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Parent–Adolescent Relationship Education (PARE): Program Delivery to Reduce Risks for Adolescent Pregnancy and STDs

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Abstract

The first author recruited parent–adolescent dyads ($N = 192$) into after-school prevention education groups at middle schools in southeast Texas. This author placed participants in either (1) an Interactive Program (IP) in which they role-played, practiced resistance skills, and held parent–child discussions or (2) an Attention Control Program (ACP) that used the same curriculum but was delivered in a traditional, didactic format. Questionnaires administered at the beginning and end of the 4-session program and again after booster sessions in 3 subsequent semesters provided measures of social controls (eg, communication with parents) and self controls (eg, protection against risk) on the youths' sexual health behaviors. Linear mixed models adjusted for gender, age, and ethnicity showed that the IP, in comparison with the ACP, achieved significant gains in social control by increasing parental rules about having sex and other risky behaviors and also enhanced students' self-control by increasing their knowledge about prevention and enhancing resistance responses when pressured to have sex.

Index Terms

adolescent pregnancy prevention; HIV/STD prevention; parent involvement

In a recent nationwide survey, nearly half (47%) of US youths aged 12 to 14 years said their parents influence their decisions about sex more than anyone else.¹ Nearly all (87%) said it would be much easier to postpone sexual activity and avoid teen pregnancy if they were able to have more open, honest conversations with their parents about sex, contraception, and pregnancy.

A key strategy for leveraging the power of parents and increasing positive family interactions to reduce risks for teen pregnancy and sexually transmitted diseases (STDs), including HIV/AIDS, is to involve parents and children in prevention education programs. Researchers^{2–4} have found that parent–child interventions can have positive effects on children's knowledge and attitudes about sexual health, as well as improve parent–child communication. The research literature indicates less certainty regarding the longer-term effects of parent–child education programs. Recent reviews of the literature^{5,6} revealed only 2 experimental studies of joint

parent–child education programs that included longer-term follow-up to evaluate the impact on adolescent behavior. In one of these, a 1993 study of a video-based program for home viewing by parents and children, Miller et al⁷ found no effect on postponement of sexual debut. In the other, a 1997 study of parent interactive activities in a school-based HIV prevention program, Weeks et al⁸ found no effect on sexual frequency.

Researchers and health practitioners have concluded that simply bringing adolescents and parents together is not sufficient.⁴ They have advised that well-designed interactive activities in which adolescents and their parents talk with and learn from each other during prevention education sessions may be more effective in reducing the risks of adolescent pregnancy and STDs.

We conducted this research study to determine the effects of integrating interactive parent–child activities into an after-school prevention education curriculum for middle-school students and their parents. The curriculum, titled Parent–Adolescent Relationship Education (PARE),^{9,10} is presented in an initial series of 4 weekly small-group sessions followed by a single-session booster in each of 3 subsequent semesters, for a total of up to 18 hr of prevention education distributed across a 2-year period. (The purpose of the booster sessions was to bring the parents and adolescents together and explore their successful and unsuccessful experiences with their peer and familial relationships over the previous months. Booster, or maintenance, sessions are provided after the initial intervention class series to review content and skills, to reinforce prevention messages to reduce and manage risk, and to foster continued parent–teen communication and interaction.) The curriculum is targeted to middle-school-aged youths because sexual activities often are initiated in the early teen and preteen years and because sexual initiation is occurring at increasingly younger ages, especially among urban minority youths.¹¹ The social learning and behavioral cognitive theories on which the PARE curriculum was framed hold that adolescent behavior is subject to social and self controls.^{12–15} Social controls can be direct (eg, parental rules) or indirect (eg, youths not wanting to disappoint those whose opinions are valued). Self controls can be cognitive (eg, knowledge about risks and protections), emotional (eg, feeling confident about one's capabilities for obtaining protective devices), and behavioral (eg, having a broad repertoire of appropriate response alternatives for coping with pressures to have sex).

