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Provider Counseling to Young Women Seeking Family Planning Services

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Abstract

CONTEXT—Contraceptive nonuse and misuse contribute to rates of unintended pregnancy and STDs among young women in the United States. Clinical providers assume an important role in guiding youths' contraceptive method choices.

METHODS—Sixty-seven women aged 16–21 were recruited as part of a cohort study, conducted in 2009–2012, that examined provider-patient interactions during family planning visits at six San Francisco clinics. Interactions between patients and providers were audio-recorded. Participants completed questionnaires about method preference immediately before seeing the provider; they reported on method choice immediately after the visit and by telephone three and six months later. Transcripts were analyzed to examine providers' strategies for guiding decision making and addressing youths' contraceptive concerns. Missed opportunities for promoting young women's reproductive health were identified.

RESULTS—Twenty-one percent of young women who did not report desiring a hormonal or long-acting reversible method (IUD or implant) before seeing their provider chose one after counseling. Use of a highly effective (hormonal or long-acting reversible) method at follow-up was more common among women who had received interactive counseling by providers who guided them to consider contextual influences than among those who had not received such counseling. Attention to relationship characteristics, sexual behavior patterns and STD risk was largely absent from contraceptive counseling.

CONCLUSION—High-quality strategies used by providers to guide contraceptive decision-making were tailored to adolescents' developmental and environmental needs. Several areas of

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counseling require increased attention and seem vital to providing comprehensive reproductive health care to adolescents.

Contraceptive method choice and inconsistent patterns of use, including discontinuation, infrequent use and misuse, contribute to high rates of pregnancy and STDs among U.S. adolescents.[1–3] In national school-based studies, 60% of sexually active adolescents reported condom use during their last sexual intercourse, while 13% reported no method use.[4] Only 23% reported use of a contraceptive method consider highly effective at preventing pregnancy—i.e., a hormonal method (the pill, ring, patch or injectable) or a long-acting reversible method (LARC; implant or IUD). A study of youth aged 15–24 initiating hormonal contraception at four clinics in the San Francisco Bay Area found that continuation rates at 12 months were low for all methods, and younger age was associated with discontinuation.[5] Continuation rates for LARC methods are higher than those for oral contraceptives;[6,7] these differences prompted a 2012 recommendation by the American College of Obstetricians and Gynecologists to increase adolescents' access to LARC methods.[8]

Importantly, there are racial and ethnic disparities in contraceptive use and related outcomes. Racial and ethnic minorities have higher contraceptive failure rates than whites,[9,10] and black and Latina women aged 18–29 have been found to use less effective methods than their white counterparts.[11] Nearly half of Latina and black teenagers in the United States are estimated to become pregnant at least once by age 20,[12] and though teenage pregnancy rates have declined over the last decade for all racial and ethnic groups, the decrease remains lowest for Latina teenagers.[13,14] In addition, black and Latina teenagers are disproportionately affected by STDs.[15]

Clinical providers of reproductive health services play an important role in guiding youth in their choice of a contraceptive method they can use effectively to prevent unintended pregnancy. Discontinuation and misuse may be due, in part, to individuals' choice of methods that are not well matched to their life circumstances and partnership patterns, lack of understanding of proper use or experience of side effects. Provider counseling influences contraceptive choice, especially among women undecided about their method preferences and those initiating a newer form of hormonal contraception, such as the patch or ring.[16,17] Some research has shown that counseling is associated with contraceptive knowledge;[18] in primary care settings, it is associated with use of hormonal contraceptives in the month following the visit.[19] However, interventions designed to improve contraceptive use through provider counseling alone have generally been unsuccessful.[20,21] The CHOICE Project, which implemented a multifaceted intervention that removed barriers by making LARC methods available at no cost, offering same-day insertions and implementing a standardized counseling script regarding the effectiveness of LARC methods, documented high uptake of these methods. Yet, there was no difference in uptake associated with the counseling script alone.[22] There are few data on the effects of contraceptive counseling on continuation rates among adolescents and young women, and a paucity of data on patient-provider interactions regarding contraception during clinic visits.[23]

