



Published in final edited form as:

*Perspect Sex Reprod Health*. 2010 June ; 42(2): 125–132. doi:10.1363/4212510.

## Abstinence and Teenagers: Prevention Counseling Practices of Health Care Providers Serving High-Risk Patients in the United States

Cynthia C. Harper, Jillian T. Henderson, Amy Schalet, Davida Becker, Laura Stratton, and Tina R. Raine

### Abstract

**CONTEXT**—Abstinence-only education has had little demonstrable impact on teenagers' sexual behaviors, despite significant policy and funding efforts. Given the struggle over resources to improve teenagers' reproductive health outcomes, the views of clinicians serving teenagers at high risk for unintended pregnancy and STDs merit particular attention.

**METHODS**—In 2005, a qualitative study with 31 clinicians serving low-income, at-risk patients was conducted. A semistructured interview guide was used to ask clinicians about adolescent pregnancy, HIV and STD prevention counseling, and when they include abstinence. Thematic content analysis was used to examine the content of the counseling and the techniques used in different situations.

**RESULTS**—Providers reported offering comprehensive counseling, presenting abstinence as a choice for teenagers, along with information about contraceptives and condoms. Several providers mentioned that with young, sexually inexperienced teenagers, they discuss delaying sexual activity and suggest other ways to be affectionate, while giving information on condoms. Providers explained how they assess whether teenagers feel ready to be sexually active and try to impart skills for healthy relationships. Some described abstinence as giving teenagers a way to opt out of unwanted sexual activity. Many support abstinence if that is the patient's desire, but routinely dispense condoms and contraceptives.

**CONCLUSIONS**—Overall, providers did not give abstinence counseling as a rigid categorical concept in their preventive practices, but as a health tool to give agency to teenagers within a harm reduction framework. Their approach may be informative for adolescent policies and programs in the future.

---

Although the average age at first intercourse in the United States, at 17, is similar to that in other industrialized countries, U.S. rates of teenage pregnancy and STD are significantly higher and contraceptive use far lower than in those other nations.<sup>1-2</sup> The U.S. government has promoted abstinence-only sex education programs for adolescents, which teach abstinence as the only way to prevent pregnancy and HIV and other STDs. A series of legislative and funding mechanisms in the past 15 years has supported abstinence-only education over comprehensive sexuality and contraceptive education, and a growing proportion of adolescents have received abstinence-only education.<sup>3-4</sup> The newly signed health care reform law allocates \$75 million for evidence-based sex education programs, and more than three times more, \$250 million, for abstinence-only-until-marriage programs for teenagers.<sup>5</sup> However, several rigorous studies have proven abstinence-only education to be ineffective at reducing sexual risk behaviors and outcomes, although one recent study did show some effect for young students in sixth and seventh grade.<sup>6-9</sup> The scientific literature

has also shown that a more comprehensive approach to educating adolescents about sexuality, which includes dispensing condoms and contraceptives, is superior to abstinence-only education at reducing sexual risk behavior.<sup>10,11</sup>

Although abstinence-only policies reigned mainly in the educational realm, they have also extended into health care services over the past decade. Title X guidelines since 2004 have encouraged providers to teach adolescents abstinence until marriage in addition to contraception and safer sex practice options.<sup>3,12</sup> Funding decisions on abstinence and policies on Title X guidelines, however, are under scrutiny.<sup>13</sup> Health care providers play a valuable role in educating their patients, and accuracy and completeness of information are the accepted standards in medicine.<sup>14</sup> Clinicians are held to professional standards involving medical and public health ethics, and are guided by professional health organizations. Guidelines in preventive medicine for HIV, other STDs and unintended pregnancy support the delivery of needed services, including counseling on condom and contraceptive use.<sup>15,16</sup> Although recognition of evidence-based medicine has been increasing, wide variation exists in medical practices; often, the provider's judgment is a component in determining patient care.<sup>17</sup> Few studies have assessed the practices of health care providers regarding abstinence counseling for adolescents within the one-on-one patient visit, although results from a recent survey of pediatricians show that 62% discuss abstinence with adolescent patients at preventive care visits.<sup>18</sup>

Abstinence-only counseling is a charged topic in policy and health funding settings, and to understand the public health implications, it is important to examine how health care providers approach it in serving teenagers who are at the highest risk of unintended pregnancy and HIV and other STDs. The objectives of this study were to gather qualitative data on provider perspectives on such patients' needs, and on whether, when and with which patients they discuss abstinence. We also looked at the content, context and framing of this topic within the visit. We tried to understand the meaning and utility of abstinence counseling for health care providers in serving their patients, as well as the role of professional judgment and scientific evidence in guiding provider practices in this area.

