Family Communication About Sex: What Are Parents Saying and Are Their Adolescents Listening?

By Kim S. Miller, Beth A. Kotchick, Shannon Dorsey, Rex Forehand and Anissa Y. Ham

Context: *Communication between parents and adolescents about sex, particularly in minority families, has been understudied; more information is needed both on which sex-related topics are discussed and on how their content is transmitted.*

Methods: *Parent-adolescent communication about 10 sex-related topics was examined in a sample of 907 Hispanic and black 14–16-year-olds. Chi-square analyses were performed to test for significant differences across the 10 topics in discussions reported by the adolescents (with either parent) and by the mothers. The openness of communication, parent-adolescent agreement about communication of topics and differences by gender and ethnicity were also examined.*

Results: *Significantly higher proportions of mothers and adolescents reported discussions of HIV or AIDS (92% by mothers and 71% by adolescents, respectively) and STDs (85% and 70%, respectively) than of issues surrounding sexual behavior, contraceptive use and physical development (27–74% for these other eight topics as reported by mothers vs. 15–66% as reported by adolescents). The gender of the adolescent and of the parent holding the discussion, but not the family's ethnicity, significantly influenced findings, with adolescents of both sexes more likely to report discussions with mothers than with fathers, and with parents more likely to discuss any of the 10 topics with an adolescent of the same gender than of the opposite gender. The likelihood of a topic being discussed and of mother-adolescent agreement that a topic was discussed both increased with an increasing degree of openness in the communication process.*

Conclusions: *Consistent with research among white samples, mothers of black and Hispanic adolescents are the primary parental communicators about sexual topics. To facilitate communication, educational programs for parents should cover not only what is discussed, but how the information is conveyed.* Family Planning Perspectives, 1998, 30(5):218–222 & 235

Adolescents have been identified as being at elevated risk for HIV infection.[1] Since the AIDS epidemic has had a disproportionate impact on minorities,[2] black and Hispanic adolescents may be at an even higher risk than nonminority teenagers. Similarly, rates of sexually transmitted diseases (STDs) and unintended pregnancy are especially high among minority youth.[3] Thus, black and Hispanic adolescents can be considered "at risk" for a number of negative consequences of sexual activity. Yet relatively little is known about the factors that influence the sexual socialization of these teenagers.[4]

Parents and other family members are in a unique position to help socialize adolescents into healthy sexual adults, both by providing accurate information about sex and by fostering responsible sexual decision-making skills. However, research on the role of parents in this process has yielded inconsistent results: Some, but not all, studies have found that family discussions about sex are related to higher levels of knowledge about sexuality and AIDS among adolescents, as well as a lower incidence of sexual risk-taking behavior.[5] Furthermore, adolescents and children often cite their parents as their preferred source of education about sex, and organized prevention and education efforts continue to advocate active parental involvement in children's sexual socialization.[6]

Research on parent-adolescent communication about sex typically has focused on who communicates with whom. Such research is important, as it delineates how parents provide information to adolescents. In general, the mother has been found to discuss sexuality with adolescents more often than the father.[7] However, this parental gender difference is often affected by the gender of the adolescent: Mothers communicate more often with their daughters than with their sons, while fathers rarely communicate with their daughters about sex; however, mothers and fathers discuss sex with their sons at approximately equal rates.[8]

Existing studies on parent-adolescent communication about sex have several shortcomings.[9] First, many have been based on samples comprised solely or predominantly of white adolescents. Further, the findings of the few studies that have examined the effect of ethnicity have been inconsistent. For example, black adolescents have been found to discuss sex with their parents both more often[10] and less often[11] than do white adolescents, while studies with Hispanic adolescents have shown they discuss sexual issues with their parents both less often[12] and as often as white adolescents.[13]

In addition, most studies of parent-teenager communication have provided only a global assessment of that information, without offering data on the specific topics discussed.[14] When the specific content was examined, however, the rate at which individual topics were discussed varied substantially.[15]

Moreover, sexual communication often has been examined from the adolescent's perspective only.[16] Even when research has examined the perspectives of both parent and child, agreement between the reports of such communication has rarely been assessed. Two studies that examined how adolescents' and parents' reports of conversation agreed found a modest level of correspondence, and indicated that mothers believed they were more communicative about sex than their daughters perceived them to be.[17]

