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The Relationship Between Contraceptive Features Preferred by Young Women and Interest in Intrauterine Devices: An Exploratory Analysis

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ABSTRACT

Context: Increased access to and use of IUDs in the U.S. offers the potential to reduce unintended pregnancy rates. Little research has examined how women's preferences for contraceptive features may impact their interest in using an IUD. Given high levels of contraceptive discontinuation and dissatisfaction, a better understanding of contraceptive preferences may support women in finding their optimal method and meeting their family planning goals.

Methodology: Analyzing data from 382 young women (ages 18-29) collected via a 2012 Internet survey, the relationship between contraceptive features preferred by young women and interest in using an IUD is explored using chi-squared tests and multivariate, multinomial logistic regression models.

Results: Nearly half of women (48%) were unsure about ever using an IUD; 20% reported they would use an IUD, while 32% would not. In multivariate logistic regression models, characteristics associated with increased likelihood of IUD interest included: the method does not interfere with the pleasure of sex (RRR 3.4), is 99% effective without user action (RRR 2.5), and works for up to 5 years (RRR 3.8). Women who preferred a method that allowed them to get pregnant immediately after stopping use (RRR 0.5) or they could see (RRR 0.4) were less likely to be interested in ever using an IUD.

Conclusions: The findings of this exploratory analysis indicate that women value a multitude of contraceptive features, which may have implications for their interest in using an IUD. Future research should consider the ways that women's contraceptive preferences can be incorporated into contraceptive counseling.

The Relationship Between Contraceptive Features Preferred by Young Women and Interest in Intrauterine Devices: An Exploratory Analysis

Because they are highly effective, reversible, and long-acting, IUDs are increasingly framed as a contraceptive method that can help ameliorate persistent rates of high unintended pregnancy in the United States.[1] For young women, IUDs are now considered a first-line contraceptive option, regardless of parity.[2] Indeed, as the distance between age of sexual debut and childbearing has increased, young women frequently spend the majority of their reproductive years trying to avoid pregnancy,[3] making IUDs an appropriate option for many. A provision of the Affordable Care Act that allows for use of FDA-approved methods of contraception without co-payments creates an environment where IUDs should be available for many women who previously did not have this option.[4] Initiatives to promote long-acting reversible contraception (LARC) have focused on reducing biases and increasing knowledge among providers,[5] as well as implementing new clinical models to increase IUD and implant uptake.[6, 7] While training providers is critical to ensuring that all U.S. women have access to a comprehensive family planning method mix that includes IUDs, understanding young women's perspectives is equally important to this goal.

Use of IUDs has increased significantly in recent years. Though only 2% of contracepting U.S. women (ages 15-44) were using an IUD in 2002, this proportion rose to 4% in 2007 and 8% in 2009, with upticks among all groups across socio-demographic characteristics, including age, race/ethnicity, income, and parity.[8] In addition to barriers not limited to cost[9] and inadequate training and knowledge among health care providers,[10, 11] an important reason why IUDs remain underutilized is women's low level of knowledge of this method. In a national survey of unmarried young adults (ages 18-29), 87% of young women had heard about the IUD. Among

these women, 39% reported they knew nothing and 53% reported they knew very little about the IUD.[12] Many misperceptions about IUDs exist, ranging from believing that IUD insertion is a surgical procedure[13] or that IUDs increase the risk of sexually transmitted infections.[14] At the same time, young women also have an array of undeniable concerns about IUDs, including the invasiveness of the method,[13, 15, 16] fear of pain during insertion,[15, 16] impact on menstruation,[15, 17] and the provider-dependent nature of use and discontinuation.[15-17] While increasing knowledge of IUDs is an important strategy to reduce misperceptions, even with perfect knowledge, women's preferences about contraceptive features will likely continue to have important implications for their method choice.