## METHODS

We used data from 31 in-depth interviews with obstetrician-gynecologists, family practice physicians, nurse practitioners and certified nurse-midwives serving low-income patients at high risk for unintended pregnancy and STDs. The interviews were conducted as part of a larger multisite study of providers' HIV, STD and pregnancy prevention services that took place in 2005–2009 in the United States and Sub-Saharan Africa. The interviews from the U.S. component took place in urban, semiurban and rural communities where women were at high risk of STDs from heterosexual transmission.

Women's risk of acquiring STDs through heterosexual transmission varies widely by location and race or ethnicity.<sup>19</sup> Therefore, to select potential recruiting areas, we used HIV and AIDS surveillance data from the Centers for Disease Control and Prevention<sup>20</sup> and state population estimates from the census<sup>21</sup> to identify states with high rates of HIV among women aged 15–44. To find communities within those states where women were at especially high risk, we requested epidemiologic and surveillance reports from state public health departments by county, parish or city. Diverse recruitment areas in urban and rural settings were selected: Essex county, New Jersey; Washington, DC; Edgemont, Lenoir, Martin and Durham counties, North Carolina; Bamberg and Sumter counties, South Carolina; St. Lucie and Miami-Dade counties, Florida; city of Oakland and San Diego county, California.

Providers within each recruitment area were identified through professional contacts, recommendations, provider directories and, when available, HIV surveillance data. Within each area, we recruited clinicians, taking into consideration provider characteristics (i.e., clinical training and specialization, practice setting and clinic type) and patient population characteristics (i.e., race, ethnicity and HIV risk). Although we recruited both physicians and advance practice clinicians, we selected twice as many advance practice clinicians because they provide the majority of prevention counseling. Clinicians were eligible if they routinely provided family planning or HIV and STD services in communities in the United States in which women have high rates of HIV and saw at least 10 female patients a week (including at least two patients for family planning and two for HIV- and STD-related services). The eligible clinician types were nurse practitioner, certified nurse-midwife, obstetrician-gynecologist or family practice physician.

Initial contact with providers was through a letter inviting them to participate in a study on family planning and STD prevention strategies. Follow-up recruitment efforts were made in person or by mail, telephone or e-mail. Prospective participants were screened for eligibility by telephone with a standard eligibility screening form. Because we sought 30 interviews, a total of 39 clinicians were formally screened for eligibility; 31 of the 37 eligible providers participated. Participants were interviewed in person, usually at their clinical practice, using a semistructured topic guide with open-ended questions. The topic guide was reviewed by clinician advisors and pilot-tested with five physicians and nurses (nurse practitioners or midwives). Interviews were conducted by two trained female interviewers in June–November 2005, and participants received \$100. The study was approved by the University of California, San Francisco, Committee on Human Research.

The interview topic guide contained questions about providers' counseling practices related to pregnancy, HIV and STD prevention. In addition, it contained scenarios that enabled providers to discuss their approach with different types of patients, which allowed us assess the degree to which providers tailor messages for different patients and risk levels. The adolescent patient scenario involved a 16-year-old student, nulliparous and unmarried, who sometimes used condoms; the reason for visit was to check for an STD. Providers were asked what HIV or pregnancy prevention approach they would take with the patient, and what they would discuss with her. Such use of scenarios is considered a high-quality and valid methodology for collecting data on provider practices.<sup>22</sup> The topic guide also included questions on whether participants discuss abstinence with patients as a prevention strategy. Clinicians were asked how effective they thought their abstinence message is, and to describe the patients with whom they discuss abstinence.

Interviews averaged 72 minutes (range, 31–110) and were recorded using digital voice recorders. Interview data were transcribed and coded independently by two researchers using Atlas.ti software. Deductive topic codes were applied to the interview responses on the basis of concepts from the literature. Additional topics and conceptual codes were generated inductively from the data. The responses were organized thematically. The goal of the analysis was to assess clinicians' prevention counseling practices by examining the content of the counseling and the techniques used for different patient situations. Though our qualitative approach did not allow for formal testing of differences between provider types, it did allow us to identify the range of approaches used, with an in-depth and nuanced understanding of providers' intentions for their counseling messages to patients.

