

Original research article

Women's questions after postabortion insertion of intrauterine contraception

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Abstract

Background: Postabortion insertion of intrauterine contraception has the potential to decrease unintended pregnancy and repeat abortions, but little is known about how to ensure that women receive appropriate counseling about this method in this setting. The goal of this investigation was to document women's questions and to assess retention of information provided during contraceptive counseling after immediate postabortion intrauterine contraceptive placement.

Study Design: Women who received postabortion intrauterine contraceptives (IUCs) at an urban, hospital-based abortion clinic were surveyed 2–3 months postabortion to evaluate for expulsion, assess their concerns about IUC and evaluate retention of information provided during contraceptive counseling.

Results: Of 141 women contacted, 121 participated. Almost half of participants (46%) had responses to the question “Do you have any questions or concerns about your intrauterine device?” that fell into the following categories: spotting/bleeding (16%), cramping/pain (15%), string management (10%), expulsion concern (5%). Seventy percent reported less bleeding during menses than prior to IUC placement, and 37% had less cramping. Sixty-three percent were able to accurately report statistics regarding IUC efficacy, 56% recalled common side effects, and 42% remembered what to do if expulsion occurred.

Conclusion: Although IUCs are highly effective and their placement in the abortion setting is safe, women frequently have questions and do not recall critical counseling information about IUCs. In order to improve IUC continuation, techniques to improve both patient knowledge retention and anticipatory guidance should be studied further.

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1. Introduction

Unintended pregnancy is a significant public health issue in the United States, with over half of pregnancies being unintended [1]. While nonuse of contraception among women who are at risk for unintended pregnancy is one factor contributing to these statistics, an additional concern is that among women using contraception, there is low utilization of the most highly effective methods of contra-

ception, such as intrauterine contraception (IUC). Specifically, of women experiencing unintended pregnancies in the United States, 48% were using a contraceptive during the month of conception [2], with oral contraceptives and condoms being the most common reversible methods used [1]. As both these methods require frequent administration and have failure rates over 10 times that of IUC [3], only 5.5% of women at risk of pregnancy use IUCs [1]. Increased use of more effective methods could have an important impact on unintended pregnancy in the United States, especially when typical use is equivalent to perfect use.

Addressing the contraceptive needs of women undergoing abortion is of particular importance, as almost half of women undergoing abortion in the United States have had a

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prior abortion [4] and women who have had an abortion have an increased risk of unintended pregnancy [5]. Because IUCs are known to be safe and to have high continuation rates when placed immediately after abortion, they are an important option to offer women undergoing termination of pregnancy [6–8]. While immediate placement of IUCs after an abortion has a slightly higher risk of expulsion compared with interval insertion [9,10], planned interval insertion significantly increases the risk that a woman will not return for placement or that she may become pregnant before her next office visit [9,11,12]. Postabortion placement of an IUC is therefore estimated to increase 1-year continuation rates significantly, as compared with delayed or interval insertion (75% versus 52%, respectively), avoiding 52 unintended pregnancies per 1000 women per year [12]. Therefore, postabortion insertion of IUCs has promise in decreasing the high rates of unintended pregnancy and repeat abortion in the United States.

One consideration when advising postabortion IUC insertion is whether women who choose this method are likely to continue it for a substantial period of time. While the available data suggest that continuation rates are reasonably high in postabortion settings, with one study finding 81% continuation at 6 months [7], there is a clear incentive to determine whether there are barriers to IUC continuation that could be addressed by counseling [13]. In the general population of women using IUCs, the most common reasons for discontinuation include changes in bleeding from both types of IUC available in the United States [copper T (CuT) and levonorgestrel intrauterine contraceptive (LNG-IUC)] and dysmenorrhea from the Cu T [14]. While counseling may be one means to address women's concerns about methods and make them aware of potential side effects, the extent to which this counseling is of benefit in general is unclear. Meta-analyses of contraceptive counseling in a variety of settings showed little effect of counseling in changing knowledge, attitudes and behaviors [15,16], and even less is known in the setting of pregnancy termination. The goal of this study is to identify potential areas of improvement of counseling of women having postabortion insertion of IUCs by asking women to detail the questions they have about their method 2 to 3 months after having it placed, as well as to quantify what people remember from their counseling sessions regarding method characteristics.