Women in the U.S. discontinue contraceptive methods at high rates due to dissatisfaction. Using data from the National Survey of Family Growth, Moreau et al found that 46% of women (ages 15-44) had discontinued a method during their lifetimes because they were not satisfied.[18] Among women who had used a long-acting hormonal method of contraception, 42% had discontinued because of dissatisfaction. While reasons for dissatisfaction were only available for four methods (oral contraceptives, Depo-Provera, Norplant and condoms), side effects and menstrual irregularity were a primary catalyst for discontinuing hormonal methods. Understanding the features of contraceptives that women prefer has implications not only for improving contraceptive continuation but also for method choice. Many women may use methods that do not have characteristics that they prefer,[19] increasing the likelihood that they will be dissatisfied and discontinue use.

As efforts to promote uptake of LARC methods ramp up, it is imperative that programs and healthcare providers take into account the preferences that women have for contraceptive methods that may or may not include effectiveness. To further elucidate aspects of contraceptive

decision-making, the present analysis investigates whether young women's contraceptive preferences are associated with their interest in using an IUD.

METHODOLOGY

Sample and Data

Between June and August 2012, an exploratory national Internet survey of young women's and men's contraceptive knowledge, attitudes and practices was conducted. Participants were recruited for the online survey through social media and networks; e-mail listservs; and Craigslist. In order to be eligible to participate, individuals completed an online screening form to assess eligibility criteria, which included: (1) residency in the United States; (2) being between the ages of 18 and 29; and (3) identifying as heterosexual. Eligible young adults who chose to participate in the study completed an online informed consent form before beginning the survey. The survey addressed participants' contraceptive use, knowledge, and preferences; and knowledge of, attitudes toward, and interest in IUDs. Participants who completed the survey were offered the opportunity to enter into a lottery for a $20 Amazon.com gift card as an incentive. The Institutional Review Board of San Francisco State University approved the study protocol and materials.

A total of 1,154 individuals completed the screening questions to determine eligibility. Of 898 eligible individuals, 730 completed the survey. The present analysis focuses on the subset of 382 women who were sexually experienced and had never used an IUD. Women who were pregnant (n=4) were excluded due to the small sample size, as well as women who did not respond to questions about IUD knowledge and interest and key demographic characteristics (n=79). Additionally, in order to restrict the sample to young women who would currently be

candidates for IUDs, women who were currently trying to get pregnant (n=16), who were sterilized or had a tubal ligation (n=5), and who were currently using implants (n=7) were excluded from the analysis subsample.

Key Measures

The outcome measure of interest focused on women's interest in using an IUD in the future. Female participants were asked, "Do you think you would ever get an IUD?" with the option of responding yes, no, or not sure. The "no" response was used as the referent category for interpretative purposes, as comparing women who were interested versus not interested was our primary research question. Primary independent variables of interest were women's preferred contraceptive features. Women were provided a list of contraceptive features and asked to select any features that they considered to be attractive. The list of contraceptive features was based on previous research on women's experiences using contraceptive methods,[19, 20] with additional items generated by the research team to capture the specific features of IUDs, such as potential length of use, lack of requisite user compliance, and high level of effectiveness. By design, women were asked about general contraceptive characteristics they considered attractive early in the survey and about IUD knowledge and interest at the end. Based on previously published studies of contraceptive behavior and unintended pregnancy,[21-23] control variables were included in multivariate models, included race/ethnicity (White, non-White); educational attainment (high school/GED or less; some college; Bachelor's degree; graduate degree); relationship status (not currently involved, casually dating, in a serious relationship or cohabiting/married); and whether the participant was unemployed or uninsured. Because of the strong relationship between knowledge of IUDs and interest in using one in the future,[24] all multivariate models also adjusted

for IUD knowledge. IUD knowledge was assessed based on responses to 15 true-false questions about aspects of IUDs, including, "IUDs get infected easily" (false) and "a young woman can use an IUD, even if she has never had a child" (true). Items were drawn or adapted from previous surveys that assessed IUD knowledge.[12, 15, 17] No educational information about IUDs was provided as part of the survey. Based on the number of correct responses to these questions, respondents were categorized as having high (13-15), medium (9-12) or low (0-8) knowledge, with cutpoints set to evenly distribute the three categories across the full sample of respondents who answered the IUD knowledge questions.