In 2002, the World Health Organization identified five characteristics central to establishing youth-friendly clinic environments and services: equity, effectiveness, accessibility, acceptability and appropriateness.[24] Yet, evidence-based strategies for developmentally appropriate contraceptive counseling for adolescents are not well explicated.[25] In a 2013 review, Jaccard and Levitz proposed 12 principles to guide a contraceptive counseling protocol for adolescents and highlighted the need for additional research on their effectiveness in shaping method choice and use.[23] These principles are consistent with the need for family planning providers to respond to adolescents' developmental and contextual needs as they transition from childhood to adulthood and, often at the same time, from family-based to individual-based health care, particularly for sexual health services.[26] Not only may adolescents be building decision-making autonomy regarding their health and well-being, they may simultaneously be managing family, peer and partner concerns and influences in making their contraceptive choices. To serve the unique needs of this population, family planning providers should be aware of these varied pressures. They should also be cognizant that adolescents have had limited exposure to reproductive health care and therefore may require extra support in choosing an appropriate contraceptive method and in developing strategies to ensure consistent and correct use. Furthermore, adolescence is characterized by developmental changes that contribute to an increase in risk-taking tendencies and strong emotions.[27] Providers' capacity to recognize and respond to these contextual and developmental complexities is critical to providing high-quality contraceptive counseling to adolescents.

This article examines patient-provider interactions during young women's visits for family planning in San Francisco. Using multiple indicators of effective contraceptive counseling for youth, based on several principles proposed by Jaccard and Levitz[23] and identified in a critical review of youths' satisfaction and experience with health care,[28] we assessed the strategies providers adopted to guide decision making and address contraceptive concerns. We explored whether use of a highly effective contraceptive method six months after the clinic visit varied according to aspects of provider counseling. Finally, we identified content areas relevant to youths' sexual health that were rarely addressed or represented missed opportunities to provide comprehensive care and strengthen reproductive health outcomes.

METHODS

Study Design

This analysis focuses on a subset of data collected for a larger cohort study, conducted during the period August 2009–January 2012, that examined provider counseling regarding family planning at six clinics in San Francisco. The clinics were two primary care sites, two sites that provide STD and contraceptive care, and two general obstetrics and gynecology sites. Five clinics served predominantly low-income women, and one served a socioeconomically mixed patient population. At all six clinics, counseling was provided by licensed health professionals—nurse practitioners, physician assistants or physicians.

Clinicians were approached and asked to participate in the study; those who agreed gave informed consent and were instructed to provide their usual care to women in the study sample. A total of 42 providers participated, 2–11 from each clinic. Twenty-two of them,

from five of the six clinics, provided counseling to the youth included in our analyses; these providers, who contributed an average of three recorded visits each (range, 1–8), were all female. Nearly all visits included in our analyses (94%) were with a nurse practitioner.

Research staff recruited 342 women of reproductive age (16–53 years old) immediately prior to their clinic visit with a participating provider. Women were eligible for study enrollment if they wished to discuss contraception with their provider; spoke English; were not currently pregnant or seeking to become pregnant; and identified themselves as white, black or Latina. (The last criterion was necessary because of planned analysis by race or ethnicity in the parent study.) Participation rates were not tracked systematically. All participants provided informed consent prior to enrollment. Parental consent for minors was waived because obtaining consent would have violated patient confidentiality.

Participants completed two self-administered questionnaires during their clinic visit: one before seeing their provider and one after. Previsit, we assessed past and current contraceptive use and contraceptive preferences. The postvisit questionnaire ascertained contraceptive method chosen and visit satisfaction. Clinic visits were audio-recorded; a member of the research team was not present in the exam room. Audio recordings were professionally transcribed and reviewed for accuracy. Three and six months after their visit, participants completed a brief telephone interview that assessed current contraceptive practices. Repeated attempts to contact participants were made, using a method they specified. Research staff did not disclose the purpose of their call unless they were speaking directly with the study participant. Participants received gift card incentives of $25 at baseline, $10 at the three-month follow-up and $25 at the six-month follow-up. The University of California, San Francisco, Committee on Human Research approved study procedures.

