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Contraception after medication abortion in the United States: results from a cluster randomized trial

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Abstract

BACKGROUND—Understanding how contraceptive choices and access differ for women having medication abortions compared to aspiration procedures can help to identify priorities for improved patient-centered postabortion contraceptive care.

OBJECTIVE—The objective of this study was to investigate the differences in contraceptive counseling, method choices, and use between medication and aspiration abortion patients.

STUDY DESIGN—This subanalysis examines data from 643 abortion patients from 17 reproductive health centers in a cluster, randomized trial across the United States. We recruited participants aged 18–25 years who did not desire pregnancy and followed them for 1 year. We measured the effect of a full-staff contraceptive training and abortion type on contraceptive counseling, choice, and use with multivariable regression models, using generalized estimating equations for clustering. We used survival analysis with shared frailty to model actual intrauterine device and subdermal implant initiation over 1 year.

RESULTS—Overall, 26% of participants (n = 166) had a medication abortion and 74% (n = 477) had an aspiration abortion at the enrollment visit. Women obtaining medication abortions were as likely as those having aspiration abortions to receive counseling on intrauterine devices or the

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implant (55%) and on a short-acting hormonal method (79%). The proportions of women choosing to use these methods (29% intrauterine device or implant, 58% short-acting hormonal) were also similar by abortion type. The proportions of women who actually used short-acting hormonal methods (71% medication vs 57% aspiration) and condoms or no method (20% vs 22%) within 3 months were not significantly different by abortion type. However, intrauterine device initiation over a year was significantly lower after the medication than the aspiration abortion (11 per 100 person-years vs 20 per 100 person-years, adjusted hazard ratio, 0.50; 95% confidence interval, 0.28–0.89). Implant initiation rates were low and similar by abortion type (5 per 100 person-years vs 4 per 100 person-years, adjusted hazard ratio, 2.41; 95% confidence interval, 0.88–6.59). In contrast to women choosing short-acting methods, relatively few of those choosing a long-acting method at enrollment, 34% of medication abortion patients and 53% of aspiration abortion patients, had one placed within 3 months. Neither differences in health insurance nor pelvic examination preferences by abortion type accounted for lower intrauterine device use among medication abortion patients.

CONCLUSION—Despite similar contraceptive choices, fewer patients receiving medication abortion than aspiration abortion initiated intrauterine devices over 1 year of follow-up. Interventions to help patients receiving medication abortion to successfully return for intrauterine device placement are warranted. New protocols for same-day implant placement may also help patients receiving medication abortion and desiring a long-acting method to receive one.

Keywords

abortion; implant; intrauterine device; long-acting reversible contraception; medical abortion; medication abortion; postabortion contraception; randomized trial

Medication abortion accounts for almost one third of nonhospital abortions in the United States.¹ The method can improve access in settings without an aspiration abortion provider, and some women prefer a procedure that seems more natural or that affords more privacy and autonomy.^{2,3} Medication abortion (MAB), however, presents unique challenges for providing the full range of contraceptives, particularly long-acting reversible methods, intrauterine devices (IUDs), and subdermal implants. All non-permanent methods, including long-acting reversible contraceptives (LARCs), can be provided safely the same day as aspiration abortion.^{4–6} Yet until recently, following MAB, all long-acting methods have required a second visit. IUDs cannot be placed until the abortion is deemed complete at a follow-up visit, and patients frequently do not return.^{7–10} Implants too have traditionally been placed at follow-up, although new data support placement at the mifepristone visit.^{11,12}

There is a gap in the medical literature about contraceptive care after a medication abortion compared with post-aspiration abortion. It remains unknown whether counseling received, choices made, or contraceptive use differs by abortion type and, if so, why. Medication and aspiration abortion patients may be different, hold varying preferences for reproductive health care, and choose different methods. They may also receive different contraceptive counseling or have disparate access to selected methods.

We examined postmedication and aspiration abortion contraceptive care with data from a large, US-based cluster randomized trial evaluating the impact of a provider training about

LARC on women's contraceptive use and pregnancy. In prior analyses, abortion patients at intervention sites were more likely than women at control sites to receive counseling on and to choose long-acting methods; however, they were not more likely to actually initiate these methods, largely because of funding barriers at abortion visits, and experienced high pregnancy rates over follow-up.^{13,14} This subanalysis assesses differences in contraceptive care and use among 643 abortion patients in the trial. Understanding how care and use differ for women having MABs compared to aspiration abortions can help to identify priorities for improved patient-centered contraceptive care.

