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Women's Social Communication About IUDs: A Qualitative Analysis

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Abstract

CONTEXT—Few U.S. women use an IUD, despite the method's efficacy and ease of use. While studies have found that misconceptions about IUDs are prevalent, few have examined the influence of women's social networks on perceptions of the method.

METHODS—Twenty-four interviews and three focus groups (comprising 14 participants) were conducted in 2013 with a diverse sample of women aged 15–45 recruited from family planning clinics and the community in San Francisco. Half of participants had used IUDs. Women were asked about their social communication concerning contraceptives, particularly IUDs, and about the content of the information they had received or given. Transcripts were analyzed using a modified grounded theory approach to identify themes of interest.

RESULTS—Women reported that communication with female friends and family members was a valued means of obtaining information about contraceptives, and that negative information (which often was incorrect) was more prevalent and memorable than positive information in such communication. Women heard about negative experiences with IUDs from social contacts and television commercials; clinicians were a major source of positive information. Women who had

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never used IUDs expressed interest in learning about potential side effects and how IUDs feel, while users reported emphasizing to friends and family the method's efficacy and ease of use.

CONCLUSIONS—Misinformation and negative information about IUDs are prevalent in social communication, and the information transmitted through social networks differs from the information never-users wish to receive. Findings support the creation of peer-led interventions to encourage IUD users to share positive personal experiences and evidence-based information.

Unintended pregnancy remains an important public health problem in the United States, contributing to poor outcomes for women and children at substantial societal cost.¹⁻³ The burden of unintended pregnancy disproportionately falls on young, poor and minority women.⁴ Increased use of effective contraceptives has the potential to dramatically reduce the rate of unintended pregnancy.⁵ IUDs, in particular, have recently gained traction as a means of addressing the country's stubbornly high unintended pregnancy rate. IUDs are at least as effective as female sterilization, yet are a fully reversible method of contraception.⁶ Unlike condoms or short-acting hormonal methods (such as oral contraceptives), IUDs present no risk of failure due to user error or poor adherence. Despite the method's advantages, only 8% of U.S. women who practice contraception use IUDs.⁷

The low rate of IUD use in the United States is likely related to a variety of factors, including lack of provider knowledge,⁸ patient preferences for methods with particular characteristics⁹ and high up-front costs, which can be as much as \$1,000.¹⁰ Widespread misconceptions and concerns about the method are additional contributors.¹¹ These misconceptions and concerns may be influenced by women's social networks, through such means as the diffusion of negative information, lack of diffusion of positive information, and generation and maintenance of social norms related to the use of the method.^{12,13} Studies conducted in developing countries have provided evidence that social networks and social communication influence women's attitudes about contraception^{14,15} and their use of modern methods.^{16,17}

Little research has been done in the developed world, however, to investigate how social networks influence attitudes toward and use of contraceptive methods in general, and of IUDs in particular. In qualitative studies, women have reported that although social networks and the media frequently provide misinformation about contraceptive methods,^{13,18-20} they consider information received through social contacts more trustworthy than information from medical providers.^{13,18,19} In addition, a quantitative study that used cross-sectional data from 1994 found that the likelihood that adolescents were using contraceptives was positively related to the number of their classmates who were doing so.²¹ One U.S. study examined the content of women's social communication about contraception, but it focused primarily on oral contraceptives, and its study population was a small sample of college women.²² The two studies that have focused on IUDs found that having heard about a friend's or an abortion clinic counselor's positive personal experience with the method was associated with uptake²³ and positive perceptions²⁴ of the IUD; however, these studies were quantitative and did not explore the content of social communication.

In this study, we sought to obtain greater understanding of how information about contraceptives, particularly IUDs, is spread through social networks and how this information influences women's attitudes. We chose a qualitative approach because the richness and depth of the resulting descriptive data about the content of women's discussions allowed us to gain a more nuanced picture than would likely be possible with quantitative methods. A better understanding of the types of information that are spread in women's social networks, how this information is perceived by members of these networks and the types of information sought by women who have never used an IUD can help family planning providers tailor their contraceptive counseling to better address women's needs.

