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Withdrawal (Coitus Interruptus) as a Sexual Risk Reduction Strategy: Perspectives from African-American Adolescents

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Abstract

This study examined adolescents' beliefs about the benefits and risks of withdrawal (coitus interruptus) with respect to both pregnancy and sexually transmitted infections (STIs). In the course of qualitative interviews with African-American youth aged 14–19 (n = 124) about sexuality and risk, 24 adolescents spontaneously introduced the subject of withdrawal as a sexual risk reduction strategy. Eighteen percent of the sexually experienced adolescents mentioned their own use of withdrawal as a contraceptive method. From adolescents' accounts of their own and

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their peers' use of withdrawal, we learned that the cultural meanings of withdrawal within the context of adolescent relationships were multifaceted. Using withdrawal could signal sexual prowess in male youth, was seen as promoting trust and caring within a stable relationship, and was seen as mitigating the risk of pregnancy. However, adolescents also recognized that withdrawal did not protect against most STIs. Beliefs about withdrawal as a gendered skill and as a sign of trust may undermine some adolescents' attempts to negotiate condom use for protection against STIs.

Keywords

Sexually transmitted infections; HIV/AIDS; Adolescents; Withdrawal; Contraception; African-American

Introduction

In the U.S., sexually transmitted infections (STIs), including HIV, have become a substantial public health issue for adolescents (Cates, Herndon, Schulz, & Darroch, 2004; Chesson, Blandford, Gift, Tao, & Irwin, 2004). African-American adolescents are disproportionately at risk for both STIs and HIV in comparison to other racial/ethnic groups (Centers for Disease Control, 2006). Aside from abstinence or a mutually monogamous sexual relationship, correct and consistent condom use offers the best protection against STIs (Centers for Disease Control, 2000). The sociocultural barriers to condom use experienced by men and women at risk for STIs have been documented in a number of studies (Bowleg, 2004; Jones, 2004; Sobo, 1993; Whitehead, 1997; Worth, 1989).

This study reports on findings from qualitative formative research conducted through the iMPPACS network for HIV prevention message development (Horner et al., in press). In semi-structured interviews conducted with urban African-American adolescents ($n = 124$), we found that withdrawal, or coitus interruptus, was used as an alternative to condoms by some adolescents in some contexts. In all, 24 adolescents spontaneously introduced the subject of withdrawal (with no prompt from the interviewer) during conversations about relationships and sexual health. Although adolescents were not specifically asked whether they used the method, 14 of the 78 sexually experienced (defined, here, as having experienced penile–vaginal intercourse) youth indicated either during the interview or on the post-interview survey that they had done so. We analyzed adolescents' statements about withdrawal to obtain a clearer understanding of the social meaning of the practice and to better understand whether the practice represents a desirable alternative to condom use.

Withdrawal is a traditional contraceptive method used in both developed and developing countries (Bissell, 2003; Population Reports, 2004). To prevent conception, the male partner "pulls out" after limited unprotected intercourse, prior to ejaculation. The failure rate of withdrawal is higher than barrier and hormonal methods of birth control (Ranjit, Bankole, Darroch, & Sing, 2001) but has demonstrated efficacy in preventing pregnancy if used properly (Miller, 2003; Trussell, 1995). Its use in the U.S. has received little scholarly attention aside from reports of frequency of use in large-scale youth and sexuality studies (Rogow & Horowitz, 1995). According to biennial data from the Youth Risk Behavior

Survey, rates of withdrawal at last intercourse decreased from 17% in 1991 to 9% in 2003 for sexually active high school students (Anderson, Santelli, & Morrow, 2006; Everett et al., 2000). When broken down by racial identity, reports of using withdrawal at last intercourse decreased between 1991 and 2003 for African-American students from 13.6% to 7.2%. The practice appears more prevalent among white and Hispanic young women (11.7% and 12.2%, respectively, reported using withdrawal at last intercourse in 2003) (Santelli, Morrow, Anderson, & Lindberg, 2006).

By contrast, other studies suggest that the practice of withdrawal is common among sexually active youth. A 2002 national phone survey by the Kaiser Family Foundation and *Seventeen* Magazine ($n = 519$) found that 59% of sexually active adolescents had used withdrawal at least once as a method for pregnancy prevention (SexSmarts Surveys, 2002). An earlier Kaiser Family Foundation study found that among 188 African-Americans aged 15–24, 48% reported “ever” having used withdrawal and 17% reported using withdrawal “regularly” as a contraceptive method (Hoff, Greene, & Davis, 2003). A recent study conducted by Crosby, Sanders, Yarber, and Graham (2003) among U.S. college students suggests that some forms of improper condom use may resemble aspects of withdrawal. They found that 38% of a convenience sample of 260 college students reported having engaged in unprotected intercourse prior to condom application, suggesting that condoms were being used by this group for blocking ejaculation to avoid pregnancy and not for protection against infections transmitted through direct genital contact.

