

Urban Adolescent Females' Views on the Implant And Contraceptive Decision-Making: A Double Paradox

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Focus groups and in-depth interviews were used to explore the decline in popularity of the contraceptive implant in a clinic-based sample of 41 ethnically diverse, urban, sexually active adolescents. While these teenagers' socioeconomic status and patterns of inconsistent contraceptive use made them potentially ideal implant recipients, they were unlikely to select this method. Negative media reports about the method were less influential than social conditions such as peer perspectives and gender relations. Oral networks that propagated misinformation went unchallenged because of the silence of satisfied users. Personal factors such as future orientation, autonomous decision-making and value of control also influenced contraceptive decision-making.

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The contraceptive implant is more effective than any other temporary method of contraception,¹ perhaps because it does not rely on user consistency; acceptability and continuation of implant use were high in U.S. and international clinical trials involving both teenagers and adults.² Among urban adolescents using the implant in the early 1990s (shortly after the U.S. Food and Drug Administration approved its use), 90% continued the method at one year and 75% claimed to be "very satisfied" with it;³ 95% were willing to recommend the method to others.⁴

Highly effective contraception that does not require user consistency is potentially critical to decreasing teenage pregnancy. More than half of U.S. high school students report having had sexual intercourse by age 16.⁵ However, only 30% of 15-19-year-olds report using a contraceptive method, and of these, 36% use contraceptives inconsistently; 16% of teenagers have ever been pregnant.⁶ Many public health professionals have targeted teenagers who are at high risk for inconsistent contraceptive use—those who live in urban areas, have low levels of education and are nonwhite—as ideal implant recipients.⁷

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However, the popularity of the method, which was initially very high, has declined precipitously.⁸ Sales of the device fell from 800 per day in the first quarter of 1994 to about 60 per day in April 1995; the U.S. distributor speculated that "adverse publicity and negative word-of-mouth" drove the decline.⁹ While both the IUD and oral contraceptives have suffered declines in use attributed to negative publicity,¹⁰ no other reliable, highly acceptable method has so rapidly developed as negative a reputation as the implant.

To better understand this paradox, we undertook a qualitative study of the factors that influence implant decision-making for urban adolescents who use contraceptives and access county health facilities. In exploring the first paradox, we discovered a second one: The very teenagers who might benefit most from the contraceptive protection of the implant, and the ones targeted by family planning clinics, may be unlikely to select it.

Methods

Study Design

We conducted a cross-sectional study employing focus groups, in-depth interviews and a written questionnaire among a sample of adolescent clients and counselors at the San Francisco General Hospital's Teen Family Planning Clinic. The research team consisted of three qualitative analysts, two of whom also served as facilitators. One facilitator was Hispanic, and one was white; both were fluent in English and Spanish.

All participants received a study description, gave prior consent and were paid for their participation (\$20 for focus

groups and \$10 for in-depth interviews). The University of California at San Francisco's Committee on Human Research approved all aspects of the study.

Sample Selection

The clinic serves an ethnically diverse population of 14-20-year-olds from urban, predominantly low-income and minority neighborhoods who are exposed to poverty, gang violence, drug use and multigenerational patterns of teenage pregnancy.¹¹ A 1991 regional survey reported that 90% of adolescents living in these circumstances are sexually active, 40% have had at least one sexually transmitted disease (STD), 69% abuse substances and 75% have family problems.¹²

Focus-group participants were sexually active clinic clients who had received standardized contraceptive counseling and were using the pill, condoms, the implant or the injectable. Participants were sought in a variety of ways. Pill, condom and implant users were recruited from among clients previously enrolled in a quantitative study of teenage contraceptive use¹³ who had consented to being contacted at home. We mailed a study introduction (without specifying the key investigation topic) to 330 of these clients. Seventy-five responded, 52 enrolled and 27 participated. Few contraceptive injection users were enrolled in the original study; by reviewing clinic charts, we identified 50 users, whom we attempted to reach by telephone. We located 10 and enrolled six; four participated.

We organized the young women into six focus groups, each with 4-8 members, according to participants' contraceptive method and whether they preferred speaking English or Spanish. This approach facilitated in-depth discussion of method-specific issues. Three groups (one ethnically diverse, one all-Hispanic and one all-black) mixed users of the pill, condoms or both methods. Two groups (one ethnically diverse and one Hispanic) consisted of implant users. One group (all-black) consisted of users of injectable contraceptives.