Finally, most research has focused on whether any discussion about sexuality has taken place. Perhaps equally important is *how* sexual information is transmitted. More communication about sex occurs if adolescents view talking about sex with parents as easy.[18] Furthermore, the process of sexual communication (i.e., the mutuality of the interchange and support for each other's comments) differs by who is holding the discussion (e.g., parent-daughter pairs have more mutuality and support than do parent-son pairs).[19]

For our research, designed to examine communication between parents and adolescents on 10 sexuality topics, we hypothesized that those topics with especially dramatic consequences (e.g., HIV

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and AIDS) and those that do not require a direct discussion about "having sex" (e.g., sex pressures) would be discussed more often than other topics.

We also examine whether communication on each topic varied by gender (of both the parent and the adolescent) or by ethnicity. We sought to test whether the findings of past research based on predominantly white samples—namely, that mothers communicate more than fathers, particularly with daughters—would also hold true in samples of minority youth. Although previous research has documented differences between blacks and Hispanics in their general parenting styles,[20] ours is the first to compare each group to ascertain if differences exist in sexual communication processes; as such, this aspect of our analysis should be viewed as exploratory.

We also expected our results to verify an earlier finding of only modest agreement in reports of discussions of sexual subjects, at least between mothers and adolescents,[21] with more mothers than adolescents reporting that various topics had been discussed. Finally, we examined whether the process of communication was associated with discussion of specific topics; we hypothesized that as the process of communication becomes more open, adolescents would report more topics having been discussed, and that the level of agreement between parents and adolescents over whether specific topics were discussed would also increase.

Methods

The Sample

Our data come from the Family Adolescent Risk Behavior and Communication Study (FARBCS), conducted in 1993–1994.[22] The FARBCS was a cross-sectional study, targeting minority communities, sponsored by the Behavioral Research and Evaluation Program of the Centers for Disease Control and Prevention. This study examined the impact of selected individual, family, peer and environmental factors on both the risk behavior and risk-reducing behavior of adolescents.

A total of 4,610 persons were contacted by presentations in the classrooms of four public high schools—two in Montgomery, Alabama, one in New York City and one in San Juan, Puerto Rico—and through distribution of fliers to students describing the study and by mailings to the students' homes. Interested persons were asked to return the forms to the school or to contact the research office directly.

The 1,733 adolescents who returned the forms were screened by phone to determine their eligibility for participation in the study. To be eligible, adolescents had to be 14–16-years of age, to identify themselves as black (in either the Montgomery or New York schools) or Hispanic (in either the New York or Puerto Rican schools) and to be currently enrolled in one of the four targeted schools. In addition, all must have resided with their mother (either biological, adoptive or stepmother) in the recruitment area for at least 10 consecutive years.

Overall, 1,124 of the screened adolescents appeared eligible to participate. Of these, 982 mother-adolescent pairs were successfully interviewed, resulting in a recruitment rate of 87%. Site-specific rates were 83% in San Juan, 88% in Montgomery and 92% in New York. Separate interviews were conducted with the adolescent and the mother either at the school or at an offsite research office. Interviewers were matched with participants on both ethnicity and gender; older women interviewed the mothers, while younger interviewers met with the adolescents. Interviews were conducted in English or Spanish, based on each participant's preference.

At the beginning of the session, the interviewer explained confidentiality and procedural issues. The consent forms were also reviewed separately with the mother and adolescent, and each signed the form. To reduce adolescents' concern about disclosure of information to their mother, the adolescent interviews were conducted, when possible, after the parent interviews had been completed (in 91% of cases). Each interview lasted approximately one hour. Mothers were paid $45 and adolescents were paid $25 for their participation.

The mother only was asked to provide information on the family's ethnicity, both her and her adolescent's age, her marital status and educational attainment, the total family monthly income, the length of time that the family had lived in the current city of residence and how long her adolescent had resided with her.

Subsequent analysis of the responses from these 982 interviewed pairs, however, showed 75 to be ineligible, because they did not adequately fulfill the ethnicity and residence requirements. Thus, the final sample for our study consists of 907 mother-adolescent pairs—259 black mother-child pairs in Montgomery and 172 in New York, and 260 Hispanic mother-adolescent pairs in San Juan and 216 in New York. There were more adolescent females than males in the sample (57% and 43%, respectively).