METHODS

Sample

From April to July 2013, women aged 15–45 were recruited from two San Francisco family planning clinics that serve a racially and ethnically diverse population of low-income patients. To include the experiences of women not actively seeking family planning services, we also recruited women via flyers posted at local bus stops and community centers. The research team monitored recruitment in order to ensure that the sample was racially and ethnically diverse, included women of various ages and had roughly equal numbers of current IUD users and never-users.

Women were eligible to participate if they had ever been sexually active with men, spoke English, were not pregnant or seeking pregnancy, and had never been told by a clinician that they were unable to conceive. In addition, IUD users had to have been using the method for at least a month, to allow time for them to process their experiences as users. Study procedures were approved by the institutional review board of the University of California, San Francisco.

The participation rate was not formally tracked. Approximately one-sixth of women who were approached in clinics declined to participate, citing scheduling conflicts such as work or child care obligations.

Procedures

To recruit participants at clinics, a female research assistant approached women who were waiting to see a clinician and asked if they were interested in learning more about a birth control research study. If the patient was interested, the research assistant conducted an eligibility screening; if eligible, the woman provided written informed consent before taking part in a half-hour semistructured interview or a one-hour focus group facilitated by the study coordinator. For potential participants recruited from community settings, eligibility screening was conducted over the phone, and written informed consent was obtained at the time of the interview or focus group.

We intentionally included at least one current IUD user in each focus group, which allowed us to simulate real-world social communication and observe how current users presented their experiences to peers and what questions never-users had for experienced users. Before each interview or discussion, participants completed a brief demographic questionnaire.

Recruitment was staggered between interviews and focus groups: After we had conducted several interviews, recruitment efforts shifted to a focus group and then back again. The interview and focus group discussion guides were structured around a common core of identical questions. They began with prompts regarding social communication about contraception in general and about preferences for learning more about new contraceptive methods. We then inquired specifically about participants' experiences with and preferences for communication about IUDs. In this study, we defined social communication as any nonclinical source of information, including friends, family, acquaintances and the media. All questions were open-ended, and facilitators used follow-up probes to explore emerging themes. For example, to gauge first impressions of IUDs among never-users, facilitators asked, "What do you think about the IUD?" and "What have you heard about it?" IUD users were asked, "How did you first learn about the IUD?" and "How did you decide to start using the IUD?" The discussion guide was modified throughout the process of data collection as themes emerged.

Focus groups and interviews were recorded with the participants' permission and transcribed using Health Insurance Portability and Accountability Act-compliant services. Analysis occurred in tandem with data collection; the latter concluded when thematic saturation was reached.²⁵

Analysis

The interview and focus group transcripts were analyzed using NVivo 10 software. We chose a modified grounded theory approach²⁵ to analyze the data because it gave us the flexibility to focus on ideas that emerged during data collection and analysis, and we devised a coding structure based both on preexisting themes of interest (e.g., the saliency of positive and negative information) and on newly identified ones (e.g., the value of hearing about someone's personal experience with a method). After independently coding several transcripts, the members of the research team met to revise the coding structure as indicated by emerging themes. We drafted memos to document our thoughts about newly identified themes throughout data collection and analysis, and added and revised coding categories as needed in an iterative manner. Each transcript was independently coded by at least two research team members, who compared their coding and met with the principal investigator to discuss and resolve any discrepancies.

RESULTS

Sample

Thirty-eight women participated in the study; 24 completed a one-on-one semistructured interview, and 14 participated in one of the three focus groups. The sample was diverse with respect to race and ethnicity (34% were black, 32% white, 24% Latina, 8% Asian and 2% members of other racial or ethnic groups) and age (21% were 15–19, 34% were 20–25 and 45% were 26 or older). Of the 29 participants who were old enough to have graduated from high school, 34% had no postsecondary education, 34% had attended college but did not have a degree and 31% had a college diploma. Approximately half of women were parous. All women had used some type of contraception; half had ever used an IUD.

We present the results organized thematically in the order in which they were discussed. When quoting participants, we identify them by their age and IUD experience, except for focus group participants, whose characteristics were not linked to discussion transcripts.