Social controls addressed in the PARE curriculum include communication about sex, values assigned to parents' and friends' opinions, parental rules about adolescent behavior, and parental monitoring through involvement in youths' activities. Key aspects of youths' self-control targeted in the curriculum are knowledge, self-efficacy, and behavioral options for prevention of pregnancy and STDs, including HIV/AIDS.

The PARE curriculum was delivered either as an Interactive Program (IP) with role-play, practice exercises, and parent–child discussions or as an Attention Control Program (ACP) that contained the same content but was delivered in traditional didactic format. The IP differed from the ACP in its inclusion of the following behavioral, cognitive, and social learning modalities:

1. Teacher and peer modeling of communication and assertiveness behaviors, and the practice of these behaviors through role-playing.¹²
2. Activities to personalize information about sexuality and reproduction.¹³
3. Guided practice opportunities for applying problem solving, decision making, and assertive communication skills in difficult situations.¹⁴
4. Exercises to enhance self-efficacy for protecting against teen pregnancy, HIV, and STDs.¹⁵

5. Facilitated opportunities for parents and youth to discuss and process the information presented and their experiences with applying new knowledge and skills.

We hypothesized that the social interactive activities and parent–child discussions designed into the IP approach for curriculum implementation would prove more effective than the ACP in maintaining and strengthening social and self controls on adolescent sexual behavior.

Methods

We studied the effectiveness of the IP method for delivery of the PARE program using a randomized comparison design. The first author assigned parent–child dyads consenting to participate in the study in the IP ($n = 90$) or ACP ($n = 102$). The difference in the numbers assigned to the 2 conditions was due to parents with more than 1 child participating in the program. The data source for this investigation was a curriculum-content-specific questionnaire administered to the child at the first and final meetings of the initial series of 4 prevention education sessions and at the close of each booster session.

Recruitment

Participants were recruited in 4 steps. First, invitations were sent through the mail and through presentations at professional conferences to all urban school districts located in and near the southeast Texas city where the research institution is located. Administrators in 2 school districts indicated a willingness to participate in the PARE program project. Step 2 consisted of orientation meetings with principals and counselors at the middle schools in the consenting districts. Two of 3 middle schools in 1 district and 3 of 4 middle schools in the second district agreed to participate. Step 3 consisted of developing partnerships with the consenting schools and inviting families to participate. Cover letters, consent forms, and informational flyers were sent to parents via the students and through the mail informing them about the program and providing details regarding the research protocol. The school principals at each of the participating schools endorsed the program and signed the letters to parents, which were written in both English and Spanish. Step 4 was to contact and invite parents and children by phone to participate in the experimental and control program groups. The Institutional Review Board for the research institution approved the research protocol. We documented active informed consent for all participating parents and children.

The participating schools were diverse in size, ethnic heritage of the student body, and performance characteristics. Two of the schools had approximately 500 students, 2 had between 700 and 1,000 students, and 1 had more than 1,200 students. Across the 5 schools, the percent of students of different heritage ranged from 0.0 to 3.4 Asian, 7.0 to 54.3 African American, 32.8 to 85.8 Hispanic, and 5.2 to 52.1 Caucasian. Three of the schools identified more than two-thirds of the student body as economically disadvantaged. The percentage of students with special circumstances ranged from 3.7 to 23.6 with limited English proficiency, 4.5 to 13.6 participating in gifted and talented programs, and 2.2 to 4.3 with disciplinary placement. Total enrollment across the 5 schools was 3,881.