After completing most of our data collection, we conducted a seventh focus group, with peer counselors who came from

the same population as the other participants and were current on teenage issues. Their training in peer counseling and their experience working with a large number of teenagers enabled them to serve as articulate, expert informants¹⁴ and as a validity check¹⁵ on our interpretations. We contacted six peer counselors; all participated.

In-depth interview participants were first-time clients who had come to the clinic for a pregnancy test, had not been consistently using a contraceptive and were intending to select a method during their visit. We described the study to four new clients waiting for their appointments; all agreed to participate (two blacks, one Asian and one Hispanic). These young women differed from the focus-group participants primarily in that they had not received standardized contraceptive counseling. Their participation increased our understanding of how new clients seeking contraception view implants.

Data Collection and Analysis

We designed a background questionnaire and semistructured, open-ended focus-group and in-depth interview guides. The questionnaire explored participants' demographic characteristics, as well as their experiences and attitudes regarding sexual behavior, pregnancy and contraceptive use. The guides addressed their exposure to and attitudes toward contraception, including the implant; their social circumstances; and their information networks.

All interviews took place at the clinic, because of its familiarity and accessibility. Interviews were taped and transcribed. Spanish was translated into English, preserving Spanish colloquialisms. All transcripts were coded numerically.

We combined focus groups and in-depth interviews in a constant comparative analysis,¹⁶ so that data collection and analysis were simultaneous. After each focus group, the researchers discussed the management and dynamics of the session, conducted preliminary content analysis and modified the discussion guide according to the developing conceptual model. Line-by-line transcript coding was refined by consensus between researchers and by checks with participants.

After two analytic meetings, we developed a code list by which to categorize our findings. Some codes were taken directly from the transcripts (e.g., "people-to-people" information sources), while the analysts named others (e.g., "stigma"). We then collapsed codes into major categories (e.g., "direct media exposure," "control" and "horror stories"). We simultaneous-

ly developed a cumulative memo series, recording themes, categories, relationships and supporting text. On the basis of the transcripts, memos, interviews and analytic meetings, we identified a decision-making process and its major elements. Major themes emerged early and were confirmed in all of the interviews and focus groups. When we had reached a point where no new themes appeared in the data, we concluded data collection.

We analyzed the data at the aggregate level to elucidate similarities and differences that were not necessarily associated with the characteristics of a method or the user's ethnicity. Similarly, participants' quotations that are presented were selected because of their content, rather than because of the speaker's attributes, except when explicitly relevant to the analysis.

Findings

Background Characteristics

The mean age of the 35 clients who participated in the study was 17.3 years. In all, 46% were Hispanic, 40% were black, 9% were Asian and 6% were non-Hispanic white; this distribution reflects that of the general clinic population. Spanish was spoken exclusively in the homes of 17% of the participants.

On average, the 41 participants (clients and peer counselors) had been 14.8 years old at first sexual intercourse (range, 12–17), and they had been sexually active for 3.3 years (range, 1–7); 37% had had an STD. Some 51% had one or more children. The teenagers' sexual partners were, on average, three years older than they were (range, two years younger to 10 years older). While 56% regretted having had sex their first time, only 19% had ever felt pressured to have sex. While 36% of participants said they had never used a condom in their last five sexual encounters, 27% reported that they had always done so.

When they initiated intercourse, 27% of the teenagers had not wanted to become pregnant, and 59% had not even thought about the possibility of pregnancy. However, at the time of the study, 71% did not want to conceive, and only 10% said they did not think about pregnancy when having intercourse. The women were more likely to think that they would be very upset than very happy about a pregnancy (27% and 15%, respectively), but they thought the reverse would be true of their partners (5% vs. 32%).

Finally, in response to questions about the reliability of various sources of information about contraception and STDs, 48% said that most of their peers would

be good sources and 42% said most adults they knew would be reliable.

General Perceptions of the Implant

Regardless of whether they used the implant, the young women shared some general perspectives on the method. They had positive feelings about the implant's convenience and long-lasting effect, the fact that the user does not have to remember to do anything and their perception that the implant is "better than the pill." Participants characterized the implant as good for "teenage moms," "older girls" and "[older] women." Their criteria for the ideal contraceptive method included maximum control and discretion, and minimum effort and pain. However, some felt that the implant is discreet and manageable, while others thought that it is too visible.