Social Communication About Contraception

All interview participants were asked to recall the last time they had had a conversation about birth control with someone other than a doctor or nurse. Sixteen of these 24 women named a female friend or acquaintance as their most recent contraceptive discussant; five others named a female family member, such as their mother or sister. Only three participants named a boyfriend or husband as the person with whom they had most recently discussed contraception; of these women, just one had specifically discussed the IUD with her partner. One participant noted that birth control was “a normal thing to talk about” with her friends, and described her most recent conversation on the subject:

“It was not too long ago, because we talk about it, like, normally.... We were... on a bus and stuff and talking, because I know I just told her, ‘I’ve got to go to the clinic to get birth control.’ And then we just starting talking about it, like, our past and then what we’d want as birth control.”—*18-year-old former IUD user*

When asked how they were affected when friends told them good or bad things about a contraceptive method, participants said that negative stories were more memorable and influential than those about women who had successfully used a method. For example, a story of someone who experienced an adverse effect or unwanted pregnancy with a method was considered more memorable than a story of someone who successfully used birth control to avoid pregnancy. As one participant explained, one assumes that birth control will work well, so unexpected adverse events are more noteworthy:

“Nobody really talks about the good things [about birth control] ‘cause it’s, like, ‘Oh, it’s supposed to do that.’ It’s when the bad things happen that people are, like, ‘Aaah! Don’t do it!’”—*26 year-old never-user*

Another participant explained how hearing about a negative aspect of a contraceptive method helps her rule out that method when weighing options:

“As I’m looking to try something and I hear anything negative about it, it’s like shopping. You want the perfect thing. You don’t want something that’s not functional. You don’t want something that doesn’t look right, you know. So it’s easier to...take stuff off the list than put stuff on.”—*Focus group member*

However, many women acknowledged that everybody is different and that they did not necessarily assume that their experiences would be the same as other women’s. This concept was mentioned in about 70% of interviews and in two of the three focus groups. A 26-year-old never-user stated that although she was considering the Mirena levonorgestrel IUD, she knew that other women’s positive experiences might not apply to her because “everyone’s body is different, [and] the only way I’ll know [if it’s a good method for me] is if I try it first.”

The perceived value of hearing about other women's experiences was evident: In 83% of interviews and two of the three focus groups, women said they preferred to learn about a contraceptive method from a woman who had used it herself. Participants valued and trusted a personal recommendation from a friend. The desired setting for a conversation about contraception was in person, in a private or semiprivate setting with a close friend. One participant explained that when evaluating birth control methods, she preferred to hear about a friend's experience with a method:

“If you have a friend that's actually tried [the method] and they can share their experience with you, then it kind of gives you, like, a more open mind about it.”—
25-year-old former IUD user

Although our discussion guide focused on communication in nonclinical settings, many women who said that they would like to hear about a method from a friend who had used it also said that they would seek additional information and validation from a health care provider. In fact, some women described their female clinician as playing the dual role of trusted clinician and experienced IUD user when the provider disclosed her own IUD use. Women felt that it was appropriate for providers to share their experiences and stated that clinician self-disclosure positively influenced their decision to use IUDs. One woman reported that learning that her clinician was an IUD user made her more confident in choosing the method:

“It really sold me on [IUDs],...hearing firsthand experiences... [from] a doctor, who has all the options. To get a recommendation from someone like that is...it's just nice to have that kind of educated opinion on it.”—*24-year-old IUD user*

Social Communication About IUDs

Interview and focus group participants were asked, “What have you heard about IUDs?” In describing social communication from nonclinical sources (friends, female family members and the media) regarding IUDs, participants reported more negative comments (93 references) than positive ones (67 references).

Negative topics—The most common negative topics mentioned during social communication were related to the IUD's perforating the uterine wall, migrating or becoming embedded in the uterine wall (seven participants); side effects, such as cramping (three participants) and heavy bleeding (two participants); problems with return to fertility (five participants); method failure (five participants); and the injuries and deaths caused by the Dalkon Shield²⁶ (five participants). One 18-year-old former IUD user stated that she had heard stories of deaths caused by IUD use, including one of a girl whose IUD “went up... into her uterus and killed her.” Although she was unsure if the stories were true, she said, “That's why I had to get [my IUD] taken out, because I'd been hearing stories.”