What protection, if any, does withdrawal provide against STIs? A European study (De Vicenzi, 1994) suggests that withdrawal provides some protection for male-to-female HIV transmission (but see Ilaria et al., 1992; Pudney, Oneta, Mayer, Seage, & Anderson, 1992). However, we found no studies indicating that the practice protects against any other STIs. Nevertheless, studies of risk reduction strategies in adults have documented the use of withdrawal as a means of reducing exposure to STIs (De Vicenzi, 1994; Donovan, 2000). A survey of low-income women in Missouri ($n = 2,256$) found that 9% had used withdrawal as an HIV prevention strategy in the absence of condoms (Crosby, Yarber, & Meyerson, 2000). The Kaiser Family Foundation survey found that 21% of adolescents considered “pulling out” or withdrawal a method of “safer” sex, but the meaning of safety was ambiguous (Hoff et al., 2003).

A few qualitative studies have investigated adolescents’ and emerging adults’ understanding of withdrawal as a contraceptive option, but none have focused on the practice among African-Americans. Sullivan's (1995) ethnographic fieldwork in low-income areas of Brooklyn during the mid-1980s found that young men in their late teens and early 20s ($n = 42$) relied primarily on withdrawal, which was attributed to the difficulty of obtaining condoms before widespread awareness of AIDS. Focus groups conducted with Latina mothers in their late teens and early 20s ($n = 40$) considered a man's willingness to withdraw prior to ejaculation as an expression of caring. Withdrawal was considered effective against pregnancy “if the man wants it to work” (Gilliam, Warden, & Tapia, 2004). Australian adults aged 18–25 in a focus group study perceived withdrawal as a common practice, suggesting it might be used by new or casual partners if there was no condom available, when women felt reluctant to discuss condom use, or when one or both partners did not want

to use one (De Visser, 2004). A survey of mostly Hispanic adolescent females detained in the juvenile justice system found that 33 of the 89 who were sexually active reported that their last male sex partner used withdrawal as a pregnancy prevention strategy (Kelly, Morgan-Kidd, Champion, & Wood, 2003).

Withdrawal can be deliberately chosen as a long-term contraceptive method (Gilliam et al., 2004; Hoff et al., 2003; Miller, 2003) or used as an ad hoc solution when condoms are either unavailable or difficult to negotiate (De Visser, 2004). Because the practice does not protect against STIs, and because few scholarly accounts have investigated the use of withdrawal in the U.S., the purposes of this study were (1) to describe the circumstances under which withdrawal became the preferred method of risk reduction; (2) to understand adolescents' perceptions about the social meanings attributed to withdrawal; and (3) to ask specifically whether adolescents believed withdrawal provided any protection against STIs.

Method

Participants

This study draws on qualitative data gathered during formative research for a health promotion program developed specifically for African-American urban youth. To develop HIV prevention messages, we drew on adolescents' own narratives of sexual health strategies in order to identify arguments against risk behaviors and in favor of protective practices (Horner et al., in press). Adolescents in two mid-sized U.S. cities, one in the northeast and one in the southeast (populations 147,000 and 97,000), were recruited through three community-based organizations (CBOs) in the northern city, and a Boys and Girls Club in the southern city. These organizations served low-income, predominantly African-American youth. Adolescents were typically approached in group settings, where a recruiter provided a brief overview of the study. Interested youth took a packet of information that included youth assent/consent and parental consent forms and a coverletter describingthe study.Those whoprovided written assent/consent were scheduled for individual interviews in private offices at the CBOs. Overall, 59 boys and 65 girls were interviewed. Most self-identified as African-American; three adolescents identified as biracial. All were between the ages of 14–19, with a mean age of 15.9 years. All youth provided assent or consent as appropriate and parental consent was obtained for each adolescent under age 19. Each participant was compensated $20. Institutional Review Boards at each associated university approved the study protocols.

Procedure

Semi-structured interviews were conducted by four research staff members (two in each city) with experience in the areas of substance abuse intervention, health education, and HIV-positive case management among urban youth. All four interviewers were in their mid-20s to mid-30s and identified as African-American. The interviews were gender-matched and conducted in private at the host facilities. At the start of each interview, the interviewers explained the reasons for the study and reassured the participants that their answers would not be shared with anyone, including their parents or staff at the host facility. To establish rapport, interviewers began with an unstructured discussion of the young

person's daily activities and interests. The formal section of the interview protocol consisted of seven topics: (1) experiences in a current or past relationship with a romantic or sexual partner; (2) experiences or expectations of sexual intercourse in that relationship or, if not sexually active in the current relationship, a prior sexual relationship; (3) attitudes about sexual behavior in general; (4) attitudes about and experiences with condoms; (5) beliefs about pregnancy; (6) experiences with sexual health care; and (7) recommendations for educating young people about sexual health. Interviewers used open-ended questions about the topics as starting points and pursued issues relevant to sexual risk taking when appropriate. On average, the interviews lasted 47 min (range = 20– 90 min). Following the interview, participants completed a self-administered questionnaire about their sexual behavior and condom use experiences, family structure, and media use.