Materials and Methods

Study design and procedures

We conducted a cluster randomized trial with 40 Planned Parenthood health centers, described previously.^{13,14} Clinics, which served low-income and diverse populations, were randomly allocated to receive LARC training or provide standard care. In this post hoc subanalysis, we examined data from the participants at the 17 sites providing abortion care across 10 geographically diverse states (California, Colorado, Connecticut, Florida, Idaho, Minnesota, North Carolina, Ohio, Pennsylvania, and Washington).

At intervention clinics, staff participated in a half-day, continuing medical education–accredited training on LARC evidence, including contraceptive effectiveness, and eligibility, including same-day placement.^{4,15} The training covered patient-centered counseling skills and ethical issues specific to LARC, such as removal when desired.¹⁶ Clinicians received hands-on IUD training with models and implant trainings with the manufacturer. All sites maintained usual contraceptive costs and coverage.

Following training at intervention sites, we recruited patients from study clinics between May 2011 and March 2012 and followed them for 1 year. Eligible women were aged 18–25 years, were sexually active, received contraceptive counseling, and did not desire pregnancy within a year.

At the 17 sites providing abortion care, patients were eligible to enroll on the day of an aspiration abortion or MAB initiation. After providing informed consent and receiving contraceptive counseling, participants completed a self-administered questionnaire documenting contraceptive history and methods discussed and chosen at the visit. Providers recorded abortion type and gestation on a visit summary.

Participants completed online or phone follow-up questionnaires quarterly for 1 year and did home urine pregnancy tests (AccuHome; Germaine Laboratories, San Antonio, TX) at 6 and 12 months. Participants received \$20 per questionnaire and \$30 per pregnancy test completed. Investigators conducted medical record reviews at year end.

Ethical approval was obtained from the Committee on Human Research of the University of California, San Francisco, and the Allendale Investigational Review Board.

Measures

Outcomes—We measured contraceptive counseling with baseline participant survey questions as to whether a nurse, doctor, or staff member had discussed each method during the abortion visit. We created a series of variables capturing methods discussed: long-acting and short-acting hormonal method (pills, transdermal patch, vaginal ring, and depot medroxyprogesterone acetate injection [DMPA]); condom; and none.

To measure the method choice, we asked which method, if any, participants decided to use after the abortion. We created a categorical variable (long-acting, short-acting, condom/none); the few women selecting more than 1 method were categorized according to the more effective method. We also examined counseling and choice of the IUD and, separately, the implant, given that provider counseling on, and patient preference for, the 2 methods might differ by abortion type.

We captured contraceptive methods actually initiated in 2 ways. First, to assess the most effective contraceptive method used within 3 months of enrollment, we used data from quarterly follow-up surveys assessing contraceptive method use in the preceding quarter. Data were available for participants completing at least 1 follow-up interview. Second, for the full sample, we used medical records data in addition to surveys to document IUD and implant placements over 1 year. Data on follow-up MAB visits within 7–28 days were also abstracted from medical records. Finally, we captured incident pregnancies using quarterly surveys, medical records, and urine pregnancy tests, dating them from the last menstrual period.

Independent variables—The primary independent variable was the participant's abortion type (medication, aspiration). All models included the study arm (intervention, control). We included baseline control variables selected a priori as associated with contraceptive use, including age, race/ethnicity, parity, and contraceptive use within 3 months of enrollment.

We also assessed how women would feel if they became pregnant within the year (very unhappy/unhappy, happy/very happy). Given prior analyses showing the importance of funding for LARC use,^{13,17} we assessed participant health insurance (public [Medicaid, other state program], private, no insurance, do not know) as well as 3 site-level funding policy variables: whether the site was in a state with a family-planning Medicaid expansion program, Medicaid coverage of abortion, and mandated private insurance contraceptive coverage.¹⁸

We also examined whether the site provided immediate postaspiration abortion LARC. To investigate whether differences in contraception by abortion type might be attributable to patient preferences around pelvic examinations (which might affect choice of both contraception and abortion type), we asked participants whether they had ever postponed going to a clinic for birth control to avoid a pelvic examination.