Television commercials were the most commonly mentioned source of negative information, cited by 10 participants. The content of the commercials, described by some women as lawsuit advertisements targeting the levonorgestrel IUD, prompted some women to consider having their IUD removed and influenced never-users to rule out the method. In some cases, the participant had seen the commercial herself; in others, she had been

contacted by a friend or family member who had seen the commercial. The stark contrast between information received from a clinician and that received from nonclinical sources is illustrated by the following comments of a focus group participant:

“About four months ago I had my daughter. I went [to the clinic], and [my doctor] recommended the Mirena. I told her I’d think about it, and then I saw the commercial. And then I didn’t think about it anymore.”

Another participant in the same focus group echoed concerns about a clinician’s recommending a method that other sources claimed to be dangerous or even deadly:

“I need to know about the health risks. Like, I went to the doctor, and the lady [said], ‘You should get Mirena; I recommend it.’ And then the other day, I seen it on a commercial talking about, ‘It could cause death.’ I’m, like, ‘What the fuck? She’s trying to kill me.’”

Additional sources of negative information regarding IUDs included friends (cited by 11 participants), mothers (five participants) and other female family members (nine participants). Mothers, aunts and other female relatives were sources of negative information related to the Dalkon Shield:

“I know my mother had an IUD. I think she called it the Dalkon Shield or something back in the day....And she said that, like, something happened and, like, she almost died from it.”—*29-year-old IUD user*

Five participants had heard of someone who became pregnant while using an IUD—in two cases a friend, in another a family member, in one case a friend’s aunt, and in the fifth, an unspecified person. One participant said that although she had heard about a pregnancy experienced by a woman using a levonorgestrel IUD, this did not dissuade her from trying the method herself:

“A friend of mine was telling me a story about her aunt. She told me that she went through a pregnancy with the Mirena. And she said it was risky, or whatever, so I did think about it before I got it done.”—*22-year-old IUD user*

Positive topics—While negative social communication tended to concern a rare event happening to an individual woman, positive social communication typically focused on method characteristics. The most commonly mentioned positive topics were the IUD’s high efficacy (eight participants) and long-lasting protection (seven participants), and the potential for amenorrhea with the levonorgestrel IUD (five participants). Four women had heard about the IUD’s efficacy from a clinician, and three from their sisters. The primary sources of information about the IUD’s length of action were clinicians (three mentions) and female friends (two mentions). A focus group participant shared the story of how she first learned about the benefits of IUDs from a close friend who used the method:

“I heard about [IUDs] through...a good friend of mine, because I started getting [sexually] active. And I have a whole life ahead of me before I want to get pregnant. And she was like, ‘Well, I have the IUD. You should get the IUD. And it’s free if you go to the clinic.... You know, it’s good because it’s five years. You don’t have to keep track [of] taking this pill.’”

IUD users' experience of social communication—Women who had ever used an IUD were asked, “Do you ever talk about your IUD with your friends?” and “What do you tell them?” Follow-up probes were used to gauge their perceptions of their friends' reactions to the information they had shared about the IUD.

Almost 80% of current or former IUD users had recommended the method to friends or family. Some women relayed stories of friends who decided to get an IUD on the basis of their recommendation, and some had accompanied a friend to her insertion appointment. The women who recommended IUDs reported introducing the topic during a discussion about a friend's pregnancy scare or her problems with her current method. Several women said that the impetus for their recommendation was hearing a friend's daily reminder alarm to take their oral contraceptive:

“When someone's alarm goes off and [she says], ‘Oh, I've got to take my birth control,’ like, I'll mention [IUDs].... I just feel like I'm so lucky, that...I should probably spread the word.”—*23-year-old IUD user*

Another IUD user recommended the levonorgestrel IUD when a friend complained about the weight she had gained while using an injectable contraceptive:

“One of my friends, she had the Depo. She blew up....She was saying, ‘What kind of birth control are you on?’ I was like, ‘Well, I'm using the Mirena right now.’ And, like, ‘Oh, okay. I might try that.’ So, I guess she just got fed up with it, and she just started to try [an IUD]. And then [another] friend asked her. And then it's like this—it's like a chain reaction.”—*29-year-old IUD user*

Three former IUD users who had had their devices removed because of side effects stated that they had shared their negative experiences with friends and family.