## RESULTS

### Sample Characteristics

Ten physicians, 14 nurse practitioners and seven certified nurse-midwives were interviewed (one nurse practitioner was also a certified nurse-midwife). Most of the practice settings were nonprofit (17 of 31), but seven were public clinics, and a few were university-based and private practices. Of the nonprofit clinics, eight were Planned Parenthood clinics, and nine were community health centers. Eighteen of the 31 clinics received Title  $\times$  funding. Providers were based largely in urban or suburban areas, but some worked in rural practices; practices varied widely in total patient volume, from 50 patients per week to 3,000 per week. Providers were mainly women, reflecting a high concentration of women in the nurse and certified nurse-midwife professions, and were from diverse racial and ethnic backgrounds. They reported that their patients were mostly low-income, and that many patients were uninsured or on Medicaid. The providers had high concentrations of black and Latina patients, including immigrants. All providers served females of reproductive age, including significant adolescent populations.

All of the physicians and almost all of the advance practice clinicians said that they discuss abstinence with patients. A couple of the nurse practitioners said that they discuss it only rarely, because their patients are sexually active; commenting on her sexually active patients, a certified nurse-midwife noted, “it’s hard to put the cat back in the bag.” However, even after making such statements, most providers gave thoughtful, complex answers indicating that they included abstinence counseling to address varying needs of patients, particularly adolescents.

An emphasis on teenage patients emerged in the data. In general, providers said they are more likely to discuss abstinence, as well as condoms, with teenagers than with adult patients. When asked with whom they discuss abstinence, providers repeatedly said that they talk about it with their younger patients:

“Primarily I see that working in young kids.”—*Nurse practitioner, Florida*

“Well, especially with the younger girls.”—*Certified nurse-midwife, New Jersey*

“It’s probably more for the very young teens.”—*Obstetrician-gynecologist, Florida*

### Abstinence as Part of Comprehensive Counseling

Providers reported delivering the abstinence message as part of a larger message about protective behaviors, within a harm reduction approach. Most providers included abstinence and condoms, as well as contraceptives, in the same sentence. Providers discussed abstinence with their patients along with recommendations for HIV and STD testing and limiting the number of lifetime and concurrent partners. Some providers mentioned that a particular challenge is reaching younger patients who are at risk for HIV, and explained that they spend more time with teenagers and teach anatomy, safe behaviors and disease risk. Even with the young teenagers, providers do not see abstinence as having priority, but rather consider it one point of discussion or one choice. A certified nurse-midwife working in Washington, DC, explained, “I probably talk a lot more about abstinence to younger people.... I still would really push condoms.”

The concept of abstinence as part of a comprehensive package was the most prevalent response. Notably, none of the providers mentioned counseling patients on abstinence until marriage as a stand-alone approach.

In examining the purpose of the abstinence message, we saw abstinence used as a concept with multiple meanings. At times, it was used simply for educational purposes to impart information, such as when discussing noncoital physical pleasure. Other times it was used to help assess patient needs and to give appropriate guidance to meet those needs. In this sense, abstinence was sometimes discussed as an important concept for developmental reasons and identity formation, or as a tool to navigate gender realities and relationships. It was also viewed as a healthy choice for some patients, and at times was brought up for physical health reasons (Box).

• **Preteenage education**—Several providers mentioned that they address abstinence during conversations with sexually inexperienced preteenagers to provide information. They view it as a way of preparing these young females for sexual maturation and for the future when new choices will be available to them. In one provider's words:

“One of the reasons why we started getting adolescents at age 11 into the teen clinic [was] because at that time we thought 11 was a reasonable age to promote abstinence, so we're trying to get people before they actually become sexually active. So abstinence is something that we do encourage.”—*Nurse practitioner, Washington, DC*

Another provider noted that her office is not the place for young people to get the abstinence message because she sees sexually active patients. However, she also mentioned the informational purpose of the abstinence message, and said that mothers bring in their daughters for education before they are sexually active.

• **Sexual pleasure**—Providers mentioned that they discuss with younger patients ways of achieving pleasure and physical closeness without having intercourse. A midwife from South Carolina talked about acknowledging that sex feels good, but letting her patients know that other things feel good, too. A nurse practitioner also brought up her educational role as a provider in discussing pleasure, healthy sexuality and sexual satisfaction without intercourse:

“We see patients 13–15, 16 years old, and sometimes they come in and they're not having sex yet, but thinking about it because they're dating someone and want to be armed with information. So that's something we're always encouraging and letting them know the things that might give them some satisfaction without actual intercourse.”—*Nurse practitioner, Florida*

Although providers discuss behaviors apart from intercourse, such as kissing and hugging, they also discuss contraception, so patients can be protected in case they have intercourse.

• **Development and identity formation**—Providers frequently discussed abstinence in relation to readiness for sex—that is, as a normal developmental stage before an individual is ready to become sexually active. The focus is not necessarily on keeping patients abstinent, but rather on acknowledging the period in their lives before sexual initiation and their need to get appropriate health information.