Measures

By examining existing criteria,[21,22] we identified two key features of high-quality youth counseling: an interactive communication style (respectful, friendly, focused on establishing trust) and attention to youth-specific contextual influences (e.g., living situation, partnership patterns, STD risk, social influences). We also examined how providers responded to youths' contraceptive history and specific method concerns, including side effects, when discussing method selection.

Method choice at the end of the visit was ascertained through the postvisit questionnaire. Continued contraceptive use was defined as use of a highly effective (hormonal or LARC) method at the six-month interview (or at three months for the eight participants for whom six-month data were unavailable). Participants were considered continuing users even if they switched between two such methods over the six months. Given the sample size, analysis of specific switching patterns (e.g., from the ring to the pill) was not possible. Because of the relatively short follow-up period and our focus on provider counseling, gaps in contraceptive coverage were not examined. Participants reporting condom use alone, withdrawal or no method at the six-month follow-up were categorized as having discontinued use of an effective contraceptive.

Analysis

To characterize the study population, we examined descriptive quantitative data, including participants' stated method preference before counseling, choice of method after counseling, and differences in method choice by race and ethnicity. Qualitative analysis consisted of coding transcripts of audio-recorded patient visits for dominant themes using a code list developed from review of an initial set of transcripts. To ensure reliability between the two researchers responsible for coding, we compared 15 transcripts for coding consistency. The codes we analyzed related to contraceptive counseling discussions, contextual influences and missed opportunities. A third author conducted an in-depth review of the text under "contraception counseling discussions" to corroborate and deepen initial observations. We compared contraceptive counseling among participants who reported continued use of an effective contraceptive method six months after the visit with counseling among those not using an effective method at six months. We determined whether a visit involved high-quality, appropriately targeted counseling by assessing the degree to which providers incorporated interactive communication and discussion of youth-specific contextual influences. Three authors reviewed any "gray area" transcripts (of which there were very few) and came to consensus on what style and tools for counseling were used. We prepared written summaries and analytic memos that explored themes and tested emerging findings. We used Atlas.ti to organize and facilitate the analysis.

The analytic sample comprises 67 women aged 16–21 for whom we have transcripts from recorded clinic visits, as well as precounseling and postcounseling quantitative interviews. Ninety percent completed a follow-up interview three or six months after their clinic visit.

RESULTS

Participant Characteristics and Contraceptive Choices

Participants' median age was 19 years. Forty-two percent of participants were black, 31% Latina and 27% white (Table 1). Condoms were the most commonly used contraceptive method (39%); the next most common were no method (28%) and oral contraceptives (10%). Risk assessments conducted by providers revealed that the type and duration of sexual partnerships—and thus contraceptive needs—varied widely. Nearly half of participants reported one current partner, and almost one-third reported multiple (and, in some cases, concurrent) partners during the previous 3–6 months. Providers collected no partnership information for 21% of participants and sought information about relationship duration infrequently.

Though all respondents requested contraceptive counseling during their visit, only 58% stated that contraception-related concerns were the primary reason for their visit. Among these, 80% came for preventive counseling, and 20% to obtain emergency contraception or pregnancy testing, or because of contraception-related irregular bleeding. Other primary reasons for presenting at the clinic were symptoms or suspicion of an STD or other genital infection (31%) and routine sexual health preventive services (11%).