2. Methods

2.1. Setting

This study was conducted at the Women's Options Center of San Francisco General Hospital, which is university affiliated and serves a diverse, predominantly low-income community.

The clinic performs approximately 2200 surgical abortions each year. Each woman meets with a counselor

individually before her abortion to discuss contraception in detail. Counselors are health educators trained in options and contraceptive counseling. This counseling is individualized for each patient, and those who choose IUCs are given extensive counseling about side effects and method characteristics. Forty-one percent of patients leave the clinic having chosen immediate IUC insertion after the abortion [17].

2.2. Study design

Women who undergo postabortion IUC placement are called approximately 6 weeks later to assess patient satisfaction, expulsion rate and side effects. The IUCs are placed immediately postabortion, and strings generally are cut to a length of 2–3 cm. Patients are encouraged to feel for the IUC strings 3–4 weeks after placement, and every 4–6 weeks thereafter. If they cannot feel the strings, counselors recommend that they make an appointment with a clinician to verify placement as soon as possible and that they use backup contraception until then. They also are encouraged to schedule a follow-up appointment 1 month after their abortion. For this study, we added a protocol to record responses to the question “Do you have any questions or concerns about your intrauterine device?” as well as ask questions about knowledge of topics commonly included in counseling and written materials in the clinic. Responses were transcribed verbatim and were not limited to a single response per patient. We obtained verbal consent for these questions. Three attempts were made to reach the patient by her given contact number. Approximately half were able to be contacted using these methods. This study was approved by the University of California, San Francisco's Committee on Human Research.

2.3. Study population

Inclusion criteria were insertion of an IUC immediately after pregnancy termination, fluency in English or Spanish and being 15 to 44 years of age. Exclusion criteria were incarceration or inability to consent. All patients who met these criteria were asked to participate during this routine follow-up phone call between January and July 2009.

2.4. Measures

After obtaining informed consent, patients were asked the following open-ended question: “Do you have any questions or concerns about your intrauterine device?” Their answers were transcribed verbatim. Their questions or concerns were first addressed by the research assistant and referred to a clinician (M.D. or R.N.) when necessary. Participants were then asked questions adapted from a 21-question survey originally described by Drey et al. [18]. Covered topics included bleeding, pain and satisfaction. The interviewer also asked whether the patient had been to a health care provider to check for the strings and/or had felt for them herself. The participants were asked open-ended questions to measure retention of information provided during the

contraceptive counseling that occurred on the day of their abortion. Patients were asked questions such as the efficacy of IUCs, common side effects, how to check strings and what to do in case of expulsion of the device. Questions were open ended and recorded verbatim in an effort not to suggest correct results. In general, counselors tell patients that the failure rate is less than 1%. However, given the limited health literacy of many of our patients, a correct response was considered a failure rate of <5%.

2.5. Data analysis

All data were collected by SurveyCrafter 4.0 (SurveyCrafter, Boston, MA, USA) and qualitatively analyzed for themes. Open-ended responses were grouped according to topic. The data from SurveyCrafter were imported into Excel (Microsoft, Seattle, WA, USA) for analysis. Quantitative descriptive analysis was performed with Excel.

3. Results

Between January and July 2009, 300 consecutive eligible patients were called, and 141 (47%) women were contacted by telephone. Of those 141 who were contacted, 121 (86%) consented to be in the study (Fig. 1). The women were contacted a mean of 8.7 weeks after their abortion (median, 8 weeks). The mean gestational age of participants was 14 weeks. The majority spoke English (87.5%); 95% had the LNG-IUC placed, and the remainder had a CuT IUC (Table 1).