Analysis—We investigated baseline differences in participant characteristics by abortion type using regression with generalized estimated equations (GEE) for clustering, with robust SEs. The model link depended on the measure of the characteristic (eg, a logit link was used

for dichotomous characteristics). To examine contraceptive methods discussed in counseling by abortion type, we used a GEE logistic regression; similarly, to compare methods chosen and used within 3 months, we used a GEE multinomial logistic regression. Models included study arm and a priori-selected control variables.

Focusing specifically on long-acting methods, we used GEE logistic regression to estimate differences in IUD counseling and choice by abortion type. For IUD initiation, we used a Cox proportional hazards model with shared frailty for clustering to estimate time to IUD placement. Women contributed observation time to the analysis until they initiated IUD use, became pregnant, or exited the study.

We repeated these analyses for implant outcomes. Implant initiation analysis excluded 1 participant who had an implant before the abortion. For 4 women who used both an IUD and implant, we examined the time to the first method placed. For pregnancy, we used a proportional hazards model with shared frailty, with participants contributing person-time until they became pregnant or exited the study. We estimated Schoenfeld residuals to check proportionality assumptions.

We explored factors we hypothesized might account for differences detected in IUD use by abortion type. We examined the role of funding by fitting multivariable logistic regression models (GEE) with and without insurance status and each site funding policy variable, separately, examining whether the abortion type effect estimate changed by more than a prespecified 15%.¹⁹ Similarly, we fit IUD initiation models with and without attitudes about the pelvic examination, which could be associated both with selecting MAB and preference not to use an IUD.

For each outcome, we assessed interactions between abortion type and the intervention to determine whether the effect of provider training on contraceptive outcomes differed by abortion type. None of the interactions was statistically significant, so we excluded them.

Analyses included 643 of the 648 participants enrolled into the trial from 17 sites providing abortions; 5 participants missing abortion type data were excluded. With this sample size, a 1:3 ratio of MAB to aspiration abortion, 0.80 power, alpha of 0.05, and using a 2-sided test for survival data, our data were sufficient to measure differences in 1-year IUD initiation by abortion type with an effect size (hazard ratio) of 0.48. All analyses were conducted with Stata 14 (StataCorp, College Station, TX), using an intent-to-treat approach. We used multiple imputation with chained equations for missing data (<1% for any variable).²⁰

Results

Of the 643 participants, 50% were from 8 intervention sites and 50% from 9 control sites. Overall, 86% of participants provided follow-up survey data through 3 months, 85% through 6 months, and 78% through 12 months. We had 12-month medical record data on all participants. Table 1 shows participants were on average 22 years old; 40% had children; and 85% reported at baseline they would be unhappy or very unhappy to become pregnant again within a year. Seventy percent of participants had health insurance, although 63% paid for at least part of the abortion herself or with donated funds.

Overall, 26% of participants (n = 166) had an MAB and 74% (n = 477) had an aspiration abortion at the enrollment visit. Participants having each type of abortion were no different with respect to age, race/ethnicity, or prior contraceptive use. However, they differed in terms of gestation, with MAB patients having a lower mean gestation than aspiration patients (7 vs 9 weeks). More MAB patients had private (42% vs 32%) or no insurance (32% vs 25%), and fewer had public insurance (22% vs 41%, overall $P = .01$). MAB patients were somewhat less likely than aspiration patients to be parous (32% vs 44%, $P = .07$) and to have enrolled from an intervention site (30% vs 56%, $P = .06$).

There were no significant differences in site funding policies between intervention and control sites¹³ or by abortion type, although 30% of MAB patients received care at a site at which Medicaid covered abortion, while 51% of aspiration abortion patients did ($P = .07$). At 15 of the 17 sites, participants had either medication or aspiration abortions; one control site offered only MAB; and at 1 intervention site, all participants chose aspiration abortion.

While women at intervention sites were more likely to receive counseling on long-acting methods than those at control sites,¹³ there were no differences in methods discussed by abortion type, with 55% overall discussing IUDs or implants, 79% short-acting hormonal methods (34% DMPA), and 40% condoms (Table 2). Women's stated contraceptive choices at the abortion visit were also similar by abortion type, with 29% overall choosing a LARC, 58% a short-acting hormonal method (10% DMPA), 3% condoms, and 10% no method.