A comparison of stated method preference and actual choice reveals that participants shifted their contraceptive use intentions after counseling (Table 2). Prior to counseling, 77% of

women reported desiring a hormonal or LARC method, and 13% had no method preference. However, immediately following counseling, 98% selected a highly effective method, suggesting 21% of participants wanted more effective methods after counseling than they had indicated prior to counseling. The pill was the most common method selected after counseling (40%); 22% of participants chose the contraceptive ring, 16% the IUD and 12% the injectable. Nearly half of black women and white women chose pills, while Latina youth chose pills, rings and IUDs equally.

Features that Defined Effective Counseling

The degree to which providers engaged young women in an interactive, appropriately targeted manner was a distinguishing characteristic of visits, even when a narrow selection of methods was discussed. In interactive, youth-targeted counseling, providers asked about contextual factors that could influence participants' method use, including their contraceptive use, lifestyle characteristics (e.g., whether they lived with their parents, ease of clinic access), knowledge of method use among friends and family, and the role of peer influence in method choice and use. In contrast, noninteractive sessions failed to engage youth and often seemed to lead to providers' choosing what they thought was the best option for the patient, in some cases with the choice shaped by the availability of free samples. Hormonal or LARC method use at six-month follow-up was reported by a larger proportion of women who had had interactive counseling (80%) than among those who had not (50%).

Providers conducting interactive contraceptive counseling sessions adopted several strategies to guide women's contraceptive method decisions. The first was to initiate the discussion by prompting participants to think about contraceptive use experiences of members of their social networks, because, as one clinician commented to a 17-year-old participant, "I always find that with teenagers…what your friends have done or their experience has been is pretty important to what you decide." Clinicians often asked participants which methods they were familiar with or if they knew anyone who had used a particular method. For example, one asked: "Have you heard about any particular pill? Are your girlfriends or anybody on a pill that you might like to try?" Invoking peer or family attitudes and experiences proved an effective way to engage youth, often leading women to discuss myths and concerns that they had about a method, which the provider could then address directly.

A second strategy involved an engaged discussion about family and partner support systems to promote and sustain contraceptive method use. One clinician, for example, advised a 20-year-old participant: "I always tell women…tell [your partner] and have him remind you. So he has some of this responsibility, too, right?" In nine counseling sessions, providers led prolonged discussions to identify supportive individuals: Eight participants described having strong support, including one 20-year old, whose grandmother worked at a clinic and was "on her about safe sex." Six of these eight women reported method continuation six months after the visit.

Guidance in balancing lifestyle characteristics with method use constituted another effective strategy. Some providers directly addressed the challenge of integrating a routine health behavior into youths' lives. They suggested strategies such as identifying a daily activity to

align with method use and setting mobile phone reminders. Providers sometimes encouraged women to try a method again:

> Clinician (C): Have you ever done the pill?
>
> Participant (P): Uh-huh. Once in the very, very, very beginning.
>
> C: And how were you at remembering it?
>
> P: Actually, I was pretty cool. At first I was taking it, but then I forgot it for a few days, and I was like, well, I can't go back on it now because I know it was a few days that passed. I'll just get the...shot because it was easier to remember.
>
> C: Was that when you were younger?
>
> P: Uh-huh.
>
> C: Sometimes when you get older, you have more stuff going on in your life, so you're better organized sometimes. Also, cell phones can help a lot. You can set an alarm.

Very few providers probed about whether parents were aware of young women's sexual activity and attendance at the clinic, or asked about the potential need for a method that could be used discreetly. One provider raised this issue effectively by asking, “Does your mom know you're here?”

Provider Responses to Method Concerns

•Previous method experience—Discontinuation of contraceptive methods was widespread among youth (49% reported previous discontinuation) and was, therefore, a common topic of contraceptive counseling. Predominant reasons cited for discontinuation were unexpected or intolerable menstrual changes; difficulty of use, including difficulty remembering to take the pill every day; not getting method refills; adverse side effects (e.g., weight gain, altered sex drive); pregnancy; and lack of continued need for the method because of intermittent sexual activity. For many adolescents, method use was tied to relationships, and use stopped when a relationship ended.