Data Analysis

The interviews were recorded as digital sound-files and transcribed by a professional transcription service. Two coders read the transcripts while checking them for accuracy against the sound files. Errors were corrected. The transcripts were coded using both directed and conventional content analysis methods (Hsieh & Shannon, 2005). In the directed portion of the process, two coders compared interpretations and secured agreement on the elements of a coding manual, which delineated rules for first identifying the seven major categories of discussion (“trees”), then marking the subcategories and probes (“branches”) within each category. Coders used the qualitative analysis software NVivo (QSR International, 2002) to mark and sort segments of dialogue pertaining to particular sections and subsections of the interview. Reliability was established through four iterations of simultaneous coding of transcripts; coders also consulted frequently to classify instances in which the interviewer modified the interview protocol. Answers to yes/no questions were entered into an integrated quantitative database. Data from the post-interview survey were also added to this database.

In addition to directed codes derived from the protocol, spontaneously recurring topics and issues were assigned “free” codes outside of the tree and branch coding scheme. During directed coding of the first interviews, we noticed several references to the practice of withdrawal, and created a “free” code to mark it in subsequent transcripts. After about half of the interviews had been completed and it was apparent that adolescents recognized withdrawal as a contraceptive method, we modified the protocol to include a question about withdrawal at the end of the fourth section (condom attitudes and use). After adolescents were asked whether they knew of any ways to prevent STIs other than condoms,they were asked whether withdrawal would provide any protection from STIs. Fifty-three adolescents responded to this question. During coding, we distinguished between discussions of withdrawal spontaneously introduced by the participant and statements about withdrawal prompted by the interviewer's probe.

In the second stage of analysis, the primary coder reviewed all transcripts to ensure comprehensive coding of references to the practice of withdrawal, defined as instances in which participants mentioned or described a male withdrawing from the female to avoid ejaculating in her vagina. Using the constant comparative method (Glaser & Strauss, 1967),

discussions of withdrawal were read and sorted along dimensions of similarity, or themes, defined as theoretically relevant concepts that convey an underlying pattern in the content of the participants' discussion (Sandelowski & Barroso, 2003). The results of our inquiry were organized into the following sections: (1) circumstances in which withdrawal might be used; (2) perceived prevalence of the practice; (3) withdrawal and trusting relationships; (4) withdrawal and sexual prowess; (5) withdrawal and perceived pregnancy risk; (6) social and interpersonal pressures to use withdrawal; and (7) withdrawal and perceived STI/HIV risk. Only spontaneous remarks were used to illustrate the first six categories. Responses to the interviewer's introduction of the topic were used to illustrate the last category. In all, the quotes used to illustrate these themes were drawn from 29 different interviews.

Results

Circumstances for Using Withdrawal

Of the 124 adolescents interviewed, 78 reported at least one experience of penile–vaginal intercourse and 46 reported none. However, the topic of withdrawal was introduced and discussed by adolescents from both groups. 24 of the 124 participants spontaneously mentioned withdrawal prior to any interviewer probing. Eleven (seven boys and four girls) mentioned their own use of withdrawal over the course of the interview. Thirteen (seven boys and six girls) introduced the topic in response to a variety of questions regarding the behavior and beliefs of their peers as well as themselves. Two girls and one boy did not discuss withdrawal with the interviewer, but indicated on the post-interview survey that they had used it for contraception at last intercourse. The topic was almost always introduced in conjunction with the risks and benefits of using condoms. The following addresses circumstances for withdrawal as described by participants.

> Participant 1 (P1): You know, I ain't got a condom...so I just was like, man, I mean, I'll just pull out or something. Interviewer (I): Right.
>
> P1: I mean that's how it went down. (Male, age 18)
>
> I: What if you, what if one day you didn't have a condom on you?
>
> P2: I'd be very very careful.
>
> I: How?
>
> P2: Have sex with her for only a minute...Oh, I wouldn't have sex with her for very long.
>
> I: What, would you pull out or something?
>
> P2: Yeah. (Male, age 15)
>
> Others also mentioned withdrawal as a solution should one or both partners object to using a condom.
>
> I: What do you think she would have said if you had told her, "I wanna stop using condoms when we have sex?" P3: Make sure you pull out before you come. (Male, age 16)

P4: I know my friend, she don't use ‘em.