Differences by abortion type emerged for the contraceptive methods actually used (Table 2). While 8% of MAB patients used an IUD or implant in the first 3 months, 22% of aspiration abortion patients did (adjusted risk ratio, 0.47, 95% confidence interval [CI], 0.23–0.96). The proportions of MAB and aspiration abortion patients who used short-acting hormonal methods (71% vs 57%) did not differ significantly. Only 14% of participants used condoms only, and 7% used no method within 3 months, similar by abortion type.

Among women choosing a short-acting hormonal method at enrollment, 90% of MAB and 79% of aspiration patients used one within 3 months. Among those choosing IUDs or implants, in contrast, only 34% of MAB patients and 53% of aspiration patients had one placed within 3 months; 0% and 45% of them, respectively, had them placed on the day of the abortion. Approximately 54% of all MAB patients returned to the recruitment site within 28 days for follow-up.

Examining IUDs and implants individually, MAB patients were as likely as aspiration patients to report that their contraceptive counseling included the IUD (43% vs 51%, adjusted odds ratio [aOR], 0.93) and the implant (26% vs 31%, aOR, 0.90) (Table 3). There were also no differences between medication and aspiration abortion patients in stated choice of an IUD (18% vs 25%, aOR, 0.85) or implant (6% vs 7%, aOR, 1.29).

Overall, 18% of participants had an IUD placed over the year after the abortion, and 3% initiated an implant (<1% [n = 4] initiated both). IUD initiation was far lower for medication than aspiration abortion patients (11 per 100 person-years [PY] MAB vs 20 per 100 PY aspiration, adjusted hazard ratio, 0.50; 95% CI, 0.28–0.89) (Table 3 and Figure 1). Implant initiation, in contrast, was low and not significantly different by abortion type (5 per 100 PY

MAB vs 4 per 100 PY aspiration, aHR, 2.41; 95% CI, 0.88–6.59) (Figure 2). We found no differences in pregnancy rates by abortion type (20 per 100 PY MAB vs 26 per 100 PY aspiration, aHR, 0.97, 95% CI, 0.62–1.51).

We investigated factors that might explain differences in IUD use by abortion type. Although health insurance was important for whether a woman used an IUD,¹³ the effect of abortion type (medication or aspiration) on IUD initiation attenuated only slightly when accounting for differences in insurance type (aHR changed to 0.50 from 0.47). Similarly, adjusting for funding policy variables did not substantially change abortion type differences in IUD initiation (to 0.47–0.53 from 0.47).

For preferences regarding pelvic examination, women having an MAB were more likely to report ever having put off a clinic visit because of the pelvic examination (22% vs 13%, aOR, 2.12, 95% CI, 1.36–3.31). However, attitudes were not significantly associated with IUD initiation, and the effect of abortion type on IUD initiation did not change when accounting for differences in attitudes toward the pelvic examination.

Comment

This study examined the contraceptive methods that medication and aspiration abortion patients received counseling on, chose, and initiated across 17 US facilities. We found no differences by abortion type in counseling and choice of short-acting hormonal methods, IUDs, or implants. Although most patients used a contraceptive method after the abortion, the MAB patients were approximately half as likely to have an IUD placed over a year than the aspiration patients. Despite the low overall numbers, similar proportions of MAB as aspiration patients used an implant.

In our exploration of factors that might account for lower IUD use among MAB patients than among aspiration abortion patients, neither differences in health insurance nor pelvic examination attitudes by abortion type appeared to explain the finding. Instead, it is likely that the delay in LARC placement for MAB patients partially accounts for the contraceptive patterns found.