Almost all participants, including implant users, had deep concerns regarding the dangerous and unpredictable effects of hormonal contraceptives. Most also recognized that the implant could not protect against infection with the human immunodeficiency virus or other STDs. Many pill and condom users were skeptical of any invasive method and concluded that condoms were the most popular and "safest" method, as this participant articulated:

"Your best deal... is a condom. 'Cause it's not only worrying about getting pregnant—it's them diseases!" —*Pill/condom user*

Despite these shared perspectives and concerns, participants made different decisions regarding implant selection. Three areas emerged as influences on the participants' decision-making process: social conditions, information sources and personal attributes or experiences.

Social Conditions

Contraceptive selection and use is often as much a social as an individual behavior. For example, the participants, especially those who were not using the implant, thought that behavior such as street violence, teenage pregnancy and contraceptive selection is affected by the same types of social dynamics that affect fashion trends. Participants even explained the early popularity of the implant as a fad.

"If I see some shoes she got on, ... I'm gonna go buy it. ... a few years ago everybody was gettin' the pill and everybody stopped taking the pill. Then that little three-month shot came—oomph—everybody had that." —*Pill/condom user*

"Everybody goes with the fad: 'New birth control—woowee!'" —*First-time clinic visitor*

For some participants, selecting or refusing the implant was a response to group influences.

"You get it... 'cause everybody else got it, not thinking about what it's gonna do to you until it happens."—*Pill/condom user*

For others, it was part of a process of observation and assessment of others' practices and experiences.

"I think it's also just people using their heads... if they see somebody with this problem and then another person with this one, they're gonna be like, 'Well why am I gonna do that?'"—*Pill/condom user*

In this population, four key social conditions created the context underlying implant decision-making. All participants reported that some combination of these conditions were a deterrent to implant selection.

•*Peer perceptions.* The women described a continuum of negative peer perceptions regarding implant selection and use. At one end, a few who used other methods thought friends would merely be curious about what was in their arm. At another point, most participants felt that their friends would think it was "gross," "stupid" or "crazy" to get "chemicals" in their bodies, and that friends would accuse a girl of being a victim for letting doctors "cut her up."

At the other end of the spectrum, almost all implant users, and some nonusers, reported or feared sexual harassment triggered by the use of the device.

"[One guy said to me,] 'Hey hey, baby, you have Norplant. Wanna fuck?'"—*Implant user*

•*Sexual stigmas.* The majority of participants described an adolescent female's sexual reputation as a balance between contradictory images: An image of sexual experience, or being a "player," was valued, but teenagers did not want to be considered "easy" or, if they had a boyfriend, unfaithful. Participants stated that without a successful balance of images, girls could be stigmatized.

The teenagers said that signs of contraceptive use, particularly the potentially visible implant, confirmed that a girl was sexually active and could therefore put her at risk of stigmatization. For example, some pill and condom users and first-time clinic visitors reported that girls who get an implant are "freaks" (kinky), want to be promiscuous or actually are promiscuous. Additionally, the majority of participants felt that a girl's partner would assume that she was promiscuous or cheating if she used the implant.

•*Relationships with males.* According to the participants, these stigmas affected their

relationships with males. If a girl had a boyfriend, the assumption that she was sexually active was acceptable; if she did not, she might be considered a prostitute, "slut" or "strawberry" (a woman who exchanges sex for drugs).

"They're gonna be like, 'What she doing this [using the implant] for?' If you don't have no boyfriend, they'd be like, 'Ugh, tramp.'"—*Pill/condom user*

Many participants, particularly pill and condom users, described very unsupportive or controlling partners. Some reported that male partners discouraged contraceptive use. Participants cited instances of partners' socially governing them or pressuring them to have a baby, which they interpreted as a male strategy to control them, a perception noted in other research.¹⁷

"When I got the abortion, he's all like, 'Oh, so now you're gonna leave me' and all this shit. And I think by him getting me pregnant, he thinks I'm gonna stay with him."—*Pill/condom user*

All participants strongly expressed a need for reproductive health education for males. They viewed male partners' ignorance and negative attitudes toward birth control as fundamental barriers to contraceptive use and safer sex.

"If we should educate young women, we should also educate young men. What good is it for us to know the knowledge if the other partner doesn't know the knowledge?"—*Pill/condom user*

Some participants felt that, as females, they were powerless to influence males.