I: She don't?

P4: This is what she told me her boyfriend told her. He take the car out of the garage when it starts to leak, so...

I: Okay.

P4: That's what she told me he told her. (Female, age 14) Some described a decision to substitute withdrawal for condom use because of a perception that using a condom was interfering with pleasure in a particular sexual intercourse occasion.

P5: ...probably about a week after she gotten the birth control, I had unprotected sex with her. But I, I pulled out before I came. So...I really don't know what happen but— oh, it was taking too long for me to come, so I was like, she got on birth control and she'll be okay so, I did it. (Male, age 18)

P6: Condoms felt too, it felt, I felt too much friction inside of me and it was like, hold on, hold on, let me turn this way and I couldn't find ways to make it feel better. So, it was like, whatever, just get rid of it. And we used that pull out method. (Female, age 17)

P7: There was one time I didn't use it but we was safe when we did it.

I: What do you mean you were safe?

P7: I used it [condom], but I took it off.

I: And then what do you mean you were safe?

P7: I ain't like, come in her, I just came out, like, then I did it. (Male, age 19)

Perceived Prevalence of Withdrawal

The choice between condoms and withdrawal for contraception was articulated most clearly by some adolescents in response to questions about their peer groups’ attitudes about condoms. These youth implied that their peers felt condoms were unnecessary because they had the option of using withdrawal.

P8: I think the males...don't really care about using a condom cause they, cause they think they'll pull out fast enough.

I: How do you think most girls feel about guys using condoms?

P8: I believe they don't care to tell you the truth... Because they be like, as long as you do this, as long as you, you know...like, don't let it go inside me and stuff. That all they be thinking sometimes.

I: OK. They, when you say don't let it go inside me, you talking don't come?

P8: Don't come inside her. (Male, age 17)

P9: Most guys feel that they, I don't know, they like to touch it without the condom better but if they don't want to get the girl pregnant or get a STD then they think twice and use a condom. Or those who don't know, they just know that it feels good

and think that pulling out is just gonna solve it even if the girl is on birth control or not. They might just, I don't know, don't use ‘em or don't think that something will happen to them. (Male, age 17)

P10: They don't use them at all.

I: They don't use them at all? Oh okay.

P10: It surprise me that they haven't got one girl pregnant.

I: Really? Okay. So what do they usually do, do you know?

P10: I think they just take their thing out before. (Female, age 15)

P11: Some of them, it's like half and half. Some will think, yeah, I'm going to use a condom. You can, you can catch something. They the smart ones. The other ones said, “No, I don't need no condom, I'll pull out in time.” I try to explain to them that you can still catch something, though. (Male, age 17)

Withdrawal and Trusting Relationships

Other discussions suggested that withdrawal was purposefully chosen by a couple as a long-term contraceptive solution. For these adolescents, withdrawal could be seen as an expression of “negotiated safety,” the choice of which signals a committed relationship. For this reason, withdrawal seems to be regarded as a superior method because it implied closeness, familiarity, and trust.

P12: This older girl, she came to my house. I had a sleepover and we were all just talking. My mom's friend's daughter, she like 16/17. She like, oh, me and my boyfriend don't use a condom, we've been together for mad long. Like, he knows what to do with just mad stuff.

I: Oh, okay. So why do you think she doesn't use one?

P12: I don't know. She said he don't got nothing, like, he knows when to pull it out, this and that stuff. (Female, age 14)

Another adolescent had always used condoms with prior partners but began using withdrawal with his current 14-year-old girlfriend.

I: So, what makes it different between the one you're with now and the other ones?

P13: I trust her.

I: You trust the one you're with now?

P13: Yeah.

I: What do you mean by trust? You—

P13: It's like she wouldn't do it with nobody else and she wouldn't bring nothing back.

I: And what about her?

P13: Her trusting me? ...It's like she know that I'm gonna pull out. I know, you know, when I'm going to pull out. (Male, age 16)

Withdrawal and Sexual Prowess

Beyond its implications for intimacy, withdrawal has a second positive connotation for some adolescents. In a variety of ways, withdrawal was framed as a skill. An ability to use withdrawal demonstrated that a male was sexually experienced and that he was sexually adept. As in the earlier two quotes, adolescents often referred to withdrawal as something one “knows” how to do.

P14: You know what I'm saying, I know when to pull out. (Male, age 17)

P15: It ain't no reason [to use condoms] cause they boyfriends know what they doing and all that stuff...they know they ain't gonna get them pregnant. (Female, age 15) One male argued that withdrawal required a measure of “familiarity” with one's own sexual responses.