Analysis

In descriptive analyses, we examined demographic characteristics, IUD interest and knowledge, and contraceptive preferences. We employed chi-squared tests to examine differences in contraceptive preference across the IUD interest categories. Using multivariate, multinomial logistic regression models, we examined the association between each contraceptive preference and IUD interest, adjusting for demographic characteristics and IUD knowledge. We used Stata statistical analysis software (version 11.2) for all analyses.

RESULTS

The majority of young women included in the analysis were between the ages of 18 and 24 (65%) and White (77%), while a small proportion was not insured (15%) or employed (8%) (Table 1). Most women had either some college education (37%) or a bachelor's degree (37%). With respect to relationship status, 39% of women were in a serious relationship, with 32% cohabiting or married, 14% casually dating, and 15% not currently involved. Less than one third

(32%) of women had low knowledge of IUDs, while 39% had medium knowledge, and 30% had high knowledge. Almost half of women (48%) were not sure if they would ever use an IUD; 32% of young women said they would not ever use an IUD, while 20% indicated that they would.

In Table 2, frequencies are presented for characteristics of contraceptives considered attractive by young women in the sample. The most frequently selected characteristic (by 87% of the sample) was the method does not interfere with the pleasure of sex. Other characteristics that the majority of young women selected as attractive included: the method reduces the heaviness of menstrual bleeding (81%); helps alleviate menstrual cramps (80%); is 99% effective without me having to do anything (74%); and protects me or my partner from pregnancy and STDs (53%). Some characteristics specific to IUDs were among those least frequently selected as attractive. For example, less than a fifth of young women considered a method working for up to five years without having to do anything (18%) or a method being inside her body (19%) as attractive.

Using chi-squared tests, the distribution of IUD interest was examined by contraceptive features preferred by young women (Table 3). For the majority of features, there was a statistically significant difference in the distribution of IUD interest. Women who preferred a method that does not interfere with sexual pleasure reported being interested in in using an IUD at higher levels (22%) than those who did not select this feature (12%). Women who desired a method that helped reduce menstrual cramping had lower levels of interest in ever using an IUD (19%), compared to those who did not select this preference (26%). Women who preferred a method that was highly effective without user action had higher levels of IUD interest (23%) compared to those who did not (14%), as did women who preferred a method that worked for up

to five years without having to do anything (33%) compared to those who did not (18%). Women who considered a method attractive if they could stop using it without a visit to a healthcare provider had lower levels of interest in using an IUD (16%) compared to those who did not (25%), as well as higher levels of uncertainty about IUD use (54%) compared to those who did not select this item (43%). Women who did prefer a contraceptive method that is inside their body had higher levels of interest in ever using an IUD (25%) compared to women who did not select this characteristic (19%).

The multivariate, multinomial logistic regression models revealed the association of preferred contraceptive characteristics with interest in ever using an IUD (Table 4). All models adjusted for race/ethnicity, age, relationship status, educational attainment, health insurance status, employment, and IUD knowledge (results not shown). The most frequently chosen characteristic – that the method does not interfere with the pleasure of sex – was a statistically significant predictor of IUD interest. Women who chose this characteristic were more likely to be interested in using an IUD in the future (RRR 3.4). Women who valued characteristics of IUDs were also more likely to be interested in using one in the future. For example, considering a method attractive when it works for up to five years without having to do anything was positively associated with interest in ever using an IUD (RRR 3.8). Similarly, women who considered a method attractive if it was 99% effective without user action also had increased relative risk of IUD interest (RRR 2.5). At the same time, some contraceptive characteristics were associated with an inverse relationship with IUD interest. Women who considered a method attractive if she could get pregnant as soon as she stopped using it were less likely to be interested in ever using an IUD (RRR 0.5), as were women who liked being able to see the method that they are using (RRR 0.4).