•Method side effects and failure—Numerous women voiced apprehension regarding method side effects and failure. However, many potential side effects cited as concerns are far less common than participants believed. Participants shared stories of friends or family members who had become pregnant while using various methods. For example, one 17-year-old participant told her provider that she was “scared” of oral contraceptives because her friend “got pregnant on them.” As was typical in such exchanges, the provider gave a neutral response—“Oh, okay”—and did not explore why the participant thought her friend had become pregnant or address the pill's effectiveness. Women also discussed fears, based on media reports, that the patch may cause death due to blood clots. Opinions about the injectable were generally negative, because patients themselves or friends of theirs had experienced weight gain while using the method. One 19-year-old participant commented, “I liked how it was something that I didn't have to take every day. That was great. It made me gain a lot of weight, and like now, I have stretch marks, but I've never been overweight. It's

just like, 'Oh, shit.'" Participants discussed fears of pain with IUD insertion, of being able to feel the IUD inside the body and of their partners' being "poked" by the IUD. Other concerns were uncertainty regarding changes in the menstrual cycle, long-term effects of ingesting hormones, mood changes and compromised future fertility.

Clinician responses to patients' previous difficulties with methods and concerns regarding side effects varied considerably. Providers clearly placed great importance on counseling about side effects; they discussed the topic at nearly all visits. Yet, the focus was primarily on method safety and medical risks. The counseling was often formulaic and not tailored to youth. Typically, providers appeared to strive for neutrality to such a degree that they often failed to offer guidance that could have helped participants address reasons for discontinuation and avoid future problems or misuse. The more engaged discussions of side effects addressed youth-specific concerns, especially those related to prolonged exposure to hormonal methods and myths generated by friends' adverse experiences. For example, one 19-year-old participant stated, "I don't wanna take a patch 'cause, like, I heard people died from it," and the provider respectfully replied, "Tell me about that. What'd you hear?"

•Lack of information—Many women raised questions that highlighted the need for providers to address misinformation, myths and rumors that could affect method choice and continuation. Lack of understanding of female anatomy and the menstrual cycle prompted confusion about pregnancy risk and method choice. Some women were unclear about the timing of ovulation within the menstrual cycle. Others were misinformed about reproductive anatomy, thinking that the penis enters the uterus during intercourse or that the ring can get pushed up into the body and lost. One participant wondered whether she could become pregnant from oral sex. Others were unsure whether vaginal discharge is "normal." Women also believed that missing periods because of use of a hormonal method can lead to a "buildup of blood in the body" or that having infrequent periods "can't be healthy." One woman, echoing the concern of others, worried that prolonged bleeding, as might occur during the initial period of injectable use, would cause her to "lose all of her eggs."

Typically, providers responded to these concerns briefly, dismissing myths or providing medically accurate information, but not in ways that seemed inadequate to support sustained confidence in the method. However, there were several strong examples of effective counseling regarding these types of concerns, including this explanation offered to a 19-year-old participant choosing the ring: "We have a very special plastic vagina....I'm going to let you practice. So, what you do is you just push [the ring] and then put it in and it sort of pops in place. Okay? Then when you need to take it out, you just put your finger in, and you just slide it out. So, that's really pretty easy."

Counseling Omissions and Missed Opportunities

•Partnerships and partner involvement—Provider attention to partnerships as an influence on method choice and continuation was quite variable and, in many cases, constituted a missed opportunity. When relationship status was assessed, many young people reported having at least one partner in the past year, and some reported relationships of six months or more; in such cases, method selection may benefit from partner

involvement. However, partner contraceptive preference was never discussed in the large majority of clinic visits. When the topic was broached, it was typically in the context of a latex allergy or of a partner's complaint about feeling the contraceptive device during sex. In one instance, an 18-year-old participant came to the clinic with her partner of two years. The provider did not inquire about the partner's method preferences or what might be best for the couple.

