Women's Health Issues xxx-xx (2017) 1–7

ELSEVIER

WOMEN'S HEALTH ISSUES

www.whijournal.com

Original article

Effect of Knowledge of Self-removability of Intrauterine Contraceptives on Uptake, Continuation, and Satisfaction

Sarah Raifman, MSc *, Rana Barar, MPH, Diana Foster, PhD

Advancing New Standards in Reproductive Health, University of California, San Francisco, Oakland, California

Article history: Received 11 January 2017; Received in revised form 20 July 2017; Accepted 28 July 2017

A B S T R A C T

Objective: Preference for control over use is a consideration in choosing a contraceptive method. Counseling women on the possibility of intrauterine device (IUD) self-removal may increase interest in the method. This study tests whether counseling on self-removability as a stated feature of IUDs affects uptake, satisfaction, and continuation.

Study Design: We monitored clinic-level data on IUD uptake at clinics in Michigan, Missouri, New Jersey, and Utah over 6 months. During the first 3 months, counselors provided standard contraceptive counseling. During the second 3 months, they added information about IUD self-removal. Women who initiated IUD use in both periods were recruited and asked to complete baseline and follow up surveys at 3 and 6 months after insertion. Among 361 women who had IUDs inserted during the study, we compared outcomes for women who did and did not receive information about self-removability during contraceptive counseling. We conducted descriptive analyses to test for differences by group and used logistic regression and survival analysis to assess discontinuation.

Results: There were no differences in IUD uptake, satisfaction, or discontinuation by receipt of self-removal information. Those who did not receive information about self-removal were more likely to report considering discontinuing use of the IUD. One-third of participants who considered discontinuation faced barriers to IUD removal. Knowledge of self-removability before the study was high in both groups, reducing our ability to find group differences.

Conclusions: Counseling women on the possibility of self-removal may empower women when they face barriers to removal at facilities. More research is needed to understand whether knowledge of self-removal increases uptake and continuation.

For many women, control over use may be a critical factor in choosing a contraceptive method (Asker, Stokes-Lampard, Beavan, & Wilson, 2006). Among a combined sample of 602 abortion patients and 1,530 family planning clients with no history of abortion, one-half said that being able to stop using a method at any time is extremely important and about one-third said it was somewhat important (Lessard et al., 2012). Evidence suggests that women from various subgroups, including Black, Latina, and young women, are more likely to report lack of control over use as a significant barrier to adoption of the method (Sonfield, 2007; Jackson, Karasek, Dehlendorf, & Foster, 2016). An Internet-based study of 1,982 female college students found that 42% of participants indicated that they preferred a "controllable" method (Hall et al., 2016). In a qualitative study of patients at two clinics in The Bronx, study participants mentioned concern about the lack of personal control and dependence on a health care provider for insertion and removal when asked about their concerns about the IUD (Rubin & Winrob, 2010).

Methods that offer women control over discontinuation have relatively high typical use failure rates: condoms, 15%; diaphragm, 12%; and hormonal contraceptives such as the pill, patch, and ring, 9% (Hatcher, 2012; Trussell, 2011). In comparison, with a failure rate of less than 1% per year, the effectiveness of intrauterine device (IUD) contraceptives is superior to these methods (Trussell, 2011). Removal of an IUD usually entails a visit to the doctor's office. Requiring a clinician to remove an IUD is viewed as a disadvantage by many women (Asker et al., 2006; Foster, Karasek, Grossman, Darney, &

Funding Statement: This work was supported by The William and Flora Hewlett Foundation [grant #2012–7378].

Conflicts of Interest: The authors have no conflicts of interest to disclose.

* Correspondence to: Sarah Raifman, MSc, University of California, San Francisco, Advancing New Standards in Reproductive Health, 1330 Broadway, Suite 1100, Oakland, CA 94612. Phone: 510-986-8974; fax: 510-986-8960.

E-mail address: sarah.raifman@ucsf.edu (S. Raifman).

1049-3867/$ - see front matter © 2017 Jacobs Institute of Women's Health. Published by Elsevier Inc.
http://dx.doi.org/10.1016/j.whi.2017.07.006

Schwarz, 2012) and may limit women's interest in the method. Recent qualitative evidence on women's experiences seeking elective IUD removal shows that providers sometimes resist or refuse to remove IUDs, particularly when the provider does not believe the patient's reasons for removal to be legitimate (Amico, Bennett, Karasz, & Gold, 2016; Higgins, Kramer, & Ryder, 2016).

