status, level of education, source of household income, number of children, type of counseling, decision-maker at home, previous use of contraception methods, type of abortion, were included in the questionnaire.

The questionnaire was developed through a literature review and face validity was established via review by the study team. The questionnaire was translated into Amharic (the local language) and back-translated to English to ensure consistency and conceptual equivalence. The quality of the data were assured by training data collectors and supervisors and by pretesting the questionnaire with 5% of study women using ODK (Open Data Kit) an Android device based data collection tool.

Religion was originally collected as a categorical variable. For analysis, it was collapsed to Muslim or Christian.

Partner approval was assessed through the question "Did your partner approve a specific contraception method among the contraceptive options?" This question was asked of the partner if he was counseled with her or of the woman if she communicated

with him through a phone call. Partner's support of her contraception decision was assessed through the question "Do you believe that your partner is supportive about your family planning decision?".

ODK data were exported to and analyzed using Stata Statistical Software: Release 14 (College Station, TX: StataCorp LP). Descriptive statistics were calculated and presented as frequencies and percentages. Odds ratio and 95% confidence interval are reported to demonstrate an association. The independent variables were the type of counseling (with or without a partner), partner approval of contraceptive method, age, and marital status. The dependent (outcome) variable was modern contraception adoption and this was documented when women had acquired her chosen contraceptive upon discharge from the hospital. Bivariate analysis was conducted to assess predictor variables. Those variables with a p-Value <0.2 used for multivariate analysis.

3 RESULTS

During the study period, 326 post-abortion care clients were interviewed. Of these 112 (34.4%) received family planning couple counseling. The sociodemographic characteristics of women are shown in Table 1. The mean (\pm SD) age of women counseled on family planning is 24.5 (4.7) years and 167 (51.2%) were in the age range 20-25 years. 297 (91.1%) of women attended school and 100 (33.7%) had primary education. 139 (39.6%) were private employees and the mean family income was 109.6 USD per month. 143 (43.9%) were married 208 (63.8%) were Orthodox in religion.

The Sociodemographic characteristics of the partners of women who participated in couple counseling are shown in Table 2. The mean age of partners was 29.8 years and 144 (44.2%) were between 26-33 years of age. 303 (92.9%) attended school and 95 (31.4%) completed high school up to grade 10.

Of all counseled clients 251 (77%) chose a family planning method. Of the 251 who chose a contraception method, 249 (99.2%) adopted a reversible contraception method and 2 (0.8%) chose permanent contraception (Bilateral Tubal Ligation). These women

did not take the method upon discharge as bilateral tubal ligation is done as an elective procedure which they would have to return to the facility to receive. Excluding these 2 (0.8%), among the 249 clients who adopted a contraception method, 80 (32.1%) chose a short-acting method and 169 (67.9%) adopted a long-acting (Implant and IUD) contraception. The most commonly adopted method was an implant, chosen by 159 (63.8%) of the women, followed by injectables, chosen by 45 (18.1%) women, while 35 (14%) adopted pills, and 10 (4.1%) chose the Intrauterine Device (IUD) [Figure 1].

Of the 214 women without couple counseling, 160 (74.7%) adopted a contraception method while 89 of the 112 (79.5%) of the women who got a couple counseling, chose a contraceptive method.

Among the 326 abortion care clients during the study period, 273 (83.7%) had an induced abortion at a health institution, and 53 (16.3%) reported having a spontaneous abortion. 119 (36.5%) of the women were accompanied by their partner, 112 (34.4%) were accompanied by a friend, 56 (17.2%) were accompanied by a family member, and 39 (11.9%) came alone during their visit. Of the total abortion care clients, 231 (70.9%) reported an unplanned pregnancy.

In bivariate analysis Partner counseling was not significantly associated with contraception adoption (P value= 0.344). While the use of modern contraception method is 2.45 times higher among women who reported their partner approved the use of contraception compared to those without partner approval (COR 2.45; 95% C.I 1.13 - 5.33; P=0.024). [Table 3] Those variables with a P-value < 0.2, as well as variables deemed important to control for by the study team, were included in multivariate analysis.

In multivariate analysis, the odds of using a modern contraceptive method was 2.34 times higher among women whose partner approved (AOR 2.34; 95% C.I 1.05 – 5.22; P=0.037) compared to those without partner approval. The odds of using a modern contraceptive method was 1.78 times higher among women who believed they had partner support (AOR 1.78; 95% C.I 1.03 – 3.10; P=0.040) compared to women without support [Table 4].

4 DISCUSSION

In this study, partner counseling was not significantly associated with contraception adoption, however, women whose partner approved of contraception were 2.34 times as likely to adopt contraception, and women who believed their partner to be supportive were 1.78 times as likely to adopt a method.

In this study, counseling with a partner, by itself, was not a statistically significant predictor of contraception adoption, but this does not suggest partner dynamics are not important among this study population. Partner approval of a contraception method and the woman's belief that her partner supports contraception decision were found to be significantly associated. Counseling provides an opportunity for the counselor to increase the partner's approval for contraception use by direct assessment of his approval, and an opportunity for him to share those feelings with his female partner. Similarly, many studies have shown that involving male partners in contraception counseling leads to better contraceptive uptake and continuation within couples [9-13]. Women whose partner approved a specific contraception method had an increased odds of contraception use. Our findings support another study conducted in Ethiopia which showed that men's approval of the use of contraception was associated with male involvement in contraception adoption [9].