Program Implementation

All sessions were conducted on middle-school campuses in the evening, and professionally trained counselors and health educators facilitated these sessions. Parents and students received small incentives (ie, gift certificates) and telephone and mail correspondence to encourage their full and continued participation. Four to 8 parent–child dyads attended each 2.5-hr group session, with parents and students in separate classes during the first half of the session. During the first 4 sessions, male students met separately from female students. Male and female students attended classes together during the booster sessions. Session I focused on pubertal development and barriers to parent–child communication. Session II concentrated on effective

communication about sexual behavior and risks for pregnancy, HIV, and other STDs. Session III provided students and parents with an overview of risky sexual behaviors and the situational or environmental conditions that predispose teens to risky behavior. Session IV explored strategies for coping with difficult situations. Booster I explored successful and unsuccessful experiences within peer and familial relationships. Booster II addressed values, beliefs, attitudes, and communication about relationships and risky behavior. Booster III focused on dating, including what it means to date, what can happen on a date, and how parents can help youths prepare for dating.

Measures

Using an ETR Associates (Scotts Valley, CA) questionnaire, the data collection instrument was modified to evaluate middle-school prevention education.¹⁶ Items were selected to measure the specific social and self-control constructs targeted in the curriculum and were revised as needed to ensure they were content relevant and developmentally appropriate. Students typically completed the questionnaire in 15 to 20 min. Unique identifying codes were marked on the questionnaire so that we could match records from semester to semester without disclosing individual identifying information. The questionnaire, with either Likert or dichotomous response options, included scales on the following domains.

Frequency of Communication With Parents—This scale contained 8 items asking students how often they talked with their parents about sex, STDs, pregnancy prevention, safer sex, HIV/AIDS, contraception, condom use, and drug use (Cronbach's alpha [α] = .94).

Comfort in Communication With Parents—This scale contained 5 items asking students “how comfortable you would feel talking with your parents” about AIDS, condoms, drugs, alcohol, and having sex (α = .91).

Parental Rules—This scale contained 8 dichotomous items inquiring if parents had definitive rules about going on dates, going to parties with friends, drinking alcohol, staying out late, who friends were, where students were after school, having sex, and using contraception (α = .78).

Parent Involvement in Youths' Activities—This scale contained 5 items inquiring how often parents helped with homework when asked, knew what students were doing after school, went to parent programs at school, watched the youth in sports or activities, and checked to see if homework was done (α = .79).

Valuing Parents' Opinions—This scale contained 5 items asking “how important are your parents' feelings or ideas when it comes to you” choosing friends, drinking alcohol, getting drunk, using drugs, and having sex (α = .88).

Communication With Peers—This scale contained 10 items asking how often students talked with friends about sex, STDs, pregnancy prevention, safer sex, HIV/AIDS, contraception, condoms, drinking alcohol, marijuana use, and other drug use (α = .94).

Valuing Peer Opinions—This scale contained 5 items asking how important friends' feelings or ideas were when choosing friends, drinking alcohol, getting drunk, using drugs, and having sex (α = .93).

Knowledge About Prevention—This scale contained 17 true or false items inquiring about risks for pregnancy (eg, “A girl can't get pregnant if she only has sex once in a while”) and

risks for AIDS/HIV (eg, “A person can get the AIDS virus by: Having sexual intercourse with someone who has shared needles”). ($\alpha = .67$)

Self-Efficacy for Prevention—This scale contained 8 items: 4 items asking about the extent to which students believed it was acceptable to resist pressures to have sex (eg, “I think it is OK to say no when someone wants to touch me”) and 4 items asking how comfortable students would be getting birth control at a store and in a clinic ($\alpha = .91$).

Behavioral Options for Resisting Pressure to Have Sex—This scale contained 11 items asking, “If a friend or someone asks you to have sex and you don't want to, how often do you”: just say no, say no several times, state a health problem, make an excuse, walk away, make a joke about it, call the person a bad name, or change the subject ($\alpha = .84$).