P16: I don't think that every time you have sex without a condom you gonna have a baby because some people familiar with themselves. Like, they could pull out. (Male, age 16)

Another female explained that she used condoms with her current boyfriend because she doubted his ability to use withdrawal:

P17: He probably can't control his self. You know... He probably can't pull out in time enough. (Female, age 15)

Risk of Pregnancy

Although some adolescents appeared to endorse withdrawal, others felt equivocal about it because of the heightened risk of unintended pregnancy. The young woman who had discussed her discomfort with condoms described using withdrawal until after she experienced a pregnancy scare:

P6: And we always had a little towel put out, whatever. And it was, it worked for a while. But, when I got scared, I was like, I can't do this no more.

I: You can't do it anymore.

P6: I'm taking too much of a chance. (Female, age 17)

I: Now, how do you think most girls feel about guys using condoms?

P3: Can't tell what they're thinking really ‘cause some, you know, do something to you. And then, like, they say, “you ain't gotta use one”...[but] you don't pull out the right time and you'll have a child on your hands. (Male, age 16)

P18: She just, she told me she didn't want to get, want to get pregnant cause I was coming too close to getting her pregnant at times.

I: What do you mean?

P18: Like, like when I was getting ready to ejaculate I was pulling out of her; and she was getting worried that maybe one day I'm not gonna, I'm not gonna pull out, I'm gonna get her pregnant. (Male, age 18)

Pressure to Use Withdrawal Instead of Condoms

Some girls discussed pressure to rely on withdrawal instead of condoms. Perhaps a girl's refusal to use withdrawal, and an insistence on condom use, contradicts a boy's claims of competence and experience, given the notion that the ability to “pull out in time” is a sign of experience and self-control.

P19: If a boy tells [a girl], “I'm gonna pull out,” or like, “We don't need to use a condom because I'm not going to get you pregnant,” and they're like, “okay, whatever, it's okay, you don't have to use one,” I think they're just easily influenced.

I: Okay, so they'll just go along with whatever the boy says.

P19: Yeah.

I: Oh, okay. So what do you think would happen, like, do you think that they don't worry about getting pregnant or they don't worry about getting STDs or what do you think that they're thinking?

P19: Some people when they are like, when they in the moment, I think that they don't think about it, really, but when they're done they be thinking, like, “Dang, I hope he didn't come in me,” or, “I hope he didn't have no STDs or nothing.” (Female, age 16)

I: So you think, like, most boys would rather not use condoms?

P20: Yeah.

I: What do you think they, what do they usually say?

P20: “it'll feel better, I'll pull out before I come” or something. (Female, age 17)

Other female adolescents who were skeptical of the practice specified that withdrawal was risky because boys could not always be trusted to follow through on a promise to pull out.

P15: ...they be like, “I'll pull it out, I'll pull it out, I know,” and all that, but most the time they say that and sometimes it probably do but [sometimes] they don't do it.

I: So, they might say they'll pull out, but they might, they might not?

P15: Uh-huh. (Female, age 15)

On the other hand, one young man implied that by using withdrawal properly, one earned the right to go without condoms.

I: Now, how would you feel if a girl you were with tells you that she wants to start using condoms?

P16: Oh, so you saying we weren't using condoms but now she wants to start? Well, I don't know. ... Like, y'all ain't been using condoms. You getting to feel it. If

you ain't nutted [ejaculated] in her yet, I say, I don't know. We would have to have a long, long talk about this. (Male, age 17)

Risk of Sexually Transmitted Infection

As it became clear that adolescents were familiar with the practice of withdrawal, a question was added towards the end of the interview protocol to ask whether withdrawal prior to ejaculation would protect against STIs. Of the 49 adolescents who answered this question, 36 said that withdrawal did not offer protection from STIs, specifying that people might use withdrawal to protect against pregnancy but not against infections:

P21: You could avoid having a baby but I don't know about diseases. (Male, age 15)

I: Okay, so you don't think that people use, like, pulling out as a way to not get a disease?

P22: No, if anything they use it for not getting pregnant.

I: Okay.

P22: But it doesn't work because that's how I got pregnant. (Female, age 18)

Others answered that withdrawal would not protect against infection, but their explanations did not clearly explain why. For example, some argued that it would not protect against diseases because a male partner might not be willing or able to pull out in time.

I: Do you think that you could be protected from diseases by pulling out?

P23: Un-uh [no].

I: Why not?

P23: Because the boy might don't tell you when they gonna nut [ejaculate] or something like that, been done nutted in you or something. (Female, age 14)

I: And what do you think about, like, pulling out?

P24: That's if. A majority of them don't, I think. A majority of them I'm pretty sure, they just keep going. (Female, age 14)

I: What about some guys say that they pull out?

P25: It don't necessarily work.

I: It doesn't necessarily work?