"I feel like guys... once one guy tell 'em [something], they gonna believe that guy before they believe that female any day, any time."—*Pill/condom user*

•*Class-racial context.* Some participants, including implant users, felt that their communities were suspicious of the implant, since the device was associated with a white medical system that had historically abused minority and poor women.¹⁸

These teenagers reported a deep resistance to the implant in their communities and families. They expressed concern that the method was a modern form of medical abuse or "population control" aimed at women who are poor or members of minority groups. Black participants voiced the strongest feelings on these issues, although many Hispanics and Asians shared this perspective.

"Black people just skeptical of it [the implant] from the start. And they moms have a lot of influence. They just don't wanna be guinea pigs."—*Black peer counselor*

"Like back in the... 60s, they'll take

women of color... or people who are poor and they'll use them as guinea pigs... that's what a lot of people thought. My mother said stuff like that too."—*Hispanic implant user*

Information Sources

Three information sources influenced these teenagers' implant decision-making: formal, or clinical; direct media; and "people-to-people." These sources all contribute to urban lore about the implant, which generally is unimpeded by accounts of satisfied users.

•*Formal sources.* Some participants said they had "read up" on the implant in "medical books" or "pamphlets from the clinic." This process of investigation of implants as part of a medical model that is open to evaluation emphasizes the rational, conscious component of implant decision-making. Implant users generally reported positive views regarding the value and legitimacy of formal informational sources. The majority of participants who were using other methods did not rely on formal sources, citing distrust of the motives of clinicians and drug manufacturers.

"Every time somebody take implants, that's boosting up the people who made it, the doctors who prescribe it."—*Pill/condom user*

"They [clinic personnel] tell you the good things about Norplant, but they didn't tell me about all the side effects. I heard them from my friends that have it already."—*Pill/condom user*

•*Direct media.* In the years since the Food and Drug Administration approved use of the implant, publicity has become overwhelmingly negative, leading to speculation that such media coverage would cause the method's demise. However, participants reported little direct contact with news or mass media coverage of the device; most of these teenagers found news shows boring. The few who had direct exposure to media accounts about the implant already were using it, which they felt had made them more aware of news reports about the method.

•*"People-to-people" sources.* While media appeared to have had little direct impact, oral networks were an effective conduit through which the news media affected the implant's reputation. Just as other studies have found this network to be considered a reliable source of information,¹⁹ many participants considered their peer and adult contacts reliable sources of media-based implant news.

"My grandmother read some articles, and she called me up from Detroit, like,

"Take that stuff out of your arm! It's not good!"—*Implant user*

"My mother, she called my aunt and told her, 'Oh, you have Norplant, I just saw this, put channel 14 on and watch.' I guess... if one person sees it, at least five are gonna hear about it."—*Peer counselor*

Friends were also responsible for highly influential stories and testimonies, although these stories often blurred the line between rumor and personal experience. For example, one participant described a woman's experience with the implant, saying first that she had seen it on TV and later in the same interview that it was the experience of a friend. When a story is personalized in this way, it does not require substantiation, but instead is treated as trusted insider information.

This peer-based word-of-mouth information worked within one focus group, when a participant stated that what she had heard in the group changed her mind about the implant.

"I was gonna need it, but now I ain't getting it. My hair ain't gonna fall out!... I'm scared now. Y'all shouldn't have told me that."—*Pill/condom user*

• *Urban lore.* Urban lore consists of stories that people tell as the truth but that actually contain only a grain of truth and usually involve an element of shock or horror.²⁰ For example, implant users are said to have gained extraordinary weight; lost all of their hair; developed cancer; become alcoholic, depressed or sterile; or lost the implant somewhere in their arm.

"This one girl got Norplant, and she ain't had her period in two years.... And she just big as a house."—*Nonuser*

"Horror stories always go first, and it may travel much faster ... by word of mouth.... Five pounds turns into gaining 20 pounds to 40 pounds."—*Implant user*

Between clinically recognized side effects and these horror stories thrived a good deal of misinformation about the implant. For example, the teenagers had been told that the device puts "too much medicine" in the body, "keeps the body from cleaning itself" or "puts your body on a time limit." Some speculated that no device could be in the body for five years and still be safe. Almost all participants, even implant users, doubted that any hormonal method could be safe.

"You can get cancer. [The implant] could pop in your arm. [It's] not very good for a girl to get if she wants a baby."—*Pill/condom user*

Almost all of the teenagers had a "friend" who had had a negative implant experience. The tales of "friends of

friends"²¹ (an urban lore hallmark) were also prevalent; in one group, three participants cited friends of friends who had become pregnant while using the implant.