The most common messages current IUD users reported sharing with their friends were the method's high efficacy (seven participants), the potential for amenorrhea (six participants) and the advantage of not having to remember to take a pill every day (five participants). Users said that their most frequent approach when recommending the method to friends was to describe how effective it is at preventing pregnancy:

“I tell them how good that is and how they should get it because then they won't have to deal with anything. Like, that's like a damn near 100% if you don't want to get pregnant.”—*23-year-old IUD user*

Never-users' questions about IUDs—To assess the types of communication women who have never used an IUD would like to receive from their social network, we asked such women, “Imagine you could talk to someone who has used an IUD—what would you want to ask them?” We also asked IUD users about the most common questions they fielded from friends regarding their experience with IUDs. Both questions were asked in focus groups and interviews.

The most common question that women with no IUD experience had for IUD users was, “How does it feel inside?” This question was reported by eight never-users and nine users.

For example, an 18-year-old never-user said, “I would ask how it feels and how your partner feels it.”

The next most common question was “Is the insertion painful?” (five never-users, 10 users). Never-users also wanted to ask users if their partners could feel the IUD (four never-users, four users) and if users experienced any side effects (eight never-users, two users) or changes in their menstrual cycle (six never-users, eight users). Two women who had used the method summarized their friends’ most common questions about IUDs thus:

“[Friends asked me]...’Did it hurt when they put it in? Or does it hurt now that it’s inside you? Or do you feel it? Does your partner feel it?’”—*18-year-old former IUD user*

“They usually ask me, ‘Can you feel it?’ Every first thing they ask me, ‘Can you feel it?’”—*22-year-old IUD user*

Some never-users expressed concern about the safety of having a foreign body inside their uterus:

“I mean, for like a little plastic thing,...wouldn’t it like rot or something in there? I don’t know? Like, wouldn’t it rust?”—*21-year-old never-user*

Efficacy and long-acting protection were less often mentioned as important characteristics of a contraceptive method by never-users. Fewer than half mentioned efficacy when asked what they would like to know about a new birth control method or about IUDs in particular. Participants reported a perception that all methods of birth control are equally effective. In addition, women were not interested in asking about the long lifespan of an IUD. In fact, those who did mention this characteristic viewed it as undesirable; one participant voiced wariness of what she viewed as the inability to easily discontinue IUD use:

“It’s not permanent, but it’s kind of—it’s long-term permanent...With the pill or anything, you could take it for a month and be, like, ‘Ah, this isn’t for me,’ and just stop...I might change tomorrow and say, ‘I want a kid.’ I don’t know. Who knows?”—*26-year-old never-user*

DISCUSSION

Our analysis provides insight into the influence of women’s social networks on contraceptive attitudes and behaviors. We found that social communication about contraception is common: Participants reported having discussed contraception with female friends or family members. Few women described communication with partners, a finding that contrasts with recent work suggesting that male partners play an important role in contraceptive decision making.^{27,28} Women valued hearing about other women’s personal experiences with contraceptive methods, and reported that negative information was more influential than positive information. There was a disconnect between what nonusers desired to hear about IUDs and the information they received through their social networks and from clinicians. Although other studies have assessed women’s knowledge about contraception,^{11,13,24,29} the content and influence of their nonclinical conversations about IUDs and other contraceptives has received little attention. Moreover, little research has

been conducted on the influence of women's social networks on the contraceptive attitudes and behaviors of U.S. women. These findings can help inform future interventions to increase knowledge and awareness of IUDs in both clinical and nonclinical settings.

Study participants frequently mentioned that when they were evaluating their contraceptive options, receiving information from women who had used a particular method was important. This is consistent with a study in which many oral contraceptive users reported that they had chosen the method because their friends were users, and that they would be unlikely to try a new method if they did not know anyone who used it.²² As only 8% of contraceptive users in the United States are using an IUD,⁷ many women may not have anyone in their immediate social network who uses the method. In addition, not all IUD users share information about their contraceptive choices with their social contacts, further limiting dissemination of information and, perhaps, uptake of the method.