The mean age of the adolescents was 15.3 years (SD=0.79), while that for the mothers was 40.3 years (SD=5.9). One-fifth of the mothers had not finished high school, 25% had gone no further than high school, 23% had had some college, 19% had gone to trade school, 7% had a college degree and the remaining 6% held a graduate degree. The average total monthly family income was $1,000–$1,999. Half of the mothers were currently married.

Measures

Ten questions were developed from the literature on adolescents and sex education to measure sexual communication between adolescents and their mother; because both individuals completed this part of the questionnaire, data are available from the perspective of both parent and child. The questions administered to the adolescents, which were reworded to allow mothers to report their version of the communication, were:

- Have you and your mother ever talked about when to start having sex?
- Have you and your mother ever talked about birth control?
- Have you and your mother ever talked about condoms?
- Have you and your mother ever talked about AIDS or HIV?
- Have you ever talked to your mother about reproduction/having babies?
- Have you ever talked to your mother about physical/sexual development?
- Have you ever talked to your mother about masturbation?
- Have you ever talked to your mother about STDs?
- Has your mother ever talked to you about how to handle sexual pressure by your friends or potential partners?
- Has your mother ever talked to you about choosing sexual partners?

For each item, a "no" response was scored as one and a "yes" response as two. The alpha coefficients for the adolescent- and mother-completed versions were 0.78 and 0.79, respectively. Higher scores indicate more communication on sex-related topics between a mother and her teenage child.

The same 10 items also were used to assess sexual communication between adolescents and fathers; as fathers were not interviewed in this study, father-adolescent communication data are available from the teenagers' perspective only. Moreover, adolescents who reported that they had no contact with their father were excluded from this part of the study, reducing the final sample size to 770 adolescents. The 10 items were summed in the same way as the items measuring communication with mothers. The alpha co-

Table 1. Percentage of mothers who reported discussing sex-related topics with their adolescent child, and percentage of adolescents who reported having such a discussion with their mother and with their father, all by adolescent's gender and ethnicity, according to topic of discussion, Montgomery, Ala., New York City and San Juan, Puerto Rico, 1993–1994

Topic	Mothers reporting discussion	Adolescents reporting discussion with mother					Adolescents reporting discussion with father				
		All†	Gender		Ethnicity		All	Gender		Ethnicity	
	(N=907)	(N=907)	Female (N=519)	Male (N=388)	Black (N=476)	Hispanic (N=431)	(N=770)	Female (N=441)	Male (N=329)	Black (N=354)	Hispanic (N=416)
When to start having sex	63	52	60	42*	56	49	31	28	35	30	32
Birth control	65	46	57	31*	48	44	22	16	30*	19	24
Condoms	74	66	64	68	65	66	40	27	58*	38	42
HIV/AIDS	92	79	81	76	76	82	53	50	57	45	59*
Reproduction	73	63	71	51*	61	64	27	20	37*	25	29
Physical/sexual development	51	40	51	25*	42	38	15	9	22*	14	15
Masturbation	27	15	15	15	13	17	8	2	15*	6	10
STDs	85	70	74	66*	71	70	40	34	47*	37	42
Pressures to have sex	71	54	67	36*	57	51	39	44	32*	39	39
Choosing sex partners	58	51	53	48	24	59*	32	30	36	24	39*

*Difference by gender or race is statistically significant at p≤.01. †Significantly higher proportions of adolescents reported talking about each topic with their mother than with their father (p<.01).

efficient for this measure was 0.86.

Another 10 items measured the process of sexual communication between the adolescents and their mothers. For the teenagers, these items, which again were reworded to assess the mothers' perceptions, were:

- My mother doesn't know enough about topics like this to talk to me.
- My mother wants to know my questions about these topics.
- My mother tries to understand how I feel about topics like this.
- When my mother talks to me about these topics, she warns or threatens me about the consequences.
- My mother knows how to talk to me about topics like this.
- I can ask my mother the questions I really want to know about topics like this.
- My mother and I talk openly and freely about these topics.
- My mother tells me things about these topics that I already know.
- If I talked to my mother about these topics, she would think I'm doing these things.
- My mother doesn't talk to me about these topics; she lectures me.