We scored the items to measure a repertoire of resistance responses, regardless of the apparent social appropriateness of the particular response option, because different social pressure situations and contexts may require different responses.¹⁷

Data Analysis

We submitted each measure to separate regression analyses. We applied linear mixed models with first order autoregressive correlation structure, a strategy recommended for analyses of longitudinal data with repeated measurements over time. In this study, the first 2 administrations of the questionnaire were 4 weeks apart, whereas the next 3 occurred in intervals of 4 to 6 months. Using linear mixed models also allows for imbalanced data structure caused by missing responses. Instead of tracing changes of each observation over time, the analytic procedures trace changes of each participant's observations. We analyzed changes in the cluster of IP scores across time compared with ACP scores. This advantage is important in a prospective study that requires the joint participation of parent and child across a 2-year project period.

Independent variables in the modeling procedures were *program* (ie, IP = 1, ACP = 0), *time* (pretest = 0, posttest following the initial series of 4 prevention education sessions = 1, Booster Session I = 2, Booster Session II = 3, Booster Session III = 4), and the interaction of program and time with adjustments for gender, age, and ethnicity. We report results as *beta statistic*, which is the estimated effect size for the given independent variable. For data analyses, we used the PROC MIXED procedure of the statistical software from the SAS Institute (Statistical Analysis Software, Cary, NC).

Because we were concerned that self-selection bias could constrain our confidence in generalizability of the study results, we prefaced the analyses of outcomes from questionnaire results with an analysis of data from a school-wide survey to compare characteristics of students who participated in the parent-child program with those of nonparticipants.¹⁰

Results

Characteristics of Program Participants

There were approximately equal numbers of student participants aged 12 (29%), 13 (29%), and 14 (25%) years. The sample included some sixth-graders aged as young as 11 years (14%) and a few seventh- and eighth-graders aged as old as 15 years (3%). There were more females (59%) than males (41%) and slightly more Hispanic (36%) than African American (29%) and Caucasian (24%) youths. The sample also included youths of Asian and other heritage (11%). More than half of the students (61%) lived in 2-parent households, 27% with a single parent, and 12% in other living arrangements (eg, living with grandparents or with other family

members or friends of the family). These proportions are consistent with census data on living arrangements of school-age children in Texas.¹⁸ When we compared the characteristics of participating youth with characteristics of nonparticipating students at the children's schools, results indicated that the group of student participants included a slightly larger percentage of 11- and 12-year-olds than did the group of nonparticipants (49% versus 45%) but was otherwise similar to the population of nonparticipating students at the same schools. In the vast majority of cases (82%), the participating parent was the mother. In nearly all other cases (17%), the participating parent was the father. In 1 case, the adult member of the dyad was a family member other than the parent.

Changes in Social Controls

Frequency of Communication With Parents—In both the IP and ACP, the frequency of talking with parents about sex and about risks and protection against pregnancy and STDs decreased across the 2-year study period ($\beta = -.24, p < .01$). The decrease was small, with the majority of youth consistently indicating they “sometimes” talked with their parents about sexual and reproductive health topics. In contrast, there was a significant increase in the frequency of talking with friends about these topics ($\beta = .83, p < .001$). Across the 2-year period, the average reported frequency of talking with friends about sex, risks, and protection increased from “not much at all” to “sometimes.”

Comfort in Communication With Parents—Although the students reported talking less with parents and more with friends about sex and about protection against pregnancy and HIV, their level of comfort in talking with parents about these topics remained constant. On average, these middle-school students reported feeling “somewhat comfortable” talking with their parents about AIDS, having sex, using condoms, taking drugs, and drinking alcohol. There were, however, no differences between students in the ACP and IP.

Parental Rules—Compared with ACP, the IP yielded increases in the extent to which parents were reported to have definite rules about the students' behaviors. The average response in both ACP and IP was “yes,” their parents had rules about them dating, going to parties, drinking alcohol, staying out late, choosing friends, choosing where to go after school, having sex, and using contraception. Across time, however, the numbers of “yes” responses diminished slightly for ACP and increased slightly for the IP ($\beta = .15, p < .05$).