The same models also examined the outcome of being unsure about ever using an IUD, relative to not being interested. Several characteristics were positively associated with being unsure about ever using an IUD. Women who liked a method that did not interfere with the pleasure of sex were more likely to be unsure about using an IUD (RRR 2.9), as were women who considered a method attractive if it reduced the heaviness of menstrual bleeding (RRR 2.3) and alleviated menstrual cramps (RRR 2.4). Women who considered a method attractive if she could use it without the knowledge of her friends and family (RRR 1.7) or if it was inside her body (RRR 2.0) were also more likely to be unsure about ever using an IUD in the future.

DISCUSSION

To our knowledge, this is the first paper to examine the relationship between contraceptive preferences and interest in using an IUD. This exploratory analysis revealed that preference for certain contraceptive characteristics was associated with being interested in or unsure about ever using an IUD. Among this sample of predominantly educated and insured women, features that were associated with interest in using an IUD at a statistically significant level were primarily the characteristics that make IUDs attractive to the reproductive health community – the high level of effectiveness, the lack of requisite user compliance, and the length of potential use.[2] At the same time, women who felt that being able to get pregnant immediately after they stopped using a method was attractive or who liked the ability to see their contraceptive method were less likely to be interested in using an IUD. Nearly half of young women in the sample were unsure if they would ever use an IUD, and several contraceptive features were associated with a greater likelihood of being unsure, after adjusting for IUD knowledge. Making the connection between their contraceptive preferences, such as desiring a

method that is not visible to family or friends or that is inside their body, may be an opportunity to start a dialogue about the best family planning method for these women (which may or may not be an IUD). Qualitative research examining this uncertainty could further shed light on the considerations of young women as they choose and use contraceptive methods.

A particularly interesting finding of this study was that a majority of surveyed women indicated that a contraceptive method that did not interfere with the pleasure of sex was attractive to them – more so than any of the other contraceptive features examined. These women were more likely to be interested or unsure about ever using an IUD. Little research has examined sexual pleasure and women's experiences using IUDs. One qualitative study found that many participants wanted contraceptive methods that could increase their intimacy and closeness with their partner and that women were more likely to consistently use contraceptives that "maximized sexual enjoyment — however they defined it — while minimizing sexual discomfort and interruption."[20] For many women who have low risk of contracting sexually transmitted infections, the use of a highly effective method without a barrier method may be appealing.[25] At the same time, while some women and men may dislike condoms due to a negative impact on sexual pleasure, others may find sex more enjoyable when they have ensured protection from disease and/or pregnancy (known as "eroticizing safety").[20] As one of the most effective forms of contraception, IUDs may be particularly attractive to women who are at low risk of contracting sexually transmitted infections and connect safety to pleasure. On the other hand, contraceptive methods may impact women's bodies in ways that also diminish pleasure. For example, heavier menstrual bleeding and cramping experienced by some women using copper IUDs may reduce sexual pleasure. The impact of any contraceptive method on sexual pleasure may be an important consideration for women's decision-making, though researchers

have noted the "pleasure deficit" in efforts to promote contraceptive use and safer sex behaviors.[26]

One of the major strengths of this analysis is the inclusion of both women who believe they will use an IUD and those who are unsure. Substantively, this is an important distinction because contraceptive decision-making is a continuous and nuanced process, and understanding method-specific uncertainty can both provide opportunities for education and improved services, as well as help women find a method about which they have more certainty. Furthermore, the sample differs from much research on IUD knowledge, attitudes and behaviors, which frequently focuses on women in clinical settings who are already accessing health care.[15, 27, 28] Finally, highlighting young women's preferences and concerns may allow them the greatest opportunity to choose a contraceptive method that fulfills their needs, particularly important at a time when this population is increasingly the target of IUD promotion efforts.