Participants who were not implant users generally seemed most influenced by people-to-people sources. They were also most active in generating and responding to implant urban lore.

• *Satisfied users' silence.* What was not said about the implant was as important as what was said. The oral network and urban lore were marked by the absence of positive testimony by users, even though participants who used the method unambiguously reported positive experiences. All participants reported feeling uncomfortable with the negative social conditions surrounding implant use. Consequently, implant users did not share their positive experiences with peers. Implant users said they would not talk about their implant and would try to hide their arms; nonusers speculated that they would do the same.

"People who have it and have no problem with it aren't wantin' to talk about it. Like, I don't like to tell my friends, 'Yeah, I have Norplant, it's great, so you guys should go out and get it.'"—*Implant user*

Personal Attributes and Experiences

Contraceptive decision-making was not guided solely by external factors. Rather, the possession of a strong future orientation and the capacity for autonomous decision-making seemed to support the selection of the implant; concerns about control over one's body and fear of pain seemed to discourage its selection.

• *Concrete goals and long-term perspectives.* Implant users had concrete goals and long-term perspectives. Consequently, they reported being motivated to be committed contraceptive users, which for some was an important reason for selecting the implant.

"Gotta get a job, get my GED... get a car... That's, you know, complicated."—*Implant user*

"If I had a baby right now, that would... put everything on hold."—*Implant user*

"I'd only change my mind [about using] implants... if I heard news that it was causing death or something... only in that case."—*Implant user*

In contrast, women who were not using the implant generally did not spontaneously discuss their futures, and when probed, they were vague.

Implant users' strong future orientation and commitment to contraceptive use may have been a response to their personal history. They discussed experiences

such as having a baby or being exposed to violence as events that influenced their orientation toward their futures. They made a further link between commitment to contraceptive use and having a future. One participant called these events "wake-up calls" that caused young women to reevaluate their former selves and change patterns of behavior. These events have a documented association with implant selection.²²

• *Autonomous decision-making.* Implant users felt that they had a great deal of autonomy in their contraceptive decision-making and that their experiences validated their decision, despite the negative atmosphere generally surrounding the method. For example, regarding side effects, they explained that since each body is different, they could judge the implant's appropriateness only for themselves.

"Word of mouth [regarding the implant] doesn't really have too much effect on me because it's not substantiated."—*Implant user*

• *Control.* Most participants strongly valued having control over their lives and bodies. They spoke of achieving control or earning respect by being "strong-willed," "taking charge" of their lives, having self-respect and even using contraceptives.

"I mean, it's your body and you do what you want with it. And if you decide to have Norplant, you know that's up to you and they don't have a right to say anything."—*Nonuser*

The teenagers were confident despite the contradictions between their desired and actual control, as illustrated by their socioeconomic marginalization, the pervasive violence in their environments, their own reported heavy drug and alcohol use, and the often negative, controlling roles that males played in their lives. At times it appeared that their assertion of self-reliance was also a defense against their feeling that there was no one they could rely on.

"I'm not gonna get married until I know where my life is because... you not gonna always have that man. As soon as he leave, where the hell you gonna be at? As soon as he leaves me, or as soon as he die or whatever, I'm gonna still have my life and I'm not gonna... stand on nobody."—*Pill/condom user*

For implant users, the method allowed them to assert control over their futures, while for many others, the implant threatened that control. Thus, both the selection and the rejection of a method were viewed as affirmations of control.

"People should just wait and get

through with school and find out—'cause not enough people today, like not enough women with children...have real strong careers...so in the future you won't have to be on welfare."—*Implant user*

"Ain't nobody gonna make me take nothing so I don't ovulate and so my eggs won't come."—*Pill/condom user*

Similarly, some women considered the side effects of the implant controllable, while others felt they could not predict or manage side effects and hence lost control over their bodies.

"With the Norplant, I can take it out any time and be fine. This... gives me like a sense of security as far as side effects."—*Implant user*

"Everything [beside condoms] got side effects or just do something. You know, if it ain't your hair falling out, you're blowing up....It's always something."—*Pill/condom user*

Loss of control of the menstrual cycle and fertility were a profound concern for almost all of the participants.

"When you want to have kids, are you gonna be able to? They tell you, 'Oh, it's gonna have side effects now,'...but what's gonna happen later? They don't tell you, 'Oh, well, two or three years later from now she might go sterile.'"—*Pill/condom user*

•*Fear of pain.* For a few of the young women, fear of pain or needles was the primary reason for not choosing the implant.