Several providers commented on the importance of the developmental process and that it can be beneficial for female teenagers to look inward or to be involved in their own activities and school, rather than looking to males for growth and affirmation. The focus is on the emotional well-being of the female teenagers, and giving patients support to develop their own identity, not always vis-à-vis a male partner. The gendered nature of a teenager's development is recognized, along with the losses that can occur for a female teenager who is dependent on male approval or needs.

“I always bring up that it’s okay not to have intercourse. I always talk about abstinence as being totally cool. [Just because] all of the sudden, you become somebody’s girlfriend or somebody’s property...don’t forget to keep your own identity...it’s okay not to have intercourse...but if you’ve really thought this through, then make sure you use condoms.”—*certified nurse-midwife, Washington, DC*

Many providers reported emphasizing school involvement, homework and the importance of finishing schooling with their teenage patients. In this way, they simultaneously address the emotional development needs of adolescent patients and opportunity-building for their future.

• **Healthy patient choice**—Providers regard abstinence as a healthy choice for some of their patients, depending on the overall context and patient preference. An obstetrician-gynecologist explained that her first goal is to promote healthy sexuality and an adolescent’s healthy development, and that within that framework, abstinence can be a tool if it helps to reach the overall goal of optimal health. A nurse practitioner commented that she supports abstinence as an option for patients who express a preference for it:

“I think you have to come from a place of seeing abstinence as something that’s a choice for some women. And promoting that. If that’s what they want, then we want to support that as an option. Certainly they don’t need to base their identity on their sexuality completely.”—*Nurse practitioner, Florida*

Providers talk to teenagers about not feeling as though they have to have sex—about being able to choose. The themes of provider support for patients’ decisions and respect for autonomy arose throughout the interviews.

The providers also explain to patients that abstinence can be a viable choice after sexual initiation. A family practice physician who counsels abstinence for HIV prevention described a teenage patient who decided to take a hiatus from a sexual relationship once she was educated on the risk of HIV. The provider saw it as a healthy choice for the patient that came from enhanced education.

• **Voluntary, wanted sexual activity**—Another theme that arose in discussions of abstinence counseling was unwanted sexual activity, with subthemes of addressing regret, empowering female teenagers and supporting them to leave relationships. Many providers were aware that a teenager might not really want to be sexually active or might not want to be with a particular partner. Some discuss with teenage patients how to turn their negative experiences into valuable lessons that might lead to changes, including finding the right partner or saving sexual activity for voluntary and wanted activity; some see their role as giving support for these possibilities. One provider said:

“I had a couple of patients who had sex for the first time and were kind of freaked out about it. So [I told them], ‘Just because you’ve done this and you’re mature enough to realize that you weren’t ready for this, it doesn’t mean you can’t stop right now. Take a breather, spend a few years thinking about it or whatever you need to do, and remain abstinent...until you’re actually really ready for it.... When you decide to have sex, make sure you’re on birth control.’”—*Nurse practitioner, Washington, DC*

Providers take into account the context of pressured or unwanted sexual activity in the ways in which they serve their young female patients. Clinicians tell their teenage patients that they can always say no to sex and never to allow someone to pressure them into sex. They

consider abstinence counseling effective for that purpose, but also recognize the power imbalance inherent in a pressure situation. One clinician remarked:

“I always tell young women they should never allow someone to pressure them into having sex. But I know from my interviews every day that it happens all the time.”  
—*Certified nurse-midwife, Washington, DC*

One provider mentioned that for the highest risk patients—those without a choice over the sexual act—abstinence counseling can be futile. Many providers address nonconsensual sex by discussing with their patients their right to say no and giving them support for leaving unhealthy relationships.

A nurse practitioner explained that she discusses abstinence as a patient’s choice, but also suggests alternate ways to have pleasure and emphasizes the importance of condom use. She commented:

“I’ll also remind them that abstinence is an option, even if they’ve been sexually active in the past. It’s not very effective. I...try and send them out the door with condoms...but I also let them know that you can just say no. We have posters up about other ways to be affectionate—one of the posters is ‘How to Make Love Without Actually Doing It.’ I think another is ‘101 Ways to Say No.’”—*Nurse practitioner, Florida*

• **Physical health**—Although the providers discuss important psychosocial issues with their patients in assessing their health care needs, they also talk with them (albeit less frequently) about the health and medical reasons to delay sexual activity. The obstetrician-gynecologists are more likely to give reasons based on physical health outcomes than are the other providers, although they also take into account the importance of relationships and other factors. One noted:

“With the very young teenagers, we ask them to delay as long as possible. Medically it would be great if they would wait.... At least the lower genital tract is more mature and more resistant [i.e., to infection].”—*Obstetrician-gynecologist, New Jersey*

Providers also reported discussing their patients’ elevated risks for some infections, such as chlamydia, because of their young age. Several providers mentioned that they may discuss abstinence with teenage patients who have received an STD diagnosis. In this context, they present abstinence as a way for teenagers at high risk for STDs to end an unhealthy pattern of infections or risk behaviors. One clinician remarked:

“If they come to me with an STD and it’s, like, their second or third time, I’m like, ‘Is sex really worth it?’ I just come very bluntly out with it. ‘Is it really worth all this infection?’ ... And that’s how we may get on the topic of abstinence.”—*Obstetrician-gynecologist, Washington, DC*

Providers give their patients suggestions for other ways to prevent infections, such as leaving high-risk partners, not having sex until they are sure they want to or finding the right person (i.e., one who will use condoms). A few providers suggest abstinence rather than a relationship with an unfaithful partner. One said:

“And of course the other [option]...if she has a proven STD with [her] partner is to consider abstinence until she can find a relationship with someone who would treat her with respect, but that’s a hard call.”—*Obstetrician-gynecologist, North Carolina*

## Effectiveness of Abstinence Counseling

Asked whether they thought their abstinence counseling is effective for patients, about half of providers acknowledged that it is not very effective, but the other half said it can be fairly or very effective if it is used in certain ways. The providers who said that it can be effective referred to tailored counseling based on patient preference or circumstance, rather than a standard approach of emphasizing abstinence for all young patients. One clinician noted:

“I don’t promote abstinence unless that’s a cue from the person, because I don’t think it’s realistic. If I get a cue from the person that that’s what they want to do, I would definitely support that as a choice—a viable choice. Certainly effective. But it’s not realistic for the majority of our patients.”—*Nurse practitioner, Florida*

For example, several providers thought that abstinence counseling may be effective for very young patients or for patients who have that preference, but that it otherwise is not realistic. They felt that abstinence counseling may give a woman a way to opt out of something she does not want to do, or may give patients a “very effective” option during a period when they are open to that choice. Overall, providers tend to view the effectiveness of abstinence counseling as highly contingent on patient preference or circumstance, and are more attuned to the usefulness of the message in specific circumstances, rather than its overall effectiveness for delaying sexual activity.

## DISCUSSION

Through in-depth interviews with health care providers serving high-risk teenage populations in different regions of the country, we found that practitioners at various levels—physicians, nurse practitioners and certified nurse-midwives—see abstinence as a multifaceted idea, which they integrate into many counseling approaches. The patient situation and context, including age, developmental stage, gender concerns and health risks, are central to how these providers discuss abstinence in prevention counseling. The concept of abstinence as not being sexually active until marriage appears absent in their approach. Instead, providers more commonly bring up abstinence as a way to discuss with female teenage patients wanted and healthy sexual activity, and integrate it into discussions of protective behaviors for pregnancy and STD prevention. Although providers’ language and conceptual focus differed somewhat, clinicians were unanimous in their comprehensive, harm reduction approach.

These providers were aware of their important role in educating young patients on basic anatomy, fertility and transmission of reproductive tract infections. Their reported preventive practices were consistent with the educational roles delineated by professional medical organizations. The American Academy of Pediatrics emphasizes the role of the health care provider in patients’ sexuality education, and the importance of delivering information in a personalized way, with confidential assessment and preventive health promotion and counseling; it also supports counseling on abstinence as a prevention strategy, and states that discussion of contraception and barrier methods ideally takes place before the onset of sexual intercourse.<sup>23</sup> Abstinence as a healthy patient choice, but one that needs to be supplemented with information on condoms and contraception, is supported by the scant medical literature on counseling adolescents about abstinence<sup>24</sup> and by the Society for Adolescent Medicine.<sup>25</sup> The comprehensive care given by providers in this study, as opposed to selective withholding of health protection information, follows guidelines of other professional health organizations as well.<sup>15,16,26</sup>

The providers also described their efforts to address patients’ underlying psychosocial and developmental needs. They explained how they address abstinence in an effort to counsel young women to attend to their health needs—for example, by leaving relationships if



necessary. Teaching assertiveness and decision-making skills to adolescents, as well as helping teenage patients refuse unwanted sexual activity and leave unhealthy or coercive relationships, is another measure that professional organizations recommend to health care providers.<sup>23-27</sup> The providers spoke about the appropriateness of abstinence during the stage before sexual readiness. Similarly, a study of adolescents in primary care clinics found that the adolescents saw abstinence as an expected behavior until they reached readiness, defined in various ways by the adolescents themselves, their families and other social institutions.<sup>28</sup> In that study, some female patients, in retrospect, did not see themselves as having been ready for sexual initiation. Our findings show that when patients share the experience of not feeling ready with their provider, the provider may reintroduce the concept of abstinence as a way to bolster their sense of efficacy in sexual decision making. The way in which providers conceptualize abstinence and address it in counseling for adolescents is complex and varied, but also targets the particular need of the patient.