•STD prevention and risk reduction—While many clinicians asked a series of STD risk assessment questions, including about partner status and recent sexual behavior, few addressed STD prevention or used routine risk assessment questions to initiate risk reduction counseling. For example, providers offered no condom counseling to a participant with pelvic inflammatory disease or to one who had moved in with an older partner she had known for only one month. One 19-year-old participant, who reported having had five partners in the past three months, including bisexual male partners, and who suspected she might have several STDs, received STD testing but no counseling on risk reduction. With a 21-year-old who had had four abortions and reported ongoing unprotected sex, the clinician discussed contraceptive options, but did not broach the topic of STD prevention.

At times, the information provided actually downplayed the risk of STDs or unintended pregnancy. To a 17-year-old participant who reported using condoms “most of the time,” the clinician responded, “Sometimes not, but most of the time? Good, excellent.” While the positive reinforcement of condom use was supportive, the clinician did not accompany it with a discussion of the implications of inconsistent condom use. Likewise, providers did not always capitalize on opportunities to engage adolescents in discussing barriers to condom use. To a 19-year-old who reported using condoms 50% of the time, the clinician responded, “Yeah, that's not a good enough method is it?” and followed her comment with a question assessing the participant's menstrual cycle, rather than probing for barriers to more frequent condom use.

There were exceptions where providers offered thoughtful risk reduction counseling, as illustrated in this exchange with a 20-year-old who reported both male and female partners and currently was in a steady relationship with a male:

> P: Well, he pulled out, but still.
>
> C: Yeah, okay. Well that's better than no condom. Do you think you can get him to use condoms for now, while we're trying to figure out what you want to do? Can he buy into that?
>
> P: Yeah, yeah. I'll talk to him.
>
> C: Yeah. I don't know if I have any extra lubricant, but I'll take a look. You know, extra lube sometimes helps make it a little more comfortable. Water-based lubricant Astroglide is a good one....We just don't want you to, while you're making a decision, to end up pregnant. Then you have to make a decision over that.
>
> P: Yeah, I know. I want to avoid it as much as possible.

> C: Do you have special kinds [of condoms] you like or just a variety? Okay. We have tons of them here; you can always come back for more. So that's what we want to do, is just pull out condoms. Condoms or no sex.

Other clinicians engaged their patients meaningfully in discussions of condom use with questions such as “How is that working for you?” and “How do your partners feel about it?”

•Additional health concerns—Though clinic visits were primarily focused on sexual health, they also afforded an opportunity to discuss participants’ other health concerns. Three topics emerged multiple times but generally went unaddressed by providers: alcohol and drug use, healthy weight and sexual violence.

When heavy alcohol use was reported, providers inconsistently discussed health and safety repercussions, including those directly related to sexual health. With one adolescent who reported heavy drinking (i.e., typical consumption when she drank was a full bottle of wine), the provider engaged meaningfully with the participant and prioritized safety concerns: “There is not only, like, the alcohol effects, you know. There is a safety issue around it because we lose our good judgment to some extent. Then there is the decision-making thing, like having sex when you're drunk or high.” She went on to ask whether the participant had discussed her plans to reduce her alcohol consumption: “Have you talked to anybody about your plans so that your friends can back you up?” More often, though, the conversation was quite minimal. For example, a 21-year-old woman described to the clinician an occasion on which she and a coworker had gone back to her house to be intimate, but she was uncertain whether they had had vaginal sex, as she had “borderline blacked out” from alcohol consumption. In this case, the clinician only asked if anyone had ever suggested that she had a drinking problem. The participant replied “no,” and it was not discussed further.

A number of participants expressed concern about weight gain as a method side effect, and some participants were clinically overweight or obese. Only when specifically requested was basic nutritional advice offered; in none of the counseling sessions did the clinician address healthy weight or offer information, counseling or linkage to services. The partner of one participant who was considering the injectable attended the visit with her and noted, “She is my baby, and the problem that we are having is that I am sure that you noticed that she is built probably like less than 1% of the population of the world. She has an issue of height, but she also has depth and width....I don't know if you discussed this with her, but she at 265 right now.” Even after this candid comment, healthy weight was not discussed; rather, the provider responded: “Those are excellent concerns....Occasionally [the injectable] causes weight loss, but usually it's weight gain....Other women, their weight is not affected, so we don't really know until we try it out.”