Women reported that sometimes clinicians not only served as a trusted source of information but also discussed their own IUD use, and that this disclosure was appropriate and influential. A qualitative study of British women seeking contraceptive care yielded similar findings, as women assumed that female health professionals (whether doctors, nurses or midwives) were contraceptive users and that they understood the physical experience of a contraceptive method.³⁰ In another study, women at a U.S. abortion clinic were more likely to choose an IUD if their family planning counselor disclosed that she used the method.²³ These findings are consistent with reports that uptake of a novel behavior is elevated among those who interact with multiple individuals who encourage or model the behavior,^{31,32} and suggest that women may be more likely to consider an IUD if they have a friend who uses the method or if a trusted female clinician recommends it. Receiving information and advice from more than one source—such as from both a friend and a clinician—may be particularly influential.¹⁴

Women in our study reported receiving both positive and negative information about contraceptives from their social network. However, they had heard more negative than positive information about IUDs. Participants also said that negative information was more memorable than positive information. These findings may reflect that a positive experience, such as the use of a contraceptive method without having side effects or an unwanted pregnancy, may be perceived as an expected outcome and therefore less noteworthy than a negative occurrence. Stories about experiencing a pregnancy with an IUD in place may be particularly striking because of the physical ramifications of having both a developing fetus and a medical device in one's uterus.

Our analysis revealed potential disconnects between the information that IUD users convey in their social communication and the information that never-users wish to receive. Never-users typically wanted to ask users about the physical experience of using an IUD, such as the feeling of having a foreign body inside the uterus and the possibility that their partner would feel the device. In contrast, women who had IUDs tended to talk about the method's benefits, notably its long-lasting protection, effectiveness and ease of use—characteristics that never-users did not consider significant incentives to adopt the method. Importantly, participants reported that these characteristics are the ones that clinicians highlight;

moreover, they are the characteristics commonly emphasized in the medical literature.³³ These findings suggest that both clinical and social communication about IUDs, even from satisfied users, may be failing to address women's most prominent questions and concerns, and may therefore be contributing to the low rate of use of this method in the United States.

Several study participants mentioned receiving a positive recommendation from a clinician but hearing from a TV commercial or a friend that IUDs can cause serious harm. As our participants explained, such conflicting information could cause women to distrust their clinicians by creating the impression that the clinicians are recommending an unsafe method; this could have implications for women's future interactions with family planning providers. The potential for distrust of clinicians may be especially high among poor and minority women, for whom there is a history of reproductive coercion, including forced sterilization.^{34,35}

While users and clinicians tended to emphasize the method's efficacy in their communication, never-users rarely mentioned that this characteristic was important to them. This disparity deserves special consideration, given that efficacy is the characteristic that has spurred the ongoing interest among providers and researchers in promoting use of this method in the United States. Our findings are consistent with research suggesting that the general public has a poor understanding of the relative efficacy of different methods; one study, for example, found that half of unmarried young people believed that the pill is at least as effective as the IUD.²⁹ This lack of understanding could explain why never-users do not consider efficacy to be an incentive to use IUDs, and suggests the importance of further research to investigate how best to communicate to women the relative efficacy of different methods.

Our results have implications both for contraceptive counseling and for nonclinical interventions designed to ensure that women have the information they need to determine whether an IUD is a good choice for them. Specifically, our findings on the frequency and saliency of contraceptive communication outside of the clinical setting illustrate the potential for social network-based interventions to increase awareness and uptake of IUDs by harnessing the powerful role of these networks in women's contraceptive choices. Given that negative information may be more common, or at least more memorable, than positive information in social communication about IUDs, social network interventions should encourage satisfied IUD users to share information about their positive experiences and to dispel misconceptions about the method. These interventions could advise IUD users to address the common questions posed by nonusers. Peer-led interventions have been successfully used to promote positive health attitudes and behaviors in other populations. For example, barbershop-based communication interventions increased knowledge of prostate cancer and promoted informed decisions about prostate screening among black men,^{36,37} and the popular opinion leader model, which uses peer leaders to endorse behavior change in social networks, reduced the prevalence of HIV risk behaviors among men who have sex with men.³⁸

Our findings suggest that providers may be better able to address women's concerns about IUDs if they inquire about the information women have received through their social

networks. Providers can also work to ensure that their counseling addresses women's concerns about IUDs, such as safety, in addition to conveying the method's benefits; failing to address such concerns could breed distrust among patients. Showing women a model device and how it is inserted and positioned in the uterus may help them understand the logistical issues related to IUD use, and assure them that the device is unlikely to fall out or move around the body. Providers should also acknowledge concerns related to the method's long-acting nature by discussing the ease of removal, including, perhaps, the possibility of self-removal.³⁹ Finally, providers should communicate the comparative effectiveness of different contraceptive methods when discussing the highly effective nature of this method.