Each item was scored on a four-point Likert scale ranging from one (strongly disagree) to four (strongly agree). Those items that were cast in negative wording were reverse-scored, so higher scores would uniformly indicate more open and receptive communication between mother and adolescent. As we were interested in the process of sexual communication from the combined perspective of mother and adolescent, we summed the 20 items from both respondents to form one score. The alpha coefficient of the combined measure was 0.74.

For each possible type of communication—mother-child and father-child from the adolescent's perspective, and mother-child from the mother's perspective—we conducted a chi-square analysis across the 10 topics, and then performed simple chi-square analyses comparing individual topics to one another. Because a number of statistical tests were performed, we elected to set the p value at .01 to partially control for repeating the null hypotheses when no difference existed.*

Results

Which Topics with Which Parent?

The data on whether specific topics were ever discussed, seen from both the adolescents' and the mothers' perspective, are presented in Table 1. For all three types of communication, a significant chi-square emerged ($\chi^2(9)>401.00$, $p<.01$, in all cases), indicating that the 10 topics were not equally discussed.

HIV or AIDS and STDs were most commonly discussed topics in all three communication scenarios, whereas masturbation and physical and sexual development were the least frequently discussed. In adolescent-mother conversations, from both the parents' and teenagers' perspectives, the next most commonly discussed topics were condoms, reproduction, pressures to have sex, when to start having sex and choosing sex partners. The rank order of the frequency of discussions about birth control varied slightly by whether the mother or the adolescent was reporting such discussions.

Among adolescents who had ever held conversations on sex-related topics with their father, the most frequently reported topics after HIV or AIDS and STDs were condoms, pressures to have sex, choosing sex partners, when to start having sex, reproduction and birth control.

We next examined if gender and ethnicity affected the likelihood that specific sexual topics would be discussed. According to the adolescents' reports of which parent they had talked with, significantly higher proportions of adolescents reported that they had talked about each sexual topic with their mother than with their father ($\chi^2(1)<21.54$, $p<.01$).

But are fathers more likely to talk to their adolescent sons about sex, while mothers are more likely to do so with their daughters? We performed chi-square analyses to test for such a gender differential in discussions on individual topics with either parent. As Table 1 shows, this gender differential was significant for seven of the 10 topics discussed with fathers ($\chi^2(1)>5.98$, $p<.01$): Male adolescents were significantly more likely than female adolescents to report having discussed six of the topics with their father, and they were significantly less likely to have discussed a seventh (pressures to have sex). In contrast, the data on mother-adolescent discussions indicate that daughters were significantly more likely than sons to report having talked to their mother about six topics ($\chi^2(1)> 5.69$, $p<.01$).

We also examined ethnicity within the context of conversations with either parent. According to the adolescents' reports, significantly greater percentages of Hispanic fathers than of black fathers had discussed two of the 10 topics with their children—HIV or AIDS and choosing a sex partner ($\chi^2(1)> 15.28$, $p<.01$). A significant difference emerged between black and Hispanic adolescents in mother-child discussions only for choosing sex partners, with Hispanic adolescents more than twice as likely to report having talked about this topic with their mothers as were black adolescents ($\chi^2(1) = 70.20$, $p<.01$).

*Further details about the analyses are available from the first author.

Agreement in Reports

We then compared adolescents' and mother's responses to gauge the degree to which their reports of specific discussions coincided. Mothers were more likely than adolescents to say that a discussion occurred for each of the 10 sexuality topics. This difference was significant at $p<.01$ for all topics except for condoms and choosing sex partners, which were significant at $p<.05$.

To more precisely examine agreement between mothers and adolescents, we conducted a case-by-case comparison of each individual teenager's report and his or her mother's report. We distributed the sample across three main groups of agreement. These included the overall percentage of mothers and their adolescent children who agreed that each topic either was or was not discussed (broken down into the proportion in which both agreed that the discussion had taken place and the proportion in which both concurred that it had not); the proportion in disagreement because the mother claimed that the topic had been discussed while the adolescent asserted that it had not; and the proportion in disagreement because the adolescent said that the topic had been discussed, while the mother reported that it had not.