Sexual violence was raised by a few providers as part of their counseling. Those who addressed the topic did so with empathy and encouraged participants to obtain support, including by linking them to onsite counselors. One provider, for example, noticed a bruise on her patient's chest and asked whether she had “any issues with abuse.” Though the participant responded that she did not, the provider commented, “We got to look out for our ladies here. Sometimes they don't look out for themselves, so we have to try to help them.”

With a participant who described a recent experience of sexual assault, the provider responded, “I'm so sorry to hear that;” after the participant reported that “it was kind of my own fault,” the clinician told her not to feel she was responsible for the assault. A clinician whose patient discussed a recent sexual assault inquired whether the young woman had been tested for STDs and pregnancy. The provider commented, “I'm glad you told me about the assault,” and ensured that the young woman was receiving counseling and had someone supportive in her life. She also discussed whether the young woman had considered pressing charges. She concluded the exchange with the statement, “You can come here any time you need anything below the waist. We're good here.”

DISCUSSION

Ensuring access to high-quality, comprehensive and youth-friendly reproductive health services is critical to addressing the health needs of young people.[29] In this study, it is plausible that providers played an important role in women's method selection, as 21% of the youth who did not report desiring a hormonal or LARC method at baseline, or who had no preference, chose one of these methods after counseling. Furthermore, use of highly effective methods after six months was higher among those who had received interactive counseling that included discussion of contextual influences on method choices than among those who had not. High-quality strategies for guiding decisions were tailored to adolescents’ developmental and environmental needs. They included initiating discussions regarding the contraceptive experiences of family and friends, recognizing that social norms play a critical role in influencing adolescent behavior, determining whether support structures exist to promote sustained method use and exploring contextual factors that could influence the acceptability of a particular contraceptive method.

Counseling regarding method side effects and contraceptive myths and misinformation were prominent concerns among young women choosing a method, and constituted primary reasons for past method switching and discontinuation. Yet providers touched on these topics inconsistently. Providers regularly discussed medical information regarding method side effects, but many communicated in such a neutral way that they failed to offer guidance that might have helped participants address reasons for discontinuation. Past research on method side effects and adolescents’ adherence to hormonal contraceptive regimens found that method safety concerns and beliefs that menstruation-related side effects could threaten long-term reproductive health[30] influence method continuation.[30,31] Anxiety regarding method safety may ultimately outweigh some women's pregnancy concerns.[32] Providers of youth sexual health services play a key role in dispelling misinformation and providing clear and accurate contraceptive information alongside more general reproductive health guidance. A number of providers in our study simply guided women toward alternative methods, rather than directly addressing reasons for discontinuation, potentially compromising sustained use of effective methods.

Family planning visits also provide an opportunity to address general preventive health needs. We identified a number of missed opportunities wherein women, either explicitly or indirectly, described health concerns beyond contraception, sometimes intimately related to contraceptive practices (e.g., STD prevention, concurrent partnerships, alcohol use, sexual

violence) that were not addressed meaningfully or consistently by providers. Given that youth aged 15–24 account for half of the 20 million new STD diagnoses that occur in the United States each year,[33] attending to their STD risk during contraceptive counseling visits is critical. Addressing partner violence with young patients is also important: In a 2011 national survey, 9% of high school students reported being physically hurt intentionally by a boyfriend or girlfriend in the previous 12 months.[4] Failure to address violence may have occurred for a number of reasons, including limited time for counseling, lack of provider training in this area, or an attempt to maintain the impression of openness and lack of judgment. However, providers' efforts to remain unbiased and respectful in their interactions with patients appeared, in some cases, to impair their abilities to engage with youths' stated health risks in nonjudgmental but forthright ways.