Parent Involvement in Youths' Activities—The students reported that their parents “often” were involved in their school and leisure activities (eg, helping with homework, attending parent programs at school, and watching them in sports or activities). But, in both the IP and ACP, there was a decrease in the reported amount of parent involvement across the 2-year study period ($\beta = -.24, p < .001$).

The students' self-report of the relative importance of parents' and friends' influence on decisions about drinking alcohol, having sex, and choosing friends remained approximately the same throughout the study. On average, they indicated their parents' feelings and ideas were “very important” and their friends' feelings and ideas were “somewhat important.”

Changes in Cognitive, Emotional, and Behavioral Self-Control—The IP differentiated scores for knowledge about risks and prevention both as a main effect ($\beta = .74, p < .01$) and in interaction with time. Compared with the ACP group, members of the IP group showed increases in knowledge about transmission of and protection against pregnancy and HIV/AIDS ($\beta = -.13, p < .05$). Although systematic, the gains across time ($\beta = .13, p < .01$) were small because the mean score at pretest on the knowledge scale indicated a 91% correct response.

There were no differences between programs or across time in youths' self-efficacy for prevention. Average scores indicated they would be "somewhat uncomfortable" getting birth control in a clinic or store and felt confident they could say "no" when pressured to engage in risky behaviors.

Average scores on the scale measuring behavioral options for resisting pressure to have sex indicated that, when asked to "have sex when you don't want to," the youth "often" but not "always" used all or nearly all of the repertoire of resistance responses that was listed on the questionnaire. There was a slight decrease across time in diversity of resistance responses for the ACP group, whereas responses for the IP group remained approximately the same ($\beta = -.50, p < .05$).

Comment

The results of this study support the hypothesis that social interactive activities and parent-child discussions designed into curriculum-guided prevention education are more effective than a traditional didactic delivery of PARE for strengthening social and self controls to reduce risks for adolescent pregnancy and STDs. Compared with the didactic approach for delivering the curriculum content, the social interactive implementation achieved increases in social control through parental rules and enhanced self-control for youths through increased knowledge about prevention and maintenance of a broader repertoire of resistance responses when pressured to have sex.

Contrary to expectations, the social interactive methodology for parent-child prevention education did not have a measurable positive effect on the extent to which youth said they talk with or feel comfortable talking with their parents about sex and other risky behaviors. Across the 2 years of this study, youths in both the IP and the ACP indicated decreased amounts of talking with their parents about sex and other risky behaviors. At the same time, there were increases in youths' reports of talking with their friends about sex, risks, and prevention. These results appear developmentally appropriate as children advance through the middle-school years. Youth in our study persistently reported, however, that their parents' opinions remained "very important" in their choices about how to behave, whereas their friends' opinions were "somewhat important."

Many prevention education programs include the goal of increasing or improving parent-child communication about sexual and reproductive health. Research indicates that nearly all parents (94%)¹⁹ and the majority of adolescents (76%)²⁰ say they have participated in family discussions about sex, birth control, or pregnancy. However, examination of the effects of such conversations has produced conflicting results. Miller²¹ identified many studies in which researchers found that more parent-child communication about sex is associated with less risk of teen pregnancy, and an almost equal number of studies in which investigators found no relationship between the amount or qualities of parent-child communication and responsible adolescent sexual behavior. Unger et al²² also linked more parental communication with more, rather than less, risk of teen pregnancy. These reports suggest, perhaps, that prevention programs can be strengthened by focusing on aspects of family interactions other than conversations about sex. Programs may become more effective, for example, by helping parents to explicate and youths to understand parental rules, leveraging positive opportunities for parental monitoring through involvement in their children's activities and fostering increased awareness of the value that youths place on their parents' opinions. Researchers^{23, 24} have found that adolescents' perceptions of their parents' disapproval of sexual activity is associated consistently with delay of sexual debut. Thus, an important result of our study is the finding that the social interactive methodology had positive outcomes, as measured by the

students' perceptions of the extent to which their parents have definite rules about adolescent risk behaviors.