The overall proportions in agreement—agreeing that a topic either had or had not been discussed—differed significantly by topic ($\chi^2(9)>52.3$, $p<.01$). According to simple chi-square analyses of agreement for each individual topic, significantly higher proportions of mother-child pairs were in agreement about their discussions of HIV or AIDS and masturbation than about most other topics (Table 2). For the former, this agreement stems from the pairs' concurring that the discussion had taken place, while for the latter, it arises from the participants' agreeing that discussion had not taken place.

For all topics, when there was a disagreement because only one party affirmed that a discussion had taken place, mothers were significantly more likely than adolescents to report that a discussion took place ($\chi^2(1)>11.39$, $p<.01$).

Process of Communication

Does the process of sexual communication play a role in whether adolescents recall that a particular topic was discussed, or in whether adolescents and mothers agree about which topics had been discussed? To answer this question, we summed the scores for the questions on the process of sexual communication (10 from the adolescent and 10 from the mother) into overall process scores and then divided these into quartiles, where scores in the first quartile indicated the least open communication between mother and adolescent, and scores in the fourth quartile indicated the most open communication. We then analyzed whether the degree of openness about sexual communication resulted in a difference in the percentage of mothers and adolescents who reported that they discussed a particular topic and in the percentage who agreed that they had discussed that topic, by gender of the adolescent.

The analyses of variance showed that the adolescent's gender had a significant effect on the proportion who agreed with their mothers: Female adolescents reported significantly more agreement than did male adolescents ($F(1,899)>39.21$, $p<.01$). Of even more interest, the process of sexual communication had a significant effect on the likelihood of agreement, with more open and receptive communication being associated with a higher degree of adolescent-parent agreement ($F(3,899)>48.25$, $p<.01$).

Figure 1 shows the quartiles for the process-of-communication scores by the mean percentage of the 10 topics that adolescents reported as having been discussed, and by the mean proportion in overall agreement about the discussions. The figure shows that as the process of sexual communication becomes more open and receptive (moving from the first through the fourth quartiles), the proportion who reported discussing a topic increases, as does the proportion of mothers and adolescents in agreement about those discussions. However, the interaction term was not significant in either analysis ($F(3,899)<.44$ in both cases), indicating that the adolescent's gender did not interact with the communication process to influence the proportion of mothers and adolescents who were in agreement about their discussions.

Table 2. Percentage distribution of mother-child pairs, by agreement over whether discussions about sexual topics had or had not occurred, according to individual topic (N=907)

Topic	N	% in agreement			% in disagreement		Total
		Overall	Both say discussion occurred	Both say discussion did not occur	Mother alone says discussion occurred	Adolescent alone says discussion occurred	
When to start having sex	906	65	40	25	23	12	100.0
Birth control	907	62	36	26	28	10	100.0
Condoms	907	68	54	14	20	12	100.0
HIV/AIDS	907	77	74	3	18	5	100.0
Reproduction	902	62	49	13	24	14	100.0
Physical/sexual development	906	61	26	35	25	14	100.0
Masturbation	904	74	8	66	19	7	100.0
STDs	906	71	63	8	22	7	100.0
Pressures to have sex	903	61	43	18	28	11	100.0
Choosing sex partners	904	58	34	24	25	17	100.0

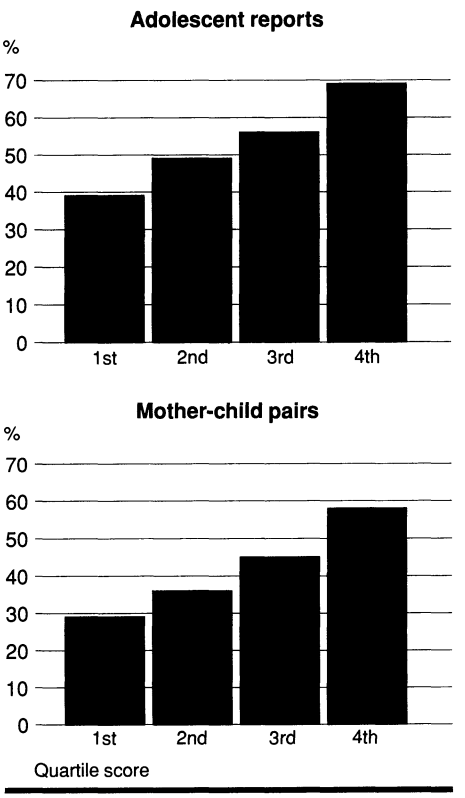
Note: Ns do not always total 907 because some respondents did not provide data on all topics.