Aligning effective contraceptive coverage with the dynamic relationship status and sexual activity of adolescents constitutes another important consideration in providing effective contraceptive counseling to this population. In this study, participants' sexual behavior ranged from current inactivity to long-term monogamous relationships, and from serial monogamy to concurrent partnerships, including partnerships with both males and females. These variations are typical among sexually experienced adolescents.[34,35] As relationship duration and intimacy increase, use of condoms typically declines, but it is not always replaced by adoption of an effective alternative method for pregnancy prevention.[18,36] It is critical that providers consider relationship types and the dynamic sexual behavior of young people, not only to help match contraceptive choices to the needs of women and their partners, but also to offer guidance on how to manage STD and pregnancy prevention.

Limitations

Several limitations should be considered in interpreting this work. First, the San Francisco participants, providers and clinics included in this study may not be representative of other populations in the United States. Nonetheless, the predominantly low-income and ethnically diverse sample, broad range of clinic types and wide choice of methods available to participants afforded in-depth examination of provider interactions with youth from groups with disproportionately high rates of unintended pregnancy and STDs. Second, the audio-recording of patient visits could have introduced a Hawthorne effect—that is, it may have caused providers to alter their counseling. However, on the basis of conversations with participating providers, who frequently reported completely forgetting about the recording device, we consider it unlikely that our results are substantially affected. Third, the sample size of 67 young women provided robust data for qualitative analysis, yet did not permit quantitative analysis of characteristics associated with continued method use at six months. Rather, the results are exploratory, highlighting features of youth-friendly, interactive counseling that may have guided method choices that were sustained six months after the visit. Finally, it is possible that women who were more able to engage with providers were also more likely to use methods consistently, regardless of the counseling they received at the clinic. Nonetheless, the observed pattern of sustained method use over six months supports the value of building providers' capacity to engage youth and address their sexual health needs comprehensively.

Conclusion

Our findings highlight the importance of addressing the influences of contextual factors on adolescents' method choices and use. Several areas of counseling require increased attention and seem vital to providing comprehensive reproductive health care to adolescents, including attending effectively to contraceptive myths and misinformation, providing information about the reproductive system, and integrating relationship characteristics and partnership patterns into the ways in which providers guide contraceptive method choices.

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TABLE 1

Percentage distribution of women aged 16–21 seeking family planning services at five San Francisco clinics, 2009–2012

Characteristic	% (N=67)
Race/ethnicity	
Black	42
Latino	31
White	27
Baseline contraceptive use*	
Pill	10
Ring	4
Patch	2
IUD	6
Implant	2
Injectable	3
Condom	39
Withdrawal	6
None	28
Partnership characteristics	
No current partner	3
One steady partner	46
Multiple/concurrent partners	30
Not assessed by provider	21
Primary reason for visit	
Contraception/pregnancy testing	58
Genital symptoms or suspected STD	31
Routine sexual health preventive services	11
Total	100

*In cases where two methods were indicated, participants were classified as users of the more effective method.

TABLE 2

Percentage distribution of study participants, by preferred contraceptive method before provider counseling; and percentage distribution by method chosen immediately after counseling, according to race or ethnicity

Method	Preferred method (N=67)	Postcounseling method choice*			
		All (N=67)	Black (N=28)	Latino (N=21)	White (N=18)
Pill	34	40	46	29	44
Ring	9	22	21	29	17
Patch	4	5	11	0	0
IUD	13	16	7	33	11
Implant	2	3	0	5	6
Injectable	15	12	14	0	22
Condom	6	2	0	5	0
Tubal ligation	2	0	0	0	0
No method	2	0	0	0	0
No preference	13	na	na	na	na
Total	100	100	100	100	100

* In cases where two methods were chosen, participants were classified as having chosen the more effective method. *Notes:* Percentages may not add to 100 because of rounding. na=not applicable.