In survey research, teens and parents say the engagement of youth and parents in effective prevention education is an attractive option for overcoming family interaction difficulties.²⁵ Teens say they have difficulty communicating with their parents about sex because of concerns that their parents will think they are having sex (80%), embarrassment (78%), and feeling their parents will not understand (64%).²⁵ Parents underestimate the amount of influence they exert on their children's decisions about sexuality.¹ They may feel unwelcome in their children's schools and activities and lack confidence in their capabilities for communicating with teens about sex. These are the kinds of limitations in family interactions that can be mitigated in prevention education programs provided for parent–adolescent dyads. Finding effective formats for offering parent–child programs to promote parental and self controls on adolescent sexual behavior is of considerable importance, given the heavy toll that STDs have on American youth. Youths aged 15 to 24 years are reported to represent 25% of the sexually experienced US population but account for 48% of new cases of STDs.²⁶

The proposed agenda for sexuality education sometimes includes scant discussion of the role of parents, advocating instead that effort be directed toward increasing adolescent access to school-based, clinic-based, and Web-based programs that provide direct education and assistance to young people.^{27,28} We identified the social interactive approach for implementing curriculum-guided small groups for parent–child dyads as a promising option for helping to build social and self controls to reduce risks for adolescent pregnancy and STDs. An important challenge is identifying means for reaching large numbers of parents and children with easily consumable opportunities to participate together in effective curriculum-guided prevention programs.

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References

1. Albert, B. With One Voice 2004: America's Adults & Teens Sound Off About Teen Pregnancy. Washington, DC: The National Campaign to Prevent Teen Pregnancy; Dec2004 [May 2, 2006]. Available at: www.teenpregnancy.org/resources/data/pdf/WOV2004.pdf
2. Hambrick M. Parent, adolescent FLE: an evaluation of five approaches. *Fam Life Educ* 1985;4:12–15.
3. Blake S, Simkin L, Ledesky R, Perkins C, Calabrese J. Effects of a parent–child communications intervention on young adolescents' risk for early onset of sexual intercourse. *Fam Plann Perspect* 2001;33:52–61. [PubMed: 11330851]
4. SIECUS Report. Innovative Approaches to Increase Parent–child Communication About Sexuality. New York, NY: SIECUS; 2002.
5. Manlove, J.; Terry-Humen, E.; Papillo, A.; Franzetta, K.; Williams, S.; Ryan, S. Preventing teenage pregnancy, childbearing, and sexually transmitted diseases: what the research shows [research brief]. *Child Trends*. May2002 [June 12, 2006]. Available at: www.childtrends.org/Files/Child_Trends-2002_05_01_RB_PrevTeenPreg.pdf
6. Johnson B, Carey M, Marsh K, Levin K, Scott-Sheldon L. Interventions to reduce sexual risk for the Human Immunodeficiency Virus in adolescents, 1985–2000: a research synthesis. *Arch Pediatr Adolesc Med* 2003;157:381–388. [PubMed: 12695235]
7. Miller B, Norton M, Jenson G, Lee T, Christopherson C, King P. Impact evaluation of FACTS and feelings: a home-based video. *Family Relat* 1993;42:392–400.