P25: Because of premature ejaculation. (Male, age 16)

Those who said that withdrawal would protect against STIs focused on semen for transmission of pathogens:

P26: Because if, like, he don't get none of his fluids inside of you then maybe the disease won't be transmitted inside you. (Female, age 15)

A few of the adolescents appeared to have learned about withdrawal from peers. However, many of those who knew it would not protect from STIs had learned this information in

health classes at school and linked the risks of withdrawal with an awareness of pre-ejaculate.

> I: Ok. Well what about like pulling out? You think people think, like use that as a way?
>
> P27: To not get somebody pregnant I think, but not to actually prevent, cause as soon as you put the thing in, pre-cum, you don't feel that, I mean it's pre-cum so that right there, it give you an STD. And you can get pregnant from that too. (Female, age 17)
>
> I: Okay, what about withdrawal or pulling out?
>
> P28: Withdrawal or pulling out, what do you mean?
>
> I: Like, if a man withdraws or pulls out from the vagina before he ejaculates.
>
> P28: That—I will—health lady say you—you still can get something either way you go, or you can have a baby ‘cause she said, “A guy dribblesbefore he shoots.” (Female, age 14)

One girl mentioned being warned against relying on withdrawal by her mother.

> P29: Cause a lot of, my momma told me, like, if a male pull out their penis ... My momma say you should always say no, cause you can catch something. You never know what that male got on him or nothing like that. (Female, age 18)

Of the 49 who answered the question, only five adolescents said that withdrawal would protect against STIs, and seven did not know. Few elaborated on their answers and several asked the interviewer to explain the practice. None mentioned that they had used withdrawal themselves. Most who knew that withdrawal would not protect against STIs had learned this in health class; of the 12 who did not, 10 were age 15 or younger. Thus, it is possible they had not yet covered this material in school.

Discussion

Several tentative conclusions and directions for future research are suggested by these findings. Withdrawal appears to be a widely used practice among the adolescents we interviewed. Many spontaneously raised it as an alternative to condom use, either because they used it themselves or had heard about its use among peers. Condoms and withdrawal may be perceived as categorically similar, as both are the only methods for contraception that necessitate male compliance and do not require formal health care or family planning services. Our findings suggest that withdrawal is used primarily for contraception. Although the failure rates for withdrawal are higher than rates for other methods (Ranjit et al., 2001), as Miller (2003) argues, it is “a very great deal better than nothing.”

For those who were asked about its efficacy in preventing STIs, most knew of the practice and, among those who knew about it, most did not believe it protected against STIs in general. However, we did not ask about protection from HIV specifically. Because Crosby et al. (2000) found that adult women used withdrawal for protection against HIV, the possibility remains that some youth may consider withdrawal preventive against HIV.

We found several reasons why adolescents chose withdrawal over other methods. One benefit is that it has no cost and requires no advance preparation. Furthermore, as suggested by the girl whose older friend has been with a boyfriend “for mad long,” and the boy whose girlfriend “trusted” him to pull out, withdrawal within monogamous relationships connotes intimacy, familiarity, and a type of negotiated safety. This view resonates with Gilliam et al.'s (2004) finding that young Latina women used the phrase “he takes care of me” to refer to a partner's use of withdrawal. This view was also reflected in comments of some adolescents who said that some youth felt pressure to accede to a partner's desire to use withdrawal rather than condoms. Arguments such as “I know what I'm doing” or “I won't let you get pregnant” suggest a level of masculine skill that might appear to be challenged by a girl's preference for condoms. In a social context valuing sexual experience and masculine control of courtship (Seal & Ehrhardt, 2003; Whitehead, 1997), an adolescent male's use of withdrawal may reflect not only on his relationship with his partner, but on his self-image. From this perspective, in peer groups in which sexual experience is valued, adolescent males may feel pressure to prove themselves experienced enough to use withdrawal instead of relying on condoms; in turn, this may contribute to a stronger sense that the practice is normative.

Other benefits were not related to the relationship context. One benefit was hedonistic in that withdrawal was viewed as being more pleasurable than using condoms. In addition, when a condom is not available, and one or both partners desire intercourse, some adolescents consider withdrawal a means of harm reduction, averting some (if not all) of the risks of unprotected sexual intercourse. Unfortunately, because the practice does not protect adequately against most STIs, it can lead to a false sense of security even when it is used primarily in longer-term and more “trusting” relationships. Indeed, use of withdrawal suggests that the primary concern among adolescents is the prevention of pregnancy rather than STIs. Given this, health educators need to devote more attention to highlighting the need to avert the risks of STIs for which withdrawal is not particularly effective. Furthermore, the findings suggest that reliance on withdrawal as a prevention strategy may compete with the use of condoms and interfere with their consistent use, especially in longer-term relationships.