Discussion

A substantial proportion of mothers and their adolescent children reported that parent-child discussions on 10 sexual topics had occurred. In particular, such topics as HIV or AIDS, STDs, condom use and pressures to have sex had been discussed with a parent in more than one-half of the families.

However, sizable proportions of our sample had not discussed many of the sexual topics examined. Given that open dis-

Figure 1. Percentage of sexual topics that adolescents report being discussed, and percentage of mother-child pairs agreeing that topics were discussed, from least-open to most-open quartile of communication score



cussion of sexual topics has been shown to inhibit early initiation of sexual activity, increase condom use and reduce sexual risk-taking behavior,[23] our findings suggest a need for educational programs designed to facilitate communication between parents and adolescents.

Not surprisingly, our data from a sample of black and Hispanic adolescents indicate that more mothers than fathers discuss sexual topics with adolescents. This finding underscores the fact that mothers are still the primary communicator with adolescents regarding sexual behavior and related topics, regardless of the adolescent's gender. These results agree with those from studies conducted among samples of white families.[24]

Moreover, our data also confirm previous research among predominantly white samples that the gender of the adolescent affects the gender of the parent with whom discussions take place[25]—that is, mothers are more likely to communicate with their daughters about sex than with their sons, whereas fathers are more likely to discuss sex with their sons than with their daughters. Interestingly, topics such as birth control, reproduction, physical and sexual development and sexual pressures are more likely to be discussed by same-gender pairs (i.e., mother-to-daughter and father-to-son) than are such topics as HIV or AIDS and choosing a sexual partner. This finding indicates that, to understand the process of sexual communication, it is important to examine discussion of individual topics rather than global sexual communication between parents and adolescents.

When we considered ethnicity within the context of conversations with either parent, the likelihood of discussion was similar in black and Hispanic families, despite the fact that these groups demonstrate substantially different cultural patterns in parenting.[26] We propose that similar educational programs, at least in terms of what should be discussed, would be useful for these two groups.

Do parents and adolescents agree that sexual topics have or have not been discussed? Similar to the findings of earlier research,[27] mothers and adolescents had modest levels of overall agreement (ranging from 58% to 77%, depending on the topic). When disagreement occurred, mothers were more likely than adolescents to report that such a topic had, in fact, been discussed, a finding that also concurs with those of earlier research.[28] This suggests sexual communication might be facilitated by discovering new ways to help parents discuss certain topics and make sure adolescents listen.

One way to facilitate such communication is to improve the process, by enhancing parental openness and receptiveness to discussions. This suggests that the content and process of sexual communication are intertwined, and thus should be studied together rather than separately. The study of sexual communication and of the educational programs developed to increase such communication should include not only what is discussed, but how it is discussed.

Our findings have several clinical implications for educational programs. First, many topics are clearly not being discussed; failure to provide adolescents with information on these specific topics may place them at risk for negative outcomes.

In addition, not only do many different topics need to be discussed, but parents need to adopt an open and receptive approach when initiating conversations or responding to teenagers' questions. An open process of sexual communication involves parents' having adequate knowledge, being willing to listen, talking openly and freely, and understanding the feelings behind questions posed by adolescents.

Moreover, adolescent intervention specialists should be aware that mothers and fathers play different roles in sexual communication. Mothers in our sample of black and Hispanic 14–16-year-olds were the primary communicators of sexual topics, as were mothers in samples of white adolescents. The prominence of the mother's role cannot be ignored in educational programs; however, fathers appear to communicate with their children about certain sexual topics, particularly with their sons (e.g., on condom use and STDs). Thus, fathers should not be ignored in research or in educational programs designed to foster effective parent-adolescent communication about sex.