8. Weeks K, Levy S, Gordon A, Handler A, Perhats C, Flay B. Does parental involvement make a difference? The impact of parent interactive activities on students in a school-based AIDS prevention program. *AIDS Educ Prev* 1997;9(suppl A):90–106. [PubMed: 9083601]
9. Lederman R, Mian T. The Parent–Adolescent Relationship Education (PARE) program: a curriculum for prevention of STDs and pregnancy in middle-school youth. *Behav Med* 2003;29:33–41. [PubMed: 14977246]
10. Lederman R, Chan W, Roberts-Gray C. Sexual risk attitudes and intentions of youth aged 12–14 years: survey comparisons of parent–teen prevention and control groups. *Behav Med* 2004;29:155–163. [PubMed: 15369196]
11. Terry, E.; Manlove, J. *Trends in Sexual Activity and Contraceptive Use Among Teens*. Washington, DC: The National Campaign to Prevent Teen Pregnancy; 2000.
12. Bandura, A. *Social Foundations of Thought and Action*. Englewood Cliffs, NJ: Prentice Hall; 1986.
13. Ajzen, I. From intentions to actions: a theory of planned behavior. In: Kuhl, J.; Beckman, J., editors. *Action Control: From Cognition to Behavior*. Heidelberg, Germany: Springer; 1985. p. 11–39.
14. Albarracin D, Johnson B, Fishbein M, Mullerleile P. Theories of reasoned action and planned behavior as models of condom use: a meta-analysis. *Psychol Bull* 2001;127:142–161. [PubMed: 11271752]
15. Bandura A. Perceived self-efficacy in the exercise of control over AIDS infection. *Eval Program Plann* 1990;13:9–17.
16. Kirby D, Adivi C, Weissman J. An impact evaluation of SNAPP, a pregnancy- and AIDS-prevention middle-school curriculum. *AIDS Educ Prev* 1997;9(suppl A):44–67. [PubMed: 9083598]
17. Wright A, Nichols T, Graber J, Brooks-Gunn J, Botvin G. It's not what you say, it's how many different ways you can say it: links between divergent peer resistance skills and delinquency a year later. *J Adolesc Health* 2004;35:380–391. [PubMed: 15488432]
18. The Annie E. Casey Foundation. *KIDS COUNT Census Data Online*. 2000 Census Data–Living Arrangements Profile for Texas. [September 17, 2007]. Available at: <http://www.kidscount.org>
19. *Teen Today 2000*, Liberty Mutual and Students Against Destructive Decisions/Students Against Drunk Driving. Boston, MA: Students Against Drunk Driving; 2000. Students Against Drunk Driving.
20. Terry-Humen, E.; Manlove, J. *14 and Younger: The Sexual Behavior of Young Adolescents (Full Report)*. Washington, DC: The National Campaign to Prevent Teen Pregnancy; 2003. Just who is having sex before age 15? Dating and sexual experience among middle school youth: analysis of the NLSY97.
21. Miller, B. *Families Matter: A Research Synthesis of Family Influences on Adolescent Pregnancy*. Washington DC: The National Campaign to Prevent Teen Pregnancy; 1998.
22. Unger J, Molina G, Terabon K. Perceived consequences of teenage childbearing among adolescent girls in an urban sample. *J Adolesc Health* 2000;26:205–212. [PubMed: 10706168]
23. Dittus P, Jaccard J. Adolescents' perceptions of maternal disapproval of sex: relationship to sexual outcomes. *J Adolesc Health* 2000;26:268–278. [PubMed: 10734274]
24. Lammers C, Ireland M, Resnick M, Blum R. Influences on adolescents' decision to postpone onset of sexual intercourse: a survival analysis of virginity among girls aged 13 to 18 years. *J Adolesc Health* 2000;26:42–48. [PubMed: 10638717]
25. The Kaiser Family Foundation. *Sex Smart. Communication: A Series of National Surveys of Teens About Sex*. Menlo Park, CA: The Kaiser Family Foundation; 2002.
26. Weinstock H, Berman S, Cates W. Sexually transmitted diseases among American youth: incidence and prevalence estimates, 2000. *Perspect Sex Reprod Health* 2004;36:6–10. [PubMed: 14982671]
27. Wilson S. Sexuality education: our current status and an agenda for 2010. *Fam Plann Perspect* 2000;32:252–254. [PubMed: 11030263]
28. Kalmus D, Davidson A, Cahall A, Laraque D, Cassell C. Preventing sexual risk behaviors and pregnancy among teenagers: linking research and programs. *Perspect Sex Reprod Health* 2003;35:87–93. [PubMed: 12729138]