Because this study relied on a convenience sample of African-American adolescents in poor urban settings, the findings may not generalize to other American youth. National surveys suggest that Latino and white youth may be more likely to use withdrawal than African-Americans (Santelli et al., 2006); however, other research suggests that African-American women may be more likely than whites or Latinas to become pregnant while using the method (Ranjit et al., 2001). Future research would be enriched by cross-cultural comparisons of sexual practices as well as the cultural meanings attributed to them. Our findings do raise a number of questions that might be answered in future studies. Is withdrawal considered more appropriate for long-term relationships than for casual encounters? Do young people learn about withdrawal through peer networks or from other sources? How widespread is approval of orskepticism toward themethod amongmen and women? Would learning more about the risks of using withdrawal encourage less reliance on it as a safer sex strategy? Future studies would benefit from focused attention according to Eyre's (1997) recommendations for eliciting adolescents’ own interpretations of

vernacular terms and their cultural connotations. Although population-level data on health practices and infection rates serve an important function, research designed to understand the sociocultural context for sexual risk-taking is needed to develop appropriate prevention strategies (Beatty, Wheeler, & Gaiter, 2004; Kreuter & Haughton, 2006; Tolman, Striepe, & Harmon, 2003).

In summary, discussions of withdrawal among this particular group of urban African-American youth suggested avenues for exploring tacit understandings about sexual intercourse, interpersonal relationships, and gender role. The option of using withdrawal in lieu of condoms for contraception may undermine efforts to reduce the incidence of STIs, including HIV, among young people. Although this qualitative study was not designed to estimate the prevalence of withdrawal use, or how many adolescents hold the beliefs addressed in this study, it does offer insights into a little-understood contraceptive practice that, under some circumstances, may increase adolescents' risk for STIs.

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References

Anderson JE, Santelli JS, Morrow B. Trends in adolescent contraceptive use, unprotected, and poorly protected sex, 1991–2003. Journal of Adolescent Health. 2006; 38:734–739. [PubMed: 16730603]

Beatty LA, Wheeler D, Gaiter J. HIV prevention research for African Americans: Current and future directions. Journal of Black Psychology. 2004; 30:40–58.

Bissell M. Withdrawal: Historical, cultural, and current perspectives on its use. Canadian Journal of Human Sexuality. 2003; 12:191–192.

Bowleg L. Love, sex, and masculinity in sociocultural context. Men and Masculinities. 2004; 7:166–186.

Cates, JR.; Herndon, NL.; Schulz, SL.; Darroch, JE. Our voices, our lives, our futures: Youth and sexually transmitted diseases. University of North Carolina; Chapel Hill, NC: 2004.

Centers for Disease Control and Prevention. Scientific evidence on condom effectiveness for sexually transmitted disease (STD) prevention.. Workshop summary; Herndon, VA. 2000. at http://www.niaid.nih.gov/dmid/stds/condomreport.pdf

Centers for Disease Control and Prevention. Cases of HIV infection and AIDS in the United States, by race/ethnicity, 2002–2004. HIV/AIDS Surveillance Supplemental Report. 2006; 12(1) at http://www.cdc.gov/hiv/topics/surveillance/resources/reports/2006supp_vol12no1.

Chesson HW, Blandford JM, Gift TL, Tao G, Irwin KL. The estimated direct medical cost of sexually transmitted diseases among American youth, 2000. Perspectives on Sexual and Reproductive Health. 2004; 36:11–19. [PubMed: 14982672]

Crosby RA, Sanders S, Yarber WL, Graham CA. Condom-use errors and problems: A neglected aspect of studies assessing condom effectiveness. American Journal of Preventative Medicine. 2003; 24:367–370.

Crosby RA, Yarber WL, Meyerson B. Prevention strategies other than male condoms employed by low-income women to prevent HIV infection. Public Health Nursing. 2000; 17:53–60. [PubMed: 10675053]

De Vicenzi I, European Study Group on Heterosexual Transmission of HIV. A longitudinal study of human immunodeficiency virus transmission by heterosexual partners. New England Journal of Medicine. 1994; 331:341–346. [PubMed: 8028613]

De Visser R. Delayed application of condoms, withdrawal, and negotiation of safer sex among heterosexual young adults. AIDS Care. 2004; 16:315–322. [PubMed: 15203425]

Donovan B. The repertoire of human efforts to avoid sexually transmissible diseases: Past and present. Part 2: Strategies used during or after sex. Sexually Transmitted Infections. 2000; 76:88–93. [PubMed: 10858708]

Everett SA, Warren CW, Santelli JS, Kann L, Collins JL, Kolbe LJ. Use of birth control pills, condoms, and withdrawal among U.S. high school students. Journal of Adolescent Health. 2000; 27:112–118. [PubMed: 10899471]

Eyre SL. The vernacular term interview: Soliciting social knowledge related to sex among adolescents. Journal of Adolescence. 1997; 20:9–27. [PubMed: 9063772]

Gilliam ML, Warden MM, Tapia B. Young Latinas recall contraceptive use before and after pregnancy: A focus group study. Journal of Pediatric and Adolescent Gynecology. 2004; 17:279–287. [PubMed: 15288030]

Glaser, BG.; Strauss, AL. The discovery of grounded theory: Strategies for qualitative research. Aldine de Gruyter; New York: 1967.