Limitations of this study include that our sample was composed predominantly of minority women recruited from urban San Francisco family planning clinics that serve low-income populations, or from the surrounding community, which may reduce generalizability. Specifically, these findings may not translate to non-English-speaking women or to women in other socioeconomic groups. In addition, while we attempted to simulate real-world social communication about IUDs in the focus groups, we were unable to observe such communication outside of the focus group environment, and instead relied on self-reports of social communication.

Conclusion

Our findings suggest that women frequently discuss contraception in nonclinical settings, and that this communication may influence their decisions regarding use of IUDs. Interventions that aim to support and encourage positive, accurate peer-to-peer communication about IUDs (particularly between users and never-users) and to improve counseling (to more directly address women's concerns) may be promising approaches to increasing acceptance and uptake of this highly effective reversible method.

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References

1. Gipson JD, Koenig MA, Hindin MJ. The effects of unintended pregnancy on infant, child, and parental health: a review of the literature. *Studies in Family Planning*. 2008; 39(1):18–38. [PubMed: 18540521]
2. Trussell J. The cost of unintended pregnancy in the United States. *Contraception*. 2007; 75(3):168–170. [PubMed: 17303484]
3. Kost K, Landry DJ, Darroch JE. The effects of pregnancy planning status on birth outcomes and infant care. *Family Planning Perspectives*. 1998; 30(5):223–230. [PubMed: 9782045]
4. Finer LB, Zolna MR. Shifts in intended and unintended pregnancies in the United States, 2001–2008. *American Journal of Public Health*. 2014; 104(Suppl 1):S43–S48. [PubMed: 24354819]
5. Hatcher, RA., et al. *Contraceptive Technology*. 20. New York: Ardent Media; 2011.
6. Trussell J. Contraceptive failure in the United States. *Contraception*. 2011; 83(5):397–404. [PubMed: 21477680]
7. Finer LB, Jerman J, Kavanaugh ML. Changes in use of long-acting contraceptive methods in the United States, 2007–2009. *Fertility and Sterility*. 2012; 98(4):893–897. [PubMed: 22795639]