There are important limitations to this exploratory analysis. As a convenience sample for an Internet-based survey, the respondents are likely more socially advantaged than young women most at risk for unintended pregnancy, as reflected in the sample demographics (mostly White, insured, and employed). The cultural and social network influences of these women may vary significantly from more diverse samples, having implications for both their preferred contraceptive features and IUD interest, limiting the generalizability of these results. Though the majority of Americans have access to the Internet,[29] the most disadvantaged young women may not have the ability to participate in the survey or may not have been reached by our recruitment efforts. Additionally, while IUD interest is a novel variable, more specificity to the outcome (for example, interest in a hormonal vs. copper IUD, expected timing of use) would be informative. Because the survey was cross-sectional, we are unable to assess whether interest in an IUD ever

translates to use. Some important measures, such as income, were not included in the survey due to the difficulty of measurement for a non-household based survey of young adults. While a range of contraceptive features was provided in the survey, the list was not exhaustive. Further, item wording may impact women choosing certain characteristics: for example, a woman who did not select "the method is inside my body" as attractive may not want a device inside her body or simply may find this characteristic neither attractive nor unattractive. Women were asked to select contraceptive features they found attractive from a list due to time constraints of the survey, but a Likert response scale would allow for a more nuanced examination of their preferences. Finally, while the examination of preferred contraceptive features is generally instructive, more detail here would also be useful, as there are no contraceptives that encompass all the characteristics women find attractive,[19] and women must weigh their preferences to make decisions. If a tipping point exists, where certain preferences are non-negotiable while others take less precedence, understanding and capturing this complexity will better inform programmatic and clinical efforts that aim to support women in finding their optimal family planning method.

CONCLUSION

While the relationship between contraceptive preferences and decision-making should be further explored in future research with representative and/or more diverse samples, the results of this study point to a number of considerations for clinical practice, Several studies have had success with the tiered effectiveness approach to counseling,[5, 7, 30] where information about a range of contraceptive methods is presented to women in order of most to least effectiveness. While effectiveness is undoubtedly important to many women – including the majority of

women in the present study – it is not the *only* consideration, as women may take into account factors such as pregnancy intentions,[31] relationship status,[32] side effects[15] as they choose and use contraceptive methods. Given low levels of accurate knowledge of all methods of contraception,[12] a conversation about preferred contraceptive features may open up opportunities to discuss methods that women have inadequate or inaccurate information about in a way that resonates with their priorities. Future research should consider how discussions of contraceptive preferences could be incorporated into contraceptive counseling. Though receiving comprehensive, evidence-based information about IUDs may change some women's interest in using this specific method, it is not clear how such information would also change their pre-existing contraceptive preferences if they are driven by factors besides knowledge, such as their own or social network members' experiences with certain methods[33] or perceptions of their fertility.[34, 35] Investigating such questions in future research with diverse samples will allow for a deeper understanding of the complexity of women's contraceptive decision-making processes and the development of patient-centered interventions accordingly.

Table 1. Frequencies for demographic characteristics, IUD knowledge, and IUD interest

	%
Age	
18-24	64.7
25-29	35.3
Race/ethnicity	
White	77.0
Non-white	23.0
Educational attainment	
High school/GED or less	8.9
Some college/associate degree/vocational	36.9
Bachelor degree	37.4
Graduate degree	16.8
Uninsured	15.2
Unemployed	8.1
Relationship status	
Not currently involved	14.9
Casually dating	14.4
In a serious relationship	38.5
Cohabiting or married	32.2
Knowledge of IUDs	
Low	31.7
Medium	38.7
High	29.6
Interest in ever using an IUD	
Yes	20.4
No	31.7
Not sure	47.9

Table 2. Frequencies of contraceptive features preferred by young women

	%
The method does not interfere with the pleasure of sex	86.7
The method reduces the heaviness of menstrual bleeding	80.6
The method helps alleviate menstrual cramps	79.8
The method is 99% effective without me having to do anything	73.6
The method protects me or my partner from pregnancy and STDs	53.4
I can stop using it without seeing a provider	49.0
I do not have to worry about running out of the method	47.1
I can get pregnant as soon as I stop using it	46.3
I can use it without friends or family knowing about it	43.2
I can get the method without visiting a provider	40.6
The method does not have hormones	33.3
I can see the method I'm using	32.7
The method does not affect my menstrual cycle	23.8
I can use it without my partner knowing about it	20.2
The method is inside my body	18.9
The method works for up to 5 years without me having to do anything	18.3