Informing women that they may safely attempt IUD self-removal on their own may increase interest in trying an IUD and give women more autonomous control over their reproduction. In 2010, we surveyed 600 women who had an abortion and asked whether they would be interested in a hypothetical self-removable IUD. One-quarter of these women (25%) said they would be more willing to try an IUD if they could remove it themselves, a percentage much higher than IUD uptake at those clinics (Foster et al., 2012). Among women who were not considering use of an IUD, 17% said they would be more likely to consider its use if they knew they could remove it themselves (Foster et al., 2012). In 2013, more than one-half of 326 women seeking IUD removal from five U.S. medical facilities indicated that they were willing to try self-removal (Foster et al., 2014). Although only 20% of those who attempted self-removal were successful, an outcome highly associated with the length of the removal threads, 54% reported they were more likely to recommend IUD use to a friend now that they knew about the possibility of self-removal. Black women had a four times higher odds of recommending the IUD to a friend if its features included self-removability compared with removal done by medical provider (Foster et al., 2014).

We hypothesize that the possibility of self-removal might increase IUD uptake, continuation, and user satisfaction by increasing women's actual and perceived control over when and how they can discontinue IUD use. This study tests whether adding self-removal as a stated feature of IUDs in contraceptive counseling would encourage more women to adopt the method and affect continuation rates and satisfaction with the method. We compare outcomes of women who received information about self-removability during contraceptive counseling with outcomes of women who did not receive information about self-removability during contraceptive options counseling.

Methods

To assess the effect of knowledge of self-removal, we monitored IUD uptake at family planning clinics in Missouri, Michigan, New Jersey, and Utah between September 2013 and June 2015. We analyzed two sets of data for this study: 1) clinic reports of IUD placements in the control and intervention periods, and 2) surveys completed by women who received an IUD during the control and intervention periods. At each site, recruitment took place over the course of 6 months. During the first 3 months, women at contraceptive counseling visits received routine clinic counseling (control group) and during the second 3 months women at contraceptive counseling visits received information about self-removal in addition to regular counseling (intervention group). Counselors used a standard script for the additional counseling and provided participants with a flyer about self-removal. The flyer informed intervention group participants that they may be able to remove the IUD themselves and indicated that, "some women prefer to remove their own. Not all women who try to remove their own IUDs are successful." The flyer also cited a recent study, which found that there are a few ways to increase the chances of a successful self-removal, including using longer IUD strings, using gloves, and squatting or lying down (Foster et al., 2014). In both the control and intervention periods, women received counseling before deciding on their contraceptive method and consenting to participate in the study. Those who subsequently elected to use an IUD were then asked to participate in a 6-month study on contraceptive attitudes and continuation and to complete a baseline survey. Most sites provided IUD insertion on the same day as counseling; for those that did not, women were assigned a study group based on when they received counseling (either in the intervention or control period), rather than when they received their IUD.

To be eligible, study participants were required to be English- or Spanish-speaking women aged 18 years and older, who indicated that they wanted to initiate the IUD after contraceptive counseling. Participants were recruited from four clinics each in New Jersey and Utah and one clinic each in Michigan and Missouri. Sites were chosen for their geographic and demographic diversity, as well as the clinics' willingness to amend counseling protocols to include information about self-removal. Participation entailed completing a baseline survey on an iPad or laptop in the

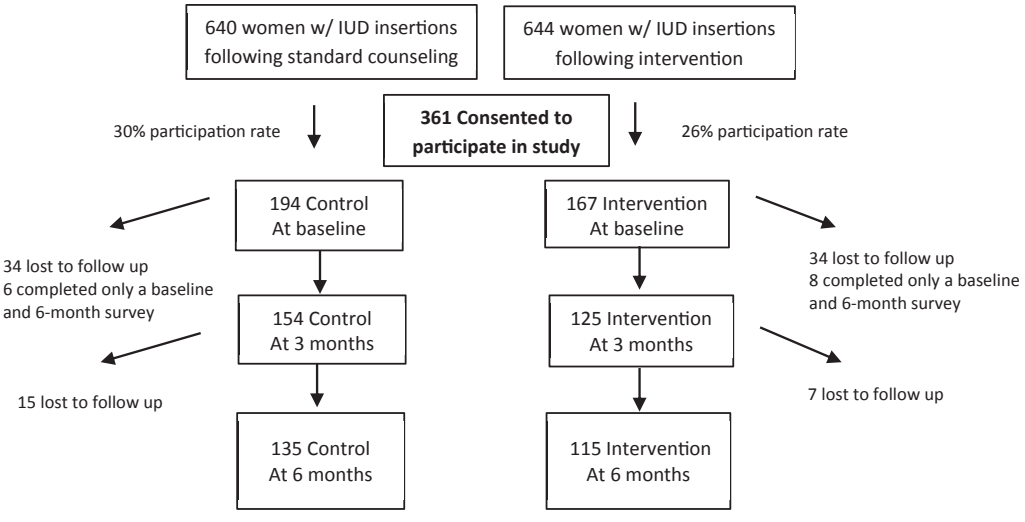

Figure 1. Recruitment flow. IUD, intrauterine device.