About half (48%) of study participants asked questions or expressed concerns regarding their new IUC. Concerns were categorized into the following groups (Table 2): spotting or bleeding ($n=20$, 16%); pain or cramping ($n=18$, 14.9%); string management ($n=12$, 9.9%); nausea, dizziness or headaches ($n=7$, 5.8%); concern that it was no longer present ($n=6$, 5%); and logistical questions, such as scheduling a follow-up appointment ($n=4$, 3.3%). Less than 2% of patients voiced concerns about each of the following: discharge, infection, rash and efficacy; 9.1% of patients used the phrase “is this normal?” when voicing their concerns. By the time of the phone contact, almost half of the patients we contacted (58 of 121 or 48%) had seen a provider to check the intrauterine device (IUD) strings. Among women who had seen a clinician to have their IUD checked, 42% had an

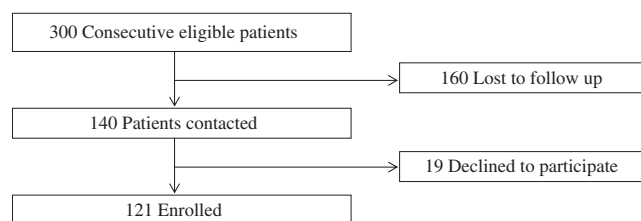


Fig. 1. Diagram of patients enrolled in postabortion IUC insertion follow-up study.

Table 1

Demographic data and IUC type of study participants in an urban abortion clinic

	N	(%)
Women called	140	–
Declined	19	(14)
Enrolled	121	(86)
Type of device		
LNG-IUC	115	(95)
CuT	2	(2)
Unknown	4	(3)
Gestational duration	14.2 weeks	–
Time until phone call	8.7 weeks	–
Have used IUC in past	20	(17)
Language		
English	106	(88)
Spanish	15	(12)

unprompted question or concern. Among those who had not yet seen a clinician, 51% had an unprompted question or concern. Exemplary responses can be seen in Table 3.

Of those women who mentioned up spotting or bleeding ($n=20$), half wanted to know if the amount of uterine bleeding that they were experiencing was normal ($n=10$, 50%) or when they could expect their menses ($n=5$, 25%). Others did not have specific questions, but did report their symptoms as a concern ($n=7$, 35%). Of the women who had questions or concerns about string management, four reported not being able to feel it, three reported that the string bothered them, and two reported that it interfered with intercourse.

Half of patients reported having checked for their IUC strings themselves, and of those who checked, 81% reported having felt them. Of all patients, 76% reported certainty their IUC was in place either by having checked themselves or by having a clinician check. Eighty-two percent of participants with LNG-IUC reported the same or less bleeding during

Table 2

Telephone interview responses for concerns about IUC and side effects

	N	(%)
Questions and concerns	58	(48)
Pain, discomfort or cramping	18	(15)
Nausea, dizziness, headaches	7	(6)
Spotting, bleeding	20	(16)
Discharge	2	(2)
Infection	2	(2)
Rash	2	(2)
Logistical (e.g., problems scheduling follow-up)	4	(3)
Efficacy	1	(1)
Falling out	6	(5)
Strings	12	(10)
Used phrase “is this normal?”	11	(9)
Have you checked your strings? (yes)	63	(52)
If yes, did you feel them? (yes)	51 of 63	(81)
Has IUC been verified in place by provider or patient?	91	(76)
How satisfied are you with IUC?		
Very/somewhat satisfied	111	(93)
Very/somewhat unsatisfied	9	(7)

Table 3

Exemplary interview responses to the query “do you have any questions or concerns about your intrauterine device?”

Category	N	(%)	Example quotes
Spotting or bleeding	20	(16)	<ul style="list-style-type: none"> • I’ve had irregular bleeding and spotting every day. Is that normal? • Right after the abortion I bled for 3 weeks and I’ve had spotting ever since without getting my period. Am I going to get my period?
Pain or cramping	18	(15)	<ul style="list-style-type: none"> • Been having cramps. First month they were bad. I’m still having them. Is that normal? • I don’t like it this time. I’ve never had cramps before and now I know what they feel like.
String management	12	(10)	<ul style="list-style-type: none"> • Why are there strings in my vagina? • My partner feels it. He has a scar on the tip of his penis, and wonders if it’s the IUD.
Nausea, dizziness, headache	7	(6)	<ul style="list-style-type: none"> • I’ve had a headache every day since the IUD. • Could the IUD give me migraines?
Expulsion	6	(5)	<ul style="list-style-type: none"> • I checked the strings and I couldn’t feel them. I’m worried it’s not in the uterus • I can’t feel the strings, but the doctor said it was OK
Logistics	4	(3)	<ul style="list-style-type: none"> • I tried to schedule follow up at the hospital, but couldn’t. • When it has to come out, how long do I have to wait to get another one?

menses than before their abortion and IUC placement. Sixty-five percent of women with LNG-IUC had the same or less menstrual cramping.