Table 3. Distribution of IUD interest by contraceptive features preferred by young women

	Interested in ever using an IUD	Not interested in ever using an IUD	Unsure about ever using an IUD	Total
	%	%	%	%
The method does not interfere with the pleasure of sex***				
Yes	21.8	28.1	50.2	100.0
No	11.8	54.9	33.3	100.0
The method reduces the heaviness of menstrual bleeding*				
Yes	19.8	28.9	51.3	100.0
No	23.0	43.2	33.8	100.0
The method helps alleviate menstrual cramps**				
Yes	19.0	28.9	52.1	100.0
No	26.0	42.9	31.2	100.0
The method is 99% effective without me having to do anything*				
Yes	22.8	27.8	49.5	100.0
No	13.9	42.6	43.6	100.0
The method protects me or my partner from pregnancy and STDs				
Yes	18.6	27.9	53.4	100.0
No	22.5	36.0	41.6	100.0
I can stop using it without seeing a provider*				
Yes	15.5	31.0	53.5	100.0
No	25.1	32.3	42.6	100.0
I do not have to worry about running out of the method				
Yes	21.7	28.3	50.0	100.0
No	19.3	34.7	46.0	100.0
I can get pregnant as soon as I stop using it*				
Yes	15.8	37.3	46.9	100.0
No	24.4	26.8	48.8	100.0
I can use it without friends or family knowing about it**				
Yes	14.6	27.9	57.6	100.0
No	24.9	34.6	40.6	100.0
I can get the method without visiting a provider				
Yes	19.4	30.3	50.3	100.0
No	21.2	32.6	46.3	100.0
The method does not have hormones				
Yes	22.1	30.7	47.2	100.0
No	19.6	32.2	48.2	100.0
I can see the method I'm using**				
Yes	11.2	37.6	51.2	100.0
No	24.9	28.8	46.3	100.0

Table 3 continued

	Interested in ever using an IUD	Not interested in ever using an IUD	Unsure about ever using an IUD	Total
	%	%	%	%
The method does not affect my menstrual cycle				
Yes	12.1	35.2	52.8	100.0
No	23.0	30.6	46.4	100.0
I can use it without my partner knowing about it*				
Yes	13.0	24.7	62.3	100.0
No	22.3	33.4	44.3	100.0
The method is inside my body*				
Yes	25.0	19.4	55.6	100.0
No	19.4	34.5	46.1	100.0
The method works for up to 5 years without me having to do anything**				
Yes	32.9	18.6	48.6	100.0
No	17.6	34.6	47.8	100.0

*Overall distributions differ at $p \leq 0.05$. **Overall distributions differ at $p \leq 0.01$. ***Overall distributions differ at $p \leq 0.001$.

Table 4. Adjusted relative risk ratios (and 95% confidence intervals) from multinomial logistic regression analysis assessing the likelihood that women are interested or unsure about using an IUD in the future, rather than not interested, by contraceptive preferences

	Interested in ever using an IUD	Unsure about ever using an IUD
The method does not interfere with the pleasure of sex	3.37 (1.27-8.98)*	2.89 (1.47-5.69)**
The method reduces the heaviness of menstrual bleeding	1.14 (0.56-2.36)	2.26 (1.23-4.18)**
The method helps alleviate menstrual cramps	1.05 (0.52-2.09)	2.38 (1.30-4.37)**
The method is 99% effective without me having to do anything	2.51 (1.22-5.17)*	1.62 (0.96-2.73)
The method protects me or my partner from pregnancy and STDs	1.08 (0.58-2.01)	1.57 (0.97-2.55)
I can stop using it without seeing a provider	0.76 (0.41-1.40)	1.43 (0.88-2.31)
I do not have to worry about running out of the method	1.45 (0.79-2.66)	1.32 (0.82-2.12)
I can get pregnant as soon as I stop using it	0.47 (0.25-0.88)*	0.65 (0.40-1.06)
I can use it without friends or family knowing about it	0.79 (0.41-1.51)	1.66 (1.02-2.70)*
I can get the method without visiting a provider	1.24 (0.66-2.33)	1.24 (0.76-2.02)
The method does not have hormones	1.33 (0.70-2.54)	1.03 (0.62-1.72)
I can see the method I'm using	0.35 (0.17-0.72)**	0.80 (0.49-1.30)
The method does not affect my menstrual cycle	0.48 (0.22-1.07)	0.95 (0.55-1.64)
I can use it without my partner knowing about it	1.03 (0.42-2.51)	2.05 (1.10-3.82)*
The method is inside my body	2.19 (0.97-4.97)	2.02 (1.03-3.98)*
The method works for up to 5 years without me having to do anything	3.77 (1.68-8.45)***	1.93 (0.96-3.91)