Consistent with the World Health Organization (WHO) recommendation, the majority of abortion care clients in this study were counseled for and adopted a modern contraception method. The WHO medical eligibility criteria for contraceptive use states that the use of combined hormonal methods and the Copper and levonorgestrel-containing intrauterine device (IUD) can all be started immediately after an abortion [14].

All post-abortion care clients in the study period were counseled for modern contraception in particular following the national guidelines of Ethiopia which recommend universal family planning counseling [7]. All women who chose a contraception method chose a modern method and received it upon discharge. According to a study done in Turkey, the introduction of modern contraception immediately after abortion was the most important factor for modern contraception usage [15].

Partners often accompany women seeking abortions to the clinic, allowing health providers to involve them during contraception counseling. Furthermore, patients appreciated having an informed partner who supports them and shares their contraception decision-making [16]. However, in this study, the majority of women seeking an abortion visited the clinic alone or with a friend. In our experience, a partner usually accompanies a woman when she has an emergency spontaneous abortion. Because of stigma in the society, women requesting a safe abortion service visit the clinic

In this study, 70.9% of the abortion care clients had an unplanned pregnancy and the majority of women adopted a long-acting contraception method upon discharge which gave them a chance of avoiding repeat abortion due to unplanned pregnancy. This is similar to the study done by Gemzell-Danielsson K (2014) [17].

This study does have some limitations. The use of convenience sampling, rather than random sampling limits the generalizability. However, we assumed that clients visit our abortion care clinic with their partners randomly and to decrease selection bias we made the data collector be a different person than the counselor. Additionally, to standardize the family planning counseling a copy of the REDI model was availed at the bedside of every post-abortion client in the ward and on the desk at the abortion clinic. Every abortion care client irrespective of counseling with or without a partner was counseled following the national guideline.

In conclusion, only 34.4% of abortion care clients received couple contraception counseling. Partner approval and a woman's belief that her partner supports her contraception decision are associated with contraception adoption

Author contributions

AT contributed to the study planning, design, data collection and analysis, and writing of the manuscript. MW contributed to the study planning, data analysis, and editing of the manuscript. BG contributed to the study planning and editing of the manuscript. BN contributed to study planning and editing the manuscript. MA contributed to study

planning and editing the manuscript. SDC contributed to the study planning, data analysis, and editing of the manuscript.

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Conflicts of Interest

The authors have no conflicts of interest

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FIGURE LEGEND

Figure 1.

TABLE 1 Socio-demographic characteristics of post-abortion care women at an abortion clinic in Saint Paul's Hospital Millennium Medical College

Characteristics*	No.	%
Age of the client(Age in Years)		
14-19	38	11.7
20-25	167	51.2
26-31	91	27.9
>=32	30	9.2
Mean ± SD	24.5± 4.7	
The woman attended school		
No	29	8.9
Yes	297	91.1
Educational level (n=297)		
Read and write	7	2.4
Elementary	100	33.7
High School-up to grade 10+2	122	41.1
Diploma and above	68	22.9
Occupation		
Government employee	24	7.4
Merchant	22	6.7
Private employee	129	39.6
NGO employee	4	1.2
Unemployed	147	45.1
Family monthly income; USD (mean, SD)	109.6 ± 135.7	
Religion		
Christians	269	82.5
Muslims	57	17.5
Marital status		
Married	143	43.87
Not married	183	56.13

* n=326 unless mentioned otherwise

TABLE 2 Socio-demographic characteristics of partners of post-abortion care clients at an abortion clinic in Saint Paul's Hospital Millennium Medical College

Characteristics	No.	%
Age of the partner(in years)		
18-25	98	30.1
26-33	144	44.2
>=34	84	25.8
Mean ± SD	29.8± 6.3	
Partner attended school		
No	23.0	7.1
Yes	303.0	92.9
Educational level (n=303)		
Read and write	7	2.3
Elementary	76	25.1
High school to 10+2	139	45.9
Diploma and above	81	26.7

TABLE 3 Bivariate logistic regression analysis of predictors' contraception adoption among abortion care clients

Variables	COR(95% C.I)	P-value
Counseled with partner	1.30 (0.75 - 2.26)	0.344
Partner approved ^a	2.45 (1.13 - 5.33)	0.024*
Woman believes her partner support ^a	1.69 (0.99 - 2.88)	0.056
Religion(Muslim)	2.11 (0.95- 4.68)	0.065
Family income ^b	1.33 (0.77 – 2.31)	0.301
History of abortion	1.61(0.81-3.18)	0.173
Women can make decision ^c	2.11(0.98 - 4.55)	0.056
Type of abortion(Induced)	0.82(0.40 – 1.69)	0.592

Accompanied by partner	1.22(0.64 – 2.65)	0.540
Married	0.86(0.51 – 1.43)	0.559

a-contraception use b-only from woman c- on household issues

TABLE 4 Multivariate logistic regression analysis of predictors' contraception adoption among abortion care clients.

Variables	AOR (95% C.I)	P-value
Partner approved ^a	2.34 (1.05- 5.22))	0.037*
Woman believes her partner support ^a	1.78(1.03 – 3.10)	0.040*
Religion (Muslim)	7.67 (0.99 – 59.27)	0.051
Type of abortion(Induced)	1.04(0.49 – 2.19)	0.923
Women can make decision ^b	2.13 (0.97 – 4.66)	0.059
History of abortion	1.53 (0.61 – 3.83)	0.359

a-contraception use b - on household issues