Although the concept of abstinence is a way for providers to discuss noncoital pleasure, it is also a limited concept for discussion of when and how sexuality can have healthy expression among adolescents. A nascent social scientific and public health literature suggests that it is important to include the experience of pleasure and physical or emotional desires in recommendations for preventive methods.<sup>29</sup> Although providers mentioned positive aspects of sexuality, their counseling appears to emphasize risk reduction, as do current recommendations of professional organizations. Adolescent sexual health policies, as well as professional guidelines, should be rethought to include a fuller discussion of sexuality, which encourages providers and educators to address positive aspects and healthy decision making.

### Limitations

Our findings must be viewed in light of a number of limitations. The study was designed to examine prevention practices among clinicians of different types serving high-risk patient populations. But results may not be generalizable beyond the providers in our purposive sample, who may have more highly developed counseling approaches than providers in general. In addition, these providers agreed to participate in a research study, and might therefore be especially conversant with the best practices for preventive care for adolescents. Social desirability bias may have caused providers to present their interactions with patients in a caring light. Providers also may be likely to bring up visits that were memorable precisely because of the in-depth and thoughtful discussion that occurred; these descriptions may represent the best care that providers have given, rather than their typical care. Many of the providers practiced in clinics receiving Title  $\times$  funding and would have been under pressure to report that they offer abstinence counseling to teenagers; the providers may have exaggerated the extent to which they offer this counseling, although most specified the patients and circumstances under which they offer it, i.e., to younger teenagers. Providers serving adolescents in the general population—for example, at a pediatrician's office—would undoubtedly have different prevention messages appropriate to their patients' needs.

Furthermore, our study was designed to reveal strategies and conceptual underpinnings in prevention counseling, as well as the content matter. It focused on the providers' perspective on adolescent care, but does not capture the patient experience, also an important subject of research.

### Conclusion

Despite the study's limitations, data from health care providers lend a refreshing expert voice to a controversial policy area. The providers' approach takes into account both individual patient needs and the elevated epidemiologic and fertility risks in this age-group.

30–32 Their conceptualizations of abstinence allow for individual teenagers to grow and change, rather than requiring one standard for all patients. The interviews revealed the multitude of ways that providers define abstinence and use it as a health prevention tool. Our findings show how providers use the concept of abstinence creatively to promote what they perceive as their patients' overall health needs. These providers use abstinence counseling not as an all-or-nothing approach to adolescent sexuality and developmental needs, but as a framework for educating adolescents about forms of noncoital pleasure, assertiveness within relationships and the importance of non-relationship-based activities and identities. They also encourage their patients to consider whether they want to be sexually active and to make choices of their own volition, even as they recognize that for some patients, sexual activity is not always based on choice. And by incorporating the abstinence message within a comprehensive set of messages, including encouraging condom and contraceptive use, providers recognize the risks their patients face.

Our findings also point to the limitations of abstinence counseling. This counseling can address developmental and relationship issues only indirectly and, by its nature, is restrictive. Investigating the provider approach is one avenue for evaluating the effectiveness of counseling, particularly in the area of pregnancy prevention, where little evidence on effectiveness has been established.<sup>33</sup> Thoughtful, comprehensive approaches from providers are important, given that much of the information adolescents receive on sexuality and sexual risk is erroneous and unhealthy for them.<sup>34,35</sup> Although this study has explored the content of preventive care received by adolescents at high risk, access to care is also critical, because most adolescents—particularly low-income adolescents, who are at highest risk of pregnancy and STDs—do not make regular preventive care visits.<sup>36</sup> For the at-risk adolescents who do present for a clinic visit, it is all the more important to reach them with effective prevention counseling.

## Acknowledgments

This work was supported by grant R01 H10603–23636 from the National Institute of Child Health and Human Development (NICHD). Jillian Henderson was also supported by National Institutes of Health (NIH)/NICHD Mentored Research Scientist Development Award in Population Research K01HD054495 and resources from NIH/National Center for Research Resources/Office of the Director/University of California, San Francisco—Clinical and Translational Science Institute grant KL2 RRO24130. The contents are the responsibility of the authors and do not necessarily represent the official views of the NIH.