IUD placement is contraindicated until abortion completion, so MAB patients desiring an IUD must wait until completion is confirmed at the 1–2 week follow-up visit. During the study, MAB patients desiring a long-acting method were asked to wait until after abortion completion for placement, while pills, patches, and rings could be prescribed or dispensed at MAB initiation.⁶ In this study, only 54% of MAB patients returned for the required follow-up visit. While follow-up visits, when indicated, can be difficult for aspiration abortion patients too, 45% of those choosing a long-acting method initiated it on the same day as the abortion. Research has shown consistently higher IUD uptake and reduced pregnancy when same-day services are provided, mostly because many women do not return.^{7–10,13} Interventions to help MAB patients wanting an IUD to actually return to the clinic for placement are warranted.²¹

Our results also suggest that same-day access to the implant for MAB patients may help women who want a long-acting method to actually receive one. Two 2016 randomized trials

demonstrated that implant placement at the time of mifepristone did not compromise abortion effectiveness (the antiprogesterin mechanism) compared with placement after abortion completion.^{11,12} Women receiving the implant at the mifepristone visit had higher initiation within 1 month (100% vs 83%; 99% vs 72%), increased satisfaction, and, in one study, reduced pregnancy.

Accordingly, Planned Parenthood's clinical protocols were updated in June 2016, allowing implant placement at mifepristone administration (PPFA Manual of Medical Standards and Guidelines, 2016). Implant use was low relative to IUD use in this sample (3% implant vs 18% IUD) but was reflective of relative use among contracepting US women (1.3% implant vs 10.3% IUD). Efforts to further update protocols and train providers on the safety of same-day implants, and to educate women on the availability of the implant, are priorities. Injectable use on the day of mifepristone administration may also be appropriate.^{22–24}

This study has limitations. Several factors can affect a woman's desire and ability to obtain a long-acting method after an abortion, and we examined some of them including follow-up visits, insurance coverage, and attitudes about pelvic procedures. However, we were unable to evaluate all explanations. Clinician concern about expulsion or residual tissue at the MAB follow-up visit may also contribute to lower post-MAB IUD placement.^{21,25} Although some women likely changed their minds about the method selected, we know of no reason that MAB patients would do so more than aspiration patients.

A sample of 643 women, 166 of whom had MABs, may have been too small to detect differences in implant use by abortion type, with low overall use. We were also underpowered to examine pregnancy rates. Because all participants at 2 sites had the same abortion type, those sites had no variability in the independent variable. Contraceptive availability or the practices of particular clinicians may have had effects on patient contraceptive use for which we were unable to control. Results may have limited generalizability because the study was conducted in specialized reproductive health facilities in which the postabortion contraceptive practices may differ from other facilities.²⁶

This study addresses an important gap in the literature on contraceptive outcomes by medication or aspiration abortion in a real-world setting. Our use of longitudinal data, including medical records, reduced biases associated with self-report and attrition. Study sites comprised diverse geographic and policy contexts.

In 2016, the US Food and Drug Administration approved an updated, evidence-based MAB label that increased gestational limits and reduced the number of required clinician visits. This action may reinforce the trend of increased MAB use.¹

Our study shows that despite a similar interest, MAB patients are less likely than aspiration patients to receive the IUD after an abortion. In light of recent data showing contraceptive implants can be safely placed at the time of mifepristone without compromising effectiveness, efforts to inform patients of this option, update protocols, and to train providers to offer same-day implants may help improve access. Such efforts will both help to provide a long-acting alternative to the IUD and also to ensure women desiring an implant are able to receive one.

Given the high unintended pregnancy rate for women receiving abortion care, contraception is a salient aspect of clinical care. Importantly, patient education, counseling, and efforts to improve contraceptive access after an abortion must reflect women's preferences^{27,28} and ensure autonomous contraceptive decision making, particularly for long-acting methods.^{14,29,30}

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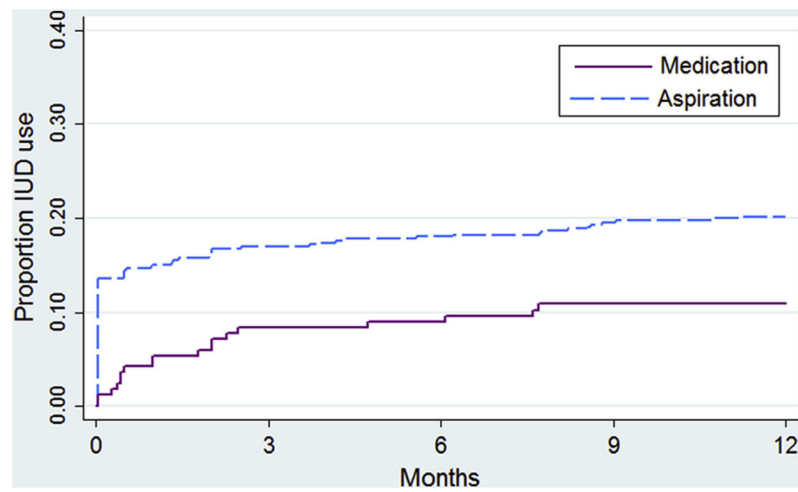


FIGURE 1.