These implications need to be considered in light of the study's limitations, however. First, the data are cross-sectional; thus, implications about causality cannot be drawn. Furthermore, our assessment of topics examined only whether a discussion had occurred, and thus provide only a brief snapshot of a complex and ongoing exchange. Information regarding the nature, depth, frequency and length of discussions is needed to fully understand communication about sex.

Another shortcoming is that we did not examine the process of communication for each individual topic. If intervention programs are to be effective, how each topic is communicated and understood needs to be studied. Our study also did not have any data supplied by fathers; it would have been strengthened by their inclusion. Neither was the degree of contact between fathers and adolescents assessed; how often adolescents see their father and the quality of that relationship may have influenced the findings. Finally, we did not consider the content and process of sexual communication within broader familial and extrafamilial contexts, which are likely to be important.

On the other hand, this analysis is the first such study to be conducted among a sample of minority adolescents, who have been identified as being at high risk for several negative outcomes of early sexual activity.[29] In addition, our sample was large enough to allow examination of gender and ethnic differences. Moreover, we evaluated not only the content of sexual discussions, but also their process.

Future research might build upon our findings by focusing on how the process and content of sexual communication relate to sexual risk-taking behavior. The role of each parent, particularly in two-parent families, should be considered. Research also needs to expand from addressing what parents say and how they say it to examining the role of other parent variables, such as their attitudes toward adolescent sexuality and their own behavior that they present as a model for their adolescent children. To understand, and perhaps change, how parents influence adolescent sexuality, the complex set of behaviors and attitudes that constitute parenting will have to be studied further.

References

1. Aggleton P, Young people and AIDS, *AIDS Care*, 1995, 7(1):77–80.

2. Centers for Disease Control and Prevention (CDC), *HIV/AIDS Surveillance Report*, 1997, 9(1):1–39.

3. Bluestein D and Starling ME, Helping pregnant teenagers, *Western Journal of Medicine*, 1994, 161(2): 140–143.

4. DiMauro D, *Sexual Research in the United States: An Assessment of the Social and Behavioral Sciences*, New York: Social Science Research Council, 1995.

5. Fisher TD, An extension of the findings of Moore, Peterson, and Furstenberg (1986) regarding family sexual communication and adolescent sexual behavior, *Journal of Marriage and the Family*, 1989, 51(3):637–639; and Pick S and Palos P, Impact of the family on the sex lives of adolescents, *Adolescence*, 1995, 30(119):667–675.

6. Alexander SJ, Improving sex education programs for young adolescents: parents' views, *Family Relations*, 1984, 33(4):251–257; and Bowler S et al., HIV and AIDS among adolescents in the United States: increasing risk in the 1990s, *Journal of Adolescence*, 1992, 15(4):345–371.

7. Nolin MJ and Petersen K, Gender differences in parent-child communication about sexuality: an explorato-

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7. Rushing B, Ideology in the reemergence of North American midwifery, *Work and Occupations*, 1993, 20(1):46–67.

8. Nelson MK, Working-class women, middle-class women, and models of childbirth, *Social Problems*, 1983, 30(3):284–296.

9. Ibid.

10. Mathews JJ and Zadak K, The alternative birth movement in the United States: history and current status, *Women and Health*, 1991, 17(1):39–56; and Sacks SR and Donnenfeld PB, Parental choice of alternative birth environments and attitudes toward childrearing philosophy, *Journal of Marriage and the Family*, 1984, 46(2):469–475.

11. Taffel S, *Midwife and Out-of-Hospital Deliveries, United States*, Washington, DC: U.S. Department of Health and Human Services, U.S. Government Printing Office, publication PHS 84–1918, 1984; Declercq ER, 1992, op. cit. (see reference 3); Declercq ER, 1993, op. cit. (see reference 3); and Parker JD, 1994, op. cit. (see reference 3).

12. Declercq ER, 1993, op. cit. (see reference 3).

13. Ibid.

14. DeMaris A, A tutorial in logistic regression, *Journal of Marriage and the Family*, 1995, 57(4):956–968.

15. Ventura SJ et al., 1996, op. cit. (see reference 1).

16. Scupholme A et al., 1992, op. cit. (see reference 3); Declercq ER, 1992, op. cit. (see reference 3); ——, 1993, op. cit. (see reference 3); Parker JD, 1994, op. cit. (see reference 3); Ventura SJ et al., 1994, op. cit. (see reference 3); and Gabay M and Wolfe SM, 1995, op. cit. (see reference 2).