## Biography

Cynthia C. Harper is associate professor, Department of Obstetrics, Gynecology and Reproductive Sciences, School of Medicine, University of California, San Francisco. Jillian T. Henderson is assistant professor, Davida Becker is postdoctoral fellow, Laura Stratton is data manager and Tina R. Raine is professor, all at the Bixby Center for Global Reproductive Health, Department of Obstetrics, Gynecology and Reproductive Sciences, School of Medicine, University of California, San Francisco. Amy Schalet is assistant professor, Sociology Department, University of Massachusetts, Amherst.

## REFERENCES

1. Abma JC, et al. Teenagers in the United States: sexual activity, contraceptive use, and childbearing, 2002. *Vital and Health Statistics*. 2004; (No. 24)Series 23
2. Darroch JE, et al. Differences in teenage pregnancy rates among five developed countries: the roles of sexual activity and contraceptive use. *Family Planning Perspectives*. 2001; 33(6):244–250. 281. [PubMed: 11804433]
3. Santelli J, et al. Abstinence and abstinence-only education: a review of U.S. policies and programs. *Journal of Adolescent Health*. 2006; 38(1):72–81. [PubMed: 16387256]

4. Lindberg LD, Santelli JS, Singh S. Changes in formal sex education: 1995–2002. *Perspectives on Sexual and Reproductive Health*. 2006; 38(4):182–189. [PubMed: 17162310]
5. Advocates for Youth. Youth and Health Care Reform. [accessed Apr. 14, 2010]. 2010 <[http://www.advocatesforyouth.org/index.php?option=com\\_content&task=view&id=1580&Itemid=835](http://www.advocatesforyouth.org/index.php?option=com_content&task=view&id=1580&Itemid=835)>
6. Underhill K, Operario D, Montgomery P. Abstinence-only programs for HIV infection prevention in high-income countries. *Cochrane Database of Systematic Reviews*. 2007; (Issue 4) No. CD005421.
7. Kirby DB, Laris BA, Rollieri LA. Sex and HIV education programs: their impact on sexual behaviors of young people throughout the world. *Journal of Adolescent Health*. 2007; 40(3):206–217. [PubMed: 17321420]
8. Trenholm C, et al. Impacts of abstinence education on teen sexual activity, risk of pregnancy, and risk of sexually transmitted diseases. *Journal of Policy Analysis and Management*. 2008; 27(2):255–276. [PubMed: 18401923]
9. Jemmott JB, Jemmott LS, Fong GT. Efficacy of a theory-based abstinence-only intervention over 24 months: a randomized controlled trial with young adolescents. *Archives of Pediatrics & Adolescent Medicine*. 2010; 164(2):152–159. [PubMed: 20124144]
10. Underhill K, Montgomery P, Operario D. Abstinence-plus programs for HIV infection prevention in high-income countries. *Cochrane Database of Systematic Reviews*. 2008; (Issue 1) No. CD007006.
11. Kohler PK, Manhart LE, Lafferty WE. Abstinence-only and comprehensive sex education and the initiation of sexual activity and teen pregnancy. *Journal of Adolescent Health*. 2008; 42(2):344–351. [PubMed: 18346659]
12. Dailard C. Title × program announcement articulates new priorities for nation’s family planning program. *Guttmacher Report on Public Policy*. 2003; 6(5):13.
13. Boonstra HD. Advocates call for a new approach after the era of “abstinence-only” sex education. *Guttmacher Policy Review*. 2009; 12(1):6–11.
14. Santelli JS. Medical accuracy in sexuality education: ideology and the scientific process. *American Journal of Public Health*. 2008; 98(10):1786–1792. [PubMed: 18703454]
15. American Medical Association. H-170.968 Sexuality Education, Abstinence, and Distribution of Condoms in Schools. [accessed Sept. 22, 2009]. 2007 <<http://www.ama-assn.org/ama/no-index/advocacy/8152.shtml>>
16. American Public Health Association. Abstinence and U.S. Abstinence-Only Education Policies: Ethical and Human Rights Concerns. [accessed Sept. 22, 2009]. 2006 <<http://www.apha.org/advocacy/policy/policysearch/default.htm?id=1334>>
17. Fish D, de Cossart L. Thinking outside the (tick) box: rescuing professionalism and professional judgment. *Medical Education*. 2006; 40(5):403–404. [PubMed: 16635118]
18. Henry-Reid LM, et al. Current pediatrician practices in identifying high-risk behaviors of adolescents. *Pediatrics*. 2010; 125(4):e741–e747. [PubMed: 20308220]
19. Centers for Disease Control and Prevention (CDC). Sexually Transmitted Disease Surveillance, 2007. [accessed Sept. 22, 2009]. 2008 <<http://www.cdc.gov/std/stats07/Surv2007FINAL.pdf>>
20. CDC. HIV/AIDS Surveillance in Women. CDC; Atlanta: [accessed Sept. 22, 2009]. 2002 Slide 8, <<http://www.cdc.gov/hiv/topics/surveillance/resources/slides/women/index.htm>>
21. U.S. Bureau of the Census. [accessed Sept. 22, 2009]. State population estimates by selected age categories and sex: July 1, 2002, Sept. 18, 2003, Table ST-EST2002-ASRO-01, <[http://www.census.gov/popest/archives/2000s/vintage\\_2002/ST-EST2002-ASRO-01.html](http://www.census.gov/popest/archives/2000s/vintage_2002/ST-EST2002-ASRO-01.html)>
22. Peabody JW, et al. Comparison of vignettes, standardized patients, and chart abstraction: a prospective validation study of 3 methods for measuring quality. *Journal of the American Medical Association*. 2000; 283(13):1715–1722. [PubMed: 10755498]
23. Committee on Psychosocial Aspects of Child and Family Health and Committee on Adolescence, American Academy of Pediatrics. Sexuality education for children and adolescents. *Pediatrics*. 2001; 108(2):498–502. [PubMed: 11483825]
24. Ott MA, Labbett RL, Gold MA. Counseling adolescents about abstinence in the office setting. *Journal of Pediatric and Adolescent Gynecology*. 2007; 20(1):39–44. [PubMed: 17289516]