Hoff, T.; Greene, L.; Davis, J. National survey of adolescents and young adults: Sexual health knowledge, attitudes, and experiences. Henry J. Kaiser Foundation; 2003. http://www.kff.org

Horner JR, Romer D, Vanable PA, Salazar LF, Carey MP, Juzang I, et al. Using culture-centered qualitative formative research to design broadcast messages for HIV prevention for African American adolescents. Journal of Health Communication. in press.

Hsieh H, Shannon SE. Three approaches to qualitative content analysis. Qualitative Health Research. 2005; 15:1277–1288. [PubMed: 16204405]

Ilaria G, Jacobs JL, Polsky B, Koll B, Baron P, MacLow C, et al. Detection of HIV-1 DNA sequences in pre-ejaculatory fluid. Lancet. 1992; 340:1469. [PubMed: 1360583]

Jones R. Relationships of sexual imposition, dyadic trust, and sensation seeking with sexual risk behavior in young urban women. Research in Nursing and Health. 2004; 27:185–197. [PubMed: 15141371]

Kelly PJ, Morgan-Kidd J, Champion JD, Wood R. Sexuality knowledge, attitudes, and practices of young women in the juvenile justice system. Pediatric Nursing. 2003; 29:271–275. [PubMed: 12956546]

Kreuter MW, Haughton LT. Integrating culture into health information for African-American women. American Behavioral Scientist. 2006; 49:794–811.

Miller R. Withdrawal: A very great deal better than nothing. Canadian Journal of Human Sexuality. 2003; 12:189–190.

Population Reports. Contraceptive use. Population Reports. 2004; 32:4–10.

Pudney J, Oneta M, Mayer K, Seage G, Anderson D. Pre-ejaculatory fluid as a potential vector for transmission of HIV-1. Lancet. 1992; 340:1470. [PubMed: 1360584]

QSR International. Using NVivo in qualitative research. 3rd ed.2002. http://www.qsrinternational.com

Ranjit N, Bankole A, Darroch JE, Sing S. Contraceptive failure in the first two years of use: Differences across socioeconomic subgroups. Family Planning Perspectives. 2001; 33:19–27. [PubMed: 11271541]

Rogow D, Horowitz S. Withdrawal: A review of the literature and an agenda for research. Studies in Family Planning. 1995; 26:140–153. [PubMed: 7570764]

Sandelowski M, Barroso J. Classifying the findings in qualitative studies. Qualitative Health Research. 2003; 13:905–923. [PubMed: 14502957]

Santelli JS, Morrow B, Anderson JE, Lindberg LD. Contraceptive use and pregnancy risk among U.S. high school students. Perspectives on Sexual and Reproductive Health. 2006; 108:106–111. [PubMed: 16772192]

Seal DW, Ehrhardt AA. Masculinity and urban men: Perceived scripts for courtship, romantic, and sexual interactions with women. Culture, Health and Sexuality. 2003; 5:295–319.

SexSmarts Surveys. [02/07/2007] Teens and sexual health communication. 2002. http://www.kff.org/youthhivstds

Sobo EJ. Inner-city women and AIDS: The psycho-social benefits of unsafe sex. Culture, Medicine, and Psychiatry. 1993; 17:455–485.

Sullivan, M. Teenage males' beliefs and practices about contraception: Findings from comparative ethnographic research in high-risk neighborhoods.. Paper presented at the annual meeting of the Population Association of America; San Francisco. 1995, April;

Tolman D, Striepe MI, Harmon T. Gender matters: Constructing a model of adolescent sexual health. Journal of Sex Research. 2003; 40:4–12. [PubMed: 12806527]

Trussell J. On the efficacy of withdrawal. Studies in Family Planning. 1995; 26:305–306. [PubMed: 8571446]

Whitehead TL. Urban low-income African-American men, HIV/AIDS, and gender identity. Medical Anthropology Quarterly. 1997; 11:411–447. [PubMed: 9408898]

Worth D. Sexual decision-making and AIDS: Why condom promotion among vulnerable women is likely to fail. Studies in Family Planning. 1989; 20:297–307. [PubMed: 2623725]