Kaplan-Meier curve of IUD initiation among abortion patients

Kaplan-Meier curve and IUD initiation among medication and aspiration abortion patients.

The figure depicts the proportions of participants initiating an intrauterine device over the 1-year study, by medication vs aspiration abortion.

IUD, intrauterine device.

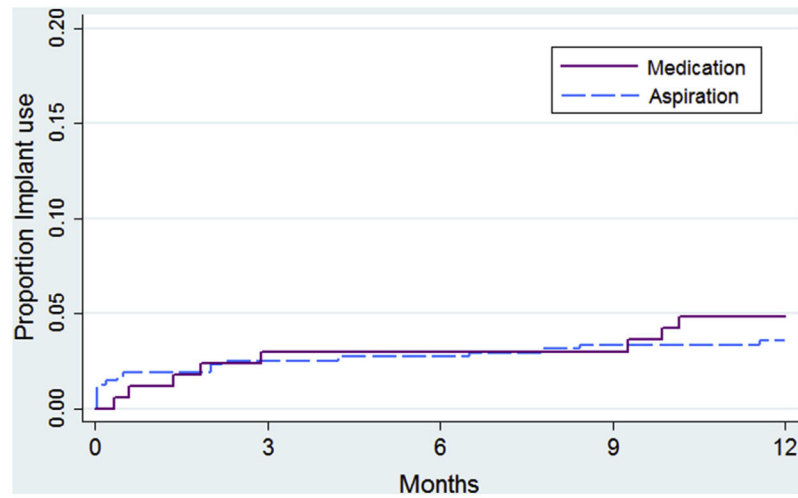


FIGURE 2.

Kaplan-Meier curve of implant initiation among abortion patients

Kaplan-Meier curve of subdermal implant initiation among medication and aspiration abortion patients. This figure depicts the proportions of participants initiating an implant over the 1-year study, by medication vs aspiration abortion.

TABLE 1Baseline characteristics of participants by type of abortion (n = 643)^a

Characteristics	Medication (n = 166)	Aspiration (n = 477)	P value
Participant characteristic			
Age, mean y, SD	21.6 ± 2.0	21.6 ± 2.2	.93
Gestation, mean wks, SD	6.9 ± 1.4	9.3 ± 2.8	<.001
Race/ethnicity			
White	93 (56.0)	256 (53.7)	.51
Black	27 (16.3)	104 (21.8)	
Latina	89 (19.9)	89 (18.7)	
Other	13 (7.8)	28 (5.9)	
Parous (n = 636)	52 (31.5)	205 (43.5)	.07
Most effective contraceptive used prior 3 mo (n=638)			
LARC (IUD or implant)	5 (3.0)	9 (1.9)	.67
Hormonal (short-acting/DMPA)	50 (30.1)	143 (30.3)	
Condom/barrier or no method	111 (66.9)	320 (67.8)	
Happiness if pregnant in next year (n = 634)			
Unhappy or very unhappy	144 (87.3)	395 (84.2)	.27
Happy or very happy	21 (12.7)	74 (15.8)	
Paid for abortion by self or with donated funds (n=633)	121 (75.5)	275 (58.5)	.58
Health insurance (n = 636)			
Public insurance	36 (22.0)	193 (40.9)	.01
Private insurance	69 (42.1)	151 (32.0)	
None	52 (31.7)	117 (24.8)	
Do not know	7 (4.3)	11 (2.3)	
Site characteristic			
Study arm			
Intervention	50 (30.1)	269 (56.4)	.06
Control	116 (69.9)	208 (43.6)	
Medicaid family-planning expansion program is in place	83 (50.0)	320 (67.1)	.12
Medicaid covers abortion care	49 (29.5)	244 (51.2)	.07
Private health insurance is mandated to cover contraception	104 (62.7)	309 (64.8)	.80
Site provides LARC on day of aspiration abortion	104 (62.7)	389 (81.6)	.15

Data are n (percentage) unless otherwise specified.