25. Santelli J, et al. Abstinence-only education policies and programs: a position paper of the Society for Adolescent Medicine. *Journal of Adolescent Health*. 2006; 38(1):83–87. [PubMed: 16387257]
26. American College of Obstetricians and Gynecologists (ACOG). *Health Care for Adolescents*. ACOG; Washington, DC: 2003. p. 109-110.
27. ACOG. *Strategies for Adolescent Pregnancy Prevention*. [accessed Sept. 22, 2009]. 2007 <<http://www.acog.org/departments/adolescentHealthCare/StrategiesForAdolescentPregnancyPrevention.pdf>>
28. Ott MA, Pfeiffer EJ, Fortenberry JD. Perceptions of sexual abstinence among high-risk early and middle adolescents. *Journal of Adolescent Health*. 2006; 39(2):192–198. [PubMed: 16857530]
29. Higgins JA, Hirsch JS, Trussell J. Pleasure, prophylaxis and procreation: a qualitative analysis of intermittent contraceptive use and unintended pregnancy. *Perspectives on Sexual and Reproductive Health*. 2008; 40(3):130–137. [PubMed: 18803794]
30. CDC. Youth risk behavior surveillance—United States, 2007. *Morbidity and Mortality Weekly Report*. 2008; Vol. 57(No. SS-4)
31. Weinstock H, Berman S, Cates W Jr. Sexually transmitted diseases among American youth: incidence and prevalence estimates, 2000. *Perspectives on Sexual and Reproductive Health*. 2004; 36(1):6–10. [PubMed: 14982671]
32. Ventura, S.J., et al. *Recent Trends in Teenage Pregnancy in the United States, 1990–2002*. National Center for Health Statistics; Hyattsville, MD: [accessed Sept. 22, 2009]. 2006 <<http://www.cdc.gov/nchs/products/pubs/pubd/hestats/teenpreg1990–2002/teenpreg1990–2002.htm>>
33. Lopez LM, et al. Strategies for communicating contraceptive effectiveness. *Cochrane Database of Systematic Reviews*. 2008; (Issue 2) No. CD006964.
34. Teitelman AM, Bohinski JM, Boente A. The social context of sexual health and sexual risk for urban adolescent girls in the United States. *Issues in Mental Health Nursing*. 2009; 30(7):460–469. [PubMed: 19544131]
35. Chandra A, et al. Does watching sex on television predict teen pregnancy? Findings from a national longitudinal survey of youth. *Pediatrics*. 2008; 122(5):1047–1054. [PubMed: 18977986]
36. Irwin CE Jr. et al. Preventive care for adolescents: few get visits and fewer get services. *Pediatrics*. 2009; 123(4):e565–e572. [PubMed: 19336348]