17. Gabay M and Wolfe SM, 1995, op. cit. (see reference 2); Health Insurance Association of America (HIAA), *Source Book of Health Insurance Data, 1992*, Washington, DC: HIAA, 1992; and Bell KE and Mills JI, Certified nurse-midwives' effectiveness in the health maintenance organization obstetric team, *Obstetrics and Gynecology*, 1989, 74(1):112–116.

18. Parker JD, 1994, op. cit. (see reference 3).

19. Gabay M and Wolfe SM, 1995, op. cit. (see reference 2).

20. Ibid.

21. Declercq ER, 1992, op. cit. (see reference 3).

22. ACNM, State facts, certified nurse-midwives in Michigan, <http://www.acnm.org/press/sfmichig.htm>, accessed Aug. 1997.

23. Scupholme A et al., 1992, op. cit. (see reference 3).

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(continued from page 222)

ry study, *Journal of Adolescent Research*, 1992, 7(1):59–79; and Noller P and Callan VJ, Adolescents' perceptions of the nature of their communication with parents, *Journal of Youth and Adolescence*, 1990, 19(4):349–362.

8. Ibid.

9. Jaccard J and Dittus PJ, Parent-adolescent communication about premarital pregnancy, *Families in Society: The Journal of Contemporary Human Services*, 1993, 74(6):329–343.

10. Furstenberg FF Jr. et al., Family communication and teenagers' contraceptive use, *Family Planning Perspectives*, 1984, 16(4):163–170.

11. Inazu JK and Fox GL, Maternal influence on the sexual behaviors of teenage daughters, *Journal of Family Issues*, 1980, 1(1):81–99.

12. Leland NL and Barth RP, Characteristics of adolescents who have attempted to avoid HIV and who have communicated with parents about sex, *Journal of Adolescent Research*, 1993, 8(1):58–76.

13. Sigelman CK et al., Parents' contributions to children's knowledge and attitudes regarding AIDS: another look, *Journal of Pediatric Psychology*, 1995, 20(1):61–77.

14. Jaccard J and Dittus PJ, 1993, op. cit. (see reference 9).

15. Jaccard J, Dittus PJ and Gordon VV, Parent-adolescent congruency in reports of adolescent sexual behavior and in communications about sexual behavior, *Child Development*, 1998, 69(1):247–261; and Nolin MJ and Petersen K, 1992, op. cit. (see reference 7).

16. Noller P and Callan VJ, 1990, op. cit. (see reference 7).

17. Furstenberg FF Jr. et al., 1984, op. cit. (see reference 10); and Jaccard J, Dittus PJ and Gordon VV, 1998, op. cit. (see reference 15).

18. Nolin MJ and Petersen KK, 1992, op. cit. (see reference 7).

19. Whalen CK et al., Parent-adolescent dialogues about AIDS, *Journal of Family Psychology*, 1996, 10(3):343–357.

20. Forehand R and Kotchick BA, Cultural diversity: a wake-up call for parent training, *Behavior Therapy*, 1996, 27(2):187–206.

21. Furstenberg FF Jr. et al., 1984, op. cit. (see reference 10); and Jaccard J, Dittus PJ and Gordon VV, 1998, op. cit. (see reference 15).

22. Miller KS et al., Adolescent heterosexual experience: a new typology, *Journal of Adolescent Health*, 1997, 20(3):179–186.

23. Kotchick BA, Miller KS and Forehand R, Adolescent sexual behavior: a multi-system perspective, *Clinical Psychology Review*, 1998 (forthcoming).

24. Nolin MJ and Petersen KK, op. cit. (see reference 7).

25. Jaccard J and Dittus PJ, 1993, op. cit. (see reference 9).

26. Forehand R and Kotchick BA, 1996, op. cit. (see reference 20).

27. Furstenberg FF Jr. et al., 1984, op. cit. (see reference 10); and Jaccard J, Dittus PJ and Gordon VV, 1998, op. cit. (see reference 15).

28. Ibid.

29. CDC, 1997, op. cit. (see reference 2).