DMPA, depot medroxyprogesterone acetate; IUD, intrauterine device; LARC, long-acting reversible contraceptive.

^aThe 5 participants with unknown abortion type are excluded.

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TABLE 2

Contraceptive method counseling, choice, and use, by type of abortion

Variables	Total (n = 643)		Medication (n = 166)		Aspiration (n = 477)		aOR ^a	(95% CI)
	n	(%)	n	(%)	n	(%)		
Methods discussed at clinic visit ^b								
IUD or implant (n = 637)	353	(55.4)	84	(50.9)	269	(57.0)	1.09	(0.70–1.70)
Short-acting hormonal (n = 637)	502	(78.8)	138	(83.6)	364	(77.1)	1.29	(0.76–2.18)
Condoms (n = 637)	256	(40.2)	68	(41.2)	188	(39.8)	0.83	(0.50–1.40)
Method chosen at clinic visit (n = 643)								
IUD or implant	186	(28.9)	39	(23.5)	147	(30.8)	0.89	(0.40–2.02)
Short-acting hormonal	371	(57.7)	105	(63.3)	266	(55.8)	0.98	(0.45–2.12)
Condoms/none	86	(13.4)	22	(13.3)	64	(13.4)	—	
Most effective method used, 3 mo (n = 550)								
IUD or implant	100	(18.2)	12	(8.4)	88	(21.6)	0.47 ^c	(0.23–0.96)
Short-acting hormonal	333	(60.6)	102	(71.3)	231	(56.8)	1.10	(0.75–1.61)
Condoms/none	117	(21.3)	29	(20.3)	88	(21.6)	—	

Data are n (percentage) and adjusted odds ratio or adjusted relative risk ratio (95% confidence interval). Aspiration abortion is the reference group for aORs and aRRs. aOR, adjusted odds ratio; aRR, adjusted risk ratio; CI, confidence interval; IUD, intrauterine device.

^a Adjusted models include study arm, age, gestation, race/ethnicity, parity, prior contraceptive use, happiness if pregnant in next year, and health insurance. Funding policy variables were excluded due to correlation with health insurance;

^b Each method assessed separately; thus percentages do not total to 100;

^c _P .05.

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TABLE 3
Counseling, choice, and initiation of long-acting methods after abortion, by abortion type (n=643)

Variables	IUD counseling			IUD chosen			IUD initiation		
	n	%	aOR ^a	(95% CI)	n	%	aOR ^a	(95% CI)	n Rate (per 100 PY) aHR ^a (95% CI)
Abortion type									
Medication	71	43.0	0.93	(0.64–1.40)	30	18.1	0.85	(0.55–1.33)	18 10.9 0.50 ^b (0.28–0.89)
Aspiration	240	50.9	—		117	24.5	—		96 20.2 —
Study arm									
Intervention	197	62.3	3.38 ^c	(2.07–5.51)	88	27.6	1.75 ^d	(1.14–2.68)	53 16.8 0.80 (0.48–1.33)
Control	114	35.5	—		59	18.2	—		61 18.8 —
Implant counseling									
Implant chosen									
Implant initiation									
Abortion type									
Medication	42	25.5	0.90	(0.42–1.93)	10	6.0	1.30	(0.64–2.59)	8 4.9 2.41 (0.88–6.59)
Aspiration	145	30.7	—		33	6.9	—		17 3.8 —
Study arm									
Intervention	126	39.9	2.78 ^c	(1.55–4.99)	30	9.4	2.44 ^d	(1.32–4.57)	15 5.3 1.83 (0.7–4.39)
Control	61	19.0	—		13	4.0	—		10 3.1 —

Data are percentages and adjusted odds ratio (95% confidence interval) for counseling and initiation. Data are rates per 100 person-years and adjusted hazard ratios (95% confidence interval) for initiation. aHR, adjusted hazard ratio; aOR, adjusted odds ratio; CI, confidence interval; IUD, intrauterine device; PY, person-years.

^a Adjusted models include age, gestation, race/ethnicity, parity, prior contraceptive use, happiness if pregnant in next year, and health insurance. Funding policy variables were excluded because of correlation with health insurance;

^b $p = .05$;

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