*p ≤ 0.05. **p ≤ 0.01. ***p ≤ 0.001. *Notes:* Individual regression models were run for each contraceptive preference. For each model, the reference group is women who did not indicate that the contraceptive characteristic was one they considered attractive. All models adjusted for age, race, educational attainment, relationship status, IUD knowledge, and whether the respondent was unemployed or uninsured.

References

1. American College of Obstetricians and Gynecologists. ACOG committee opinion no. 450: Increasing use of contraceptive implants and intrauterine devices to reduce unintended pregnancy. Obstetrics and Gynecology 2009:114(6): 1434-1438.
2. American College of Obstetricians and Gynecologists. ACOG committee opinion no. 539: Adolescents and long-acting reversible contraception: Implants and intrauterine devices. Obstetrics and Gynecology 2012:120(4): 983-988.
3. Finer LB, Philbin JM. Trends in ages at key reproductive transitions in the United States, 1951–2010. Women's Health Issues In Press: e1-e9.
4. Johnson KA. Women's health and health reform: Implications of the Patient Protection and Affordable Care Act. Current Opinion in Obstetrics and Gynecology 2010:22(6): 492-497.
5. Harper CC, Rocca C, Thompson K, Goodman S, Patel A, Blum M, Speidel JJ. LARC training intervention: Results from a cluster randomized trial. North American Forum on Family Planning; October 5-7, 2013; Seattle, WA; 2013.
6. Peipert JF, Madden T, Allsworth JE, Secura GM. Preventing unintended pregnancies by providing no-cost contraception. Obstet Gynecol 2012:120(6): 1291-1297.
7. Romer SE, Teal S. The BC4U service model: Achieving astronomical LARC uptake in adolescents. In. The bc4u service model: Achieving astronomical larc uptake in adolescents. Reproductive Health; New Orleans, LA; 2013.
8. 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): 893-987.

9. Thompson KMJ, Speidel JJ, Saporta V, Waxman NJ, Harper CC. Contraceptive policies affect post-abortion provision of long-acting reversible contraception. Contraception 2011:83(1): 41-47.

10. Rubin SE, Fletcher J, Stein T, Segall-Gutierrez P, Gold M. Determinants of intrauterine contraception provision among US family physicians: A national survey of knowledge, attitudes and practice. Contraception:83(5): 472-478.

11. Harper CC, Henderson JT, Raine TR, Goodman S, Darney P, Thompson K, Dehlendorf C, Speidel JJ. Evidence-based IUD practice: Family physicians and obstetrician-gynecologists. Family Medicine 2012:44(9): 647-645.

12. Kaye K, Suellentrop K, Sloup C. The Fog Zone: How misperceptions, magical thinking, and ambivalence put young adults at risk for unplanned pregnancy. Washington, D.C.: National Campaign to Prevent Teen and Unplanned Pregnancy; 2009.

13. Rubin SE, Winrob I. Urban female family medicine patients' perceptions about intrauterine contraception. Journal of Womens Health 2010:19(4): 735-740.