Two thirds (63%) remembered information about method efficacy accurately, but only 56% of patients remembered anything about common side effects. Those who did not remember accurately either remembered incorrect information or responded with “I don’t know.” Some responses included “cramping,” “breast swelling” or “headaches.” One woman reported she “wasn’t paying attention — too many things going on. But they gave me lots of pamphlets and I knew I could always look back.” These results were similar among women who had used one of the IUCs previously, with 60% able to remember common side effects correctly. Only 42% of participants remembered what to do if they thought their IUC was expelled. Although most women remembered to contact their doctor, only 42% remembered to use a backup method until a new method was begun if expulsion had occurred.

4. Discussion

Our data show that about half of women who chose an IUC to be placed at the time of their abortion had questions or concerns about their method afterward, with these concerns mostly relating to issues that are addressed routinely during the counseling session at our clinic. The most common concern regarded side effects, including bleeding, with string management also being a common issue. The presence of these concerns despite these women having received extensive counseling suggests many women did not retain information provided during this counseling.

These findings suggest the need for novel strategies to ensure that women have adequate knowledge to prevent unnecessary discontinuation of highly effective, long-acting methods. How best to accomplish this is an area of uncertainty; while contraceptive counseling is a growing area of research, there are limited data about how best to ensure that women have the information they need about

the method they are starting. In a systemic review by Moos et al. [15], contingency planning (providing anticipatory guidance about side effects, pressure to discontinue and difficulty in obtaining the method) was found to decrease pregnancy rates at 6 months, but this effect disappeared by 12 months. Both contingency-planning counseling and motivational interviewing techniques have not been found to have a benefit [19]. As suggested by our study, further investigations should evaluate how to perform counseling about bleeding, side effects and string management in a manner that ensures retention of information and determines whether this counseling has an effect on method continuation. While investigating this counseling, it is important to recognize that counseling in the context of abortion may be different than other situations, as the emotional, cultural and medical context of receiving care may change women’s ability to retain information and affect the concerns that they have. Ultimately, by improving counseling about IUC in the postabortion setting, we may improve method acceptability and potentially increase IUC continuation, with the final goal of decreasing the burden of unintended and unplanned pregnancy.

An additional implication of our study is the potential benefit of the follow-up phone call. There are times when anticipatory guidance and materials given to patients are not sufficient, and by virtue of speaking with the patient, any additional questions or new concerns can be addressed. The majority of concerns regarding side effects were discussed at the time of the phone interview. In addition, patients with logistical questions, such as scheduling a follow-up appointment or device removal, also can be addressed by this phone call. During a time of decreased funding and economic uncertainty, this may be a cost-effective way to enhance continuation. Given that a brief phone call can identify patients who have very basic questions regarding use of their method, this protocol could be applied to those utilizing not only long-acting reversible contraceptives but less effective, user-dependent methods, such as combined oral contraceptives, vaginal rings, patches and injections. An automated text-message- or social-media-based reminder may prove

useful as well as cost-effective. The potential benefit of repeated contacts with patients was emphasized in a recent review by Halpern et al. [20], which suggested that repeated mail and phone call reminders can increase continuation of hormonal contraception at 12 months and result in women being less likely to discontinue for common side effects, although these findings were based on limited data.

The greatest limitation of our study is the relatively high loss to follow-up. This is similar to an attrition rate reported previously in the same patient population [18]. This problem is due in part to the fact that our clinic is a referral center with a large catchment area. Additionally, the patients we serve often travel far, and most have contact information that changes frequently. Additionally, counseling was not standardized, and therefore, we cannot confirm content of the sessions, which may affect why patients remember or do not remember efficacy and frequent side effects.

5. Conclusion

The vast majority of women contacted by follow-up phone call were satisfied with the IUC they had received at the time of their abortion. However, although IUCs are highly effective and their insertion in the abortion setting is safe and appreciated by the women who receive them, women frequently have questions and do not recall critical counseling information about IUCs. In order to improve IUC continuation, techniques to improve both patient knowledge retention and anticipatory guidance should be studied further.

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