"I'm going to be truthful about something 'cause I ain't using 'em, 'cause I'm scared of needles."—*Pill/condom user*

Discussion

This study explored the paradox of a rapid decline in the use of a new contraceptive method that had been found highly acceptable during clinical and postmarketing trials. Although there was speculation that negative media publicity was the cause of this decline, we found that media reports had little direct impact on these focus-group participants, since few were exposed to them. Another recent study of implant discontinuation also found that negative publicity had little direct effect on continuation rates.²³

On the other hand, the social nature of contraceptive use made the implant susceptible to a negative climate engendered by peer perspectives, sexual stigma and the intersection of race, gender and class. Males in particular seemed to have a strong negative influence on the selection of implants. Other studies, including one conducted prior to the negative implant publicity, found similar barriers to implant selection.²⁴

In this negative climate, peers and adult

relatives propagated urban lore about the implant, unchallenged by positive testimony of satisfied users. Other studies have demonstrated that mothers influence teenage daughters' sexual decisions and implant selection,²⁵ especially when the teenagers do not know other adolescents who use the implant. Similarly, we found that a synergistic interaction of negative media coverage filtered by adult relatives, the silence of implant users and peer-based urban lore created negative influences that may help to explain the implant's rapid loss of popularity.

In exploring the paradox of the implant's decline in popularity, we discovered another one. The socioeconomic status and patterns of contraceptive use of the teenagers in our study make them, in the view of many family planning professionals, potentially ideal implant recipients. However, many of these young women seemed very unlikely to select the method.

Several contradictions help to explain this paradox, in particular the contradiction between the participants' self-images and their stereotypes of implant users. For example, participants negotiated their roles and reputations among peers in part through their contraceptive decisions, and implant use could endanger adolescent females' reputations. Pill and condom users and first-time clinic clients also stated that the implant was for older teenagers, older women, mothers, girls in steady relationships and girls who sleep around. In using these words to describe implant users as the "other," they implied that they themselves were different.

Furthermore, all participants sought control over their lives and their bodies. While choosing the implant could facilitate taking control of the future, it also implied an immediate loss of control over one's body and reputation. Menstrual changes are often the main reason for implant discontinuation, even though such changes do not differ significantly between those who stay with the method and those who discontinue its use.²⁶ Recognizing the individualized interpretations and value of control may help to explain the different implant decisions that teenagers make. The invasiveness of the device, the unpredictable effects of hormones, the social risks of implant use and the racial-class ties of the institution that prescribes them could threaten some teenagers' sense of control.

Finally, the implant may work against adolescents' needs for peer acceptance and immediate reward. The device was viewed as a long-term, unpopular and potential-

ly visible method of contraception. These aspects of the implant may inherently contradict some fundamental aspects of adolescence, such as a short-term perspective and a strong need for group acceptance.

The handful of participants who were using the implant had a strong future orientation, were autonomous decision-makers, did not find control issues to be a barrier to implant use and did not have a profound fear of pain. Recent studies have confirmed the existence of these characteristics among adolescents interested in implant use.²⁷ Additionally, since implant users relied more on clinic information, they may have been better informed about the method; being well-informed has been associated with increased implant selection and with positive attitudes toward other methods.²⁸ Finally, it may be that they simply were willing to exchange immediate control over their bodies for long-term control over their futures.

Since most participants were self-selected and the sample size was small, the generalizability of this study for different contraceptive methods and ethnic groups is limited. While the study cannot determine causal relationships, its findings can be important for identifying key issues, generating hypotheses and setting research and practice priorities.

Teenagers' personal and social experiences are critical to their contraceptive decision-making. Reproductive health service research should explore strategies that better respond to the major social, physical, cognitive and developmental concerns that teenagers face in contraceptive selection. Likewise, counseling techniques that respond to these concerns should be investigated. The role of males in contraceptive decision-making must be better understood and prioritized in reproductive health services, counseling and education. Finally, the broader issue of empowerment in varying socioeconomic conditions and in gender relations must be addressed.

Helping teenagers to select a method of contraception by formulating decision pathways accounting for the various interactions of their social conditions, information sources and personal attributes may be a more effective approach for reproductive health service providers and planners than targeting particular groups for specific methods. Unbiased debate and examination of issues such as management of side effects, safe removal and ethics are critical to ensuring that adolescents have accurate information for contraceptive decision-making.

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