14. Hladky KJ, Allsworth JE, Madden T, Secura GM, Peipert JF. Women's knowledge about intrauterine contraception. Obstet Gynecol 2011:117(1): 48-54.

15. Fleming KL, Sokoloff A, Raine TR. Attitudes and beliefs about the intrauterine device among teenagers and young women. Contraception 2010:82(2): 178-182.

16. Potter J, Rubin SE, Sherman P. Fear of intrauterine contraception among adolescents in New York City. Contraception, In Press.

17. Whitaker AK, Johnson LM, Harwood B, Chiappetta L, Creinin MD, Gold MA. Adolescent and young adult women's knowledge of and attitudes toward the intrauterine device. Contraception 2008:78(3): 211-217.

18. Moreau C, Cleland K, Trussell J. Contraceptive discontinuation attributed to method dissatisfaction in the United States. Contraception 2007:76(4): 267-272.

19. Lessard LN, Karasek D, Ma S, Darney P, Deardorff J, Lahiff M, Grossman D, Foster DG. Contraceptive features preferred by women at high risk of unintended pregnancy. Perspectives on Sexual and Reproductive Health 2012:44(3): 194-200.

20. Higgins JA, Hirsch JS. Pleasure, power, and inequality: Incorporating sexuality into research on contraceptive use. Am J Public Health 2008:98(10): 1803-1813.

21. Spies EL, Askelson NM, Gelman E, Losch M. Young women's knowledge, attitudes, and behaviors related to long-acting reversible contraceptives. Women's Health Issues 2010:20(6): 394-399.

22. Finer L, Zolna M. Unintended pregnancy in the United States: Incidence and disparities, 2006. Contraception 2011:84(5): 478.

23. Nearns J. Health insurance coverage and prescription contraceptive use among young women at risk for unintended pregnancy. Contraception 2009:79(2): 105-110.

24. Gomez AM, Clark J, Finlayson S, Hartofelis EC. What [young] women want: A national survey of intrauterine device knowledge, attitudes and interest. YTH Live; San Francisco, CA 2013.

25. Fennell J. "And isn't that the point?" Pleasure and contraceptive decisions. Contraception 2014:89(4): 264-270.

26. Higgins JA, Hirsch JS. The pleasure deficit: Revisiting the “sexuality connection” in reproductive health. Perspectives on Sexual and Reproductive Health 2007:39(4): 240-247.

27. Stanwood NL, Bradley KA. Young pregnant women's knowledge of modern intrauterine devices. Obstetrics and Gynecology 2006:108(6): 1417-1422.

28. Foster DG, Karasek D, Grossman D, Darney P, Schwarz EB. Interest in using intrauterine contraception when the option of self-removal is provided. Contraception 2012:85(3): 257-262.

29. File T. Computer and internet use in the United States. Suitland, Maryland: United States Census Bureau; 2013.

30. Madden T, Mullersman JL, Omvig KJ, Secura GM, Peipert JF. Structured contraceptive counseling provided by the contraceptive choice project. Contraception 2013:88(2): 243-249.

31. Turok DK, Gurtcheff SE, Handley E, Simonsen SE, Sok C, North R, Frost C, Murphy PA. A survey of women obtaining emergency contraception: Are they interested in using the copper IUD? Contraception 2011:83(5): 441-446.

32. Kusunoki Y, Upchurch D. Contraceptive method choice among youth in the United States: The importance of relationship context. Demography 2011:48(4): 1451-1472.

33. Blackstock OJ, Mba-Jonas A, Sacajiu GM. Family planning knowledge: The role of social networks and primary care providers as information sources for African American women. American Journal of Sexuality Education 2010:5(2): 128-143.

34. Kuiper H, Miller S, Martinez E, Loeb L, Darney P. Urban adolescent females' views on the implant and contraceptive decision-making: A double paradox. Fam Plann Perspect 1997:29(4): 167-172.

35. Polis CB, Zabin LS. Missed conceptions or misconceptions: Perceived infertility among unmarried young adults in the United States. Perspectives on Sexual and Reproductive Health 2013:44(1): 30-38.