8. Dehlendorf C, et al. Health care providers' knowledge about contraceptive evidence: a barrier to quality family planning care? *Contraception*. 2010; 81(4):292–298. [PubMed: 20227544]
9. Lessard LN, et al. Contraceptive features preferred by women at high risk of unintended pregnancy. *Perspectives on Sexual and Reproductive Health*. 2012; 44(3):194–200. [PubMed: 22958664]
10. [accessed Sept. 30, 2013] Planned Parenthood, Birth control: IUD. no date. <<http://www.plannedparenthood.org/health-topics/birth-control/iud-4245.htm>>
11. Rubin SE, Winrob I. Urban female family medicine patients' perceptions about intrauterine contraception. *Journal of Women's Health*. 2010; 19(4):735–740.
12. Whitaker AK, et al. Adolescent and young adult women's knowledge of and attitudes toward the intrauterine device. *Contraception*. 2008; 78(3):211–217. [PubMed: 18692611]
13. Yee L, Simon M. The role of the social network in contraceptive decision-making among young, African American and Latina women. *Journal of Adolescent Health*. 2010; 47(4):374–380. [PubMed: 20864007]
14. Valente TW, Saba WP. Campaign exposure and interpersonal communication as factors in contraceptive use in Bolivia. *Journal of Health Communication*. 2001; 6(4):303–322. [PubMed: 11783665]
15. Kincaid DL. Social networks, ideation, and contraceptive behavior in Bangladesh: a longitudinal analysis. *Social Science & Medicine*. 2000; 50(2):215–231. [PubMed: 10619691]
16. Behrman JR, Kohler HP, Watkins SC. Social networks and changes in contraceptive use over time: evidence from a longitudinal study in rural Kenya. *Demography*. 2002; 39(4):713–738. [PubMed: 12471851]
17. Valente TW, et al. Social network associations with contraceptive use among Cameroonian women in voluntary associations. *Social Science & Medicine*. 1997; 45(5):677–687. [PubMed: 9226791]
18. Guendelman S, et al. Perceptions of hormonal contraceptive safety and side effects among low-income Latina and non-Latina women. *Maternal and Child Health Journal*. 2000; 4(4):233–239. [PubMed: 11272343]
19. Gilliam ML, et al. Concerns about contraceptive side effects among young Latinas: a focus-group approach. *Contraception*. 2004; 70(4):299–305. [PubMed: 15451334]
20. Rose JG, Chrisler JC, Couture S. Young women's attitudes toward continuous use of oral contraceptives: the effect of priming positive attitudes toward menstruation on women's willingness to suppress menstruation. *Health Care for Women International*. 2008; 29(7):688–701. [PubMed: 18663629]
21. Ali MM, Amialchuk A, Dwyer DS. Social network effects in contraceptive behavior among adolescents. *Journal of Developmental and Behavioral Pediatrics*. 2011; 32(8):563–571. [PubMed: 21918469]
22. Sundstrom B. Fifty years on "the pill": a qualitative analysis of nondaily contraceptive options. *Contraception*. 2012; 86(1):4–11. [PubMed: 22176798]
23. Benson LS, et al. Effect of shared contraceptive experiences on IUD use at an urban abortion clinic. *Contraception*. 2012; 85(2):198–203. [PubMed: 22067784]
24. Callegari LS, Parisi SM, Schwarz EB. Perceptions of intrauterine contraception among women seeking primary care. *Contraception*. 2013; 88(2):269–274. [PubMed: 23521810]
25. Charmaz, K. *Constructing Grounded Theory: A Practical Guide Through Qualitative Analysis*. Thousand Oaks, CA: Sage Publications; 2006.
26. Sivin I. Another look at the Dalkon Shield: meta-analysis underscores its problems. *Contraception*. 1993; 48(1):1–12. [PubMed: 8403900]
27. Kraft JM, et al. Pregnancy motivations and contraceptive use: hers, his, or theirs? *Women's Health Issues*. 2010; 20(4):234–241. [PubMed: 20620912]
28. Cox S, Posner SF, Sangi-Haghpeykar H. Who's responsible? Correlates of partner involvement in contraceptive decision making. *Women's Health Issues*. 2010; 20(4):254–259. [PubMed: 20620914]
29. Kaye, K.; Suellentrop, K.; Sloup, C. *The Fog Zone: How Misperceptions, Magical Thinking, and Ambivalence Put Young Adults at Risk for Unplanned Pregnancy*. Washington, DC: National Campaign to Prevent Teen and Unplanned Pregnancy; 2009.

30. Lowe P. Embodied expertise: women's perceptions of the contraception consultation. *Health*. 2005; 9(3):361–378. [PubMed: 15937037]
31. Valente TW. Social network thresholds in the diffusion of innovations. *Social Networks*. 1996; 18(1):69–89.
32. Centola D. The spread of behavior in an online social network experiment. *Science*. 2010; 329(5996):1194–1197. [PubMed: 20813952]
33. MacIsaac L, Espey E. Intrauterine contraception: the pendulum swings back. *Obstetrics and Gynecology Clinics of North America*. 2007; 34(1):91–111. [PubMed: 17472867]
34. Stern AM. Sterilized in the name of public health: race, immigration, and reproductive control in modern California. *American Journal of Public Health*. 2005; 95(7):1128–1138. [PubMed: 15983269]
35. Thorburn S, Bogart LM. Conspiracy beliefs about birth control: barriers to pregnancy prevention among African Americans of reproductive age. *Health Education & Behavior*. 2005; 32(4):474–487. [PubMed: 16009745]
36. Luque JS, et al. Barbershop communications on prostate cancer screening using barber health advisers. *American Journal of Men's Health*. 2011; 5(2):129–139.
37. Luque JS, Ross L, Gwede CK. Qualitative systematic review of barber-administered health education, promotion, screening and outreach programs in African-American communities. *Journal of Community Health*. 2014; 39(1):181–190. [PubMed: 23913106]
38. Kelly JA, et al. HIV risk behavior reduction following intervention with key opinion leaders of population: an experimental analysis. *American Journal of Public Health*. 1991; 81(2):168–171. [PubMed: 1990853]
39. Foster DG, et al. Interest in using intrauterine contraception when the option of self-removal is provided. *Contraception*. 2012; 85(3):257–262. [PubMed: 22067772]