

Adolescent Medicine

Youth-Parent Communication and Youth Sexual Behavior: Implications for Physicians

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Background and Objectives: *This study explores youth and parent agreement about conversations on specific topics related to sexual risk behavior and youth-parent relationship. The study's objective was to determine if the amount of agreement was associated with youth sexual behavior.* **Methods:** *Data were collected using a computer-assisted data entry system from one parent and one youth in 1,350 randomly selected households in inner-city areas of two Midwestern cities.* **Results:** *Youth-parent positive agreement scores about these conversations were significant after controlling for youth age, race, gender, family structure, and parental income and education. Scores were associated with youth abstinence and with the use of contraception if the youth had become sexually active.* **Conclusions:** *In this study, youth-parent agreement regarding their communication was associated with positive youth behaviors, including abstinence and the use of contraception if sexually active.*

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The quality of adolescents' family relationship has implications for their health. For example, studies have found that family conflict is associated with lower adherence rates in diabetic adolescents and also with participation in risky behaviors.¹ Good family communication regarding sexual risk behavior has been positively associated with a delay in sexual activity.²⁻⁴

Sexual activity places teens at greater risk for infection with human immunodeficiency virus (HIV) and other sexually transmitted diseases (STDs),⁵ as well as for pregnancy, which for teens numbers more than 800,000 annually,⁶ resulting in about 42 births per thousand population of teens ages 15-19.⁷ Although recent trends regarding sexual risk behaviors have shown improvements,⁸⁻¹⁰ the costs related to STDs and teen pregnancy are still higher, and rates of STDs and teen pregnancy are higher in the United States than in other developed countries.⁹⁻¹² Improvements in sexual risk behaviors have included both delay of sexual activity and use of condoms.¹³ The antecedents of these behaviors

have yet to be enumerated. The role of parental values communication regarding sexual behavior has shown promise in explaining these behaviors,^{2,14,15} and youth have identified their parents as the most influential source in their sexual decision making.¹⁶

This study's purpose was to explore the level of agreement between parents and teens regarding parent-child communication and to assess the association of this agreement with youth sexual risk behavior. The specific objective was to assess the extent to which youth and parents agreed that they had talked about their relationship, as well as specific topics related to sexual risk behavior, and to determine if the level of agreement was significantly associated with sexual risk behaviors.

Methods

Data for this study were collected from 1,350 randomly selected households in inner-city areas of two Midwestern cities with populations of approximately 500,000, each of which was part of the Healthy, Empowered, and Responsible Teens of Oklahoma City (HEART of OKC) project. One parent and one adolescent from each household were randomly selected to participate in interviews that we conducted in the respondents' homes using a computer-assisted data entry system. The teenager self-administered the risk behavior questionnaire by listening to tape-recorded

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items with headphones and then entering the responses into the computer. The response rate was 51%.

The study was approved and monitored for compliance by our Institutional Review Board. Both the youth and parent signed consent forms prior to data collection. Detailed methods for the *HEART* of OKC study have been published elsewhere.¹⁷

Measures

Demographic data were collected from parent and adolescent respondents. These data included age, race/ethnicity, gender, income, family structure (one or two parent household), and level of parent education.

This paper examined data from two questions about general family communication and four questions related to family communication about sexual relationships and sexuality. These questions were asked both of youth and their parents.

The six questions were: (1) "Have you talked to your parents (child) about birth control?" (2) "Have you talked to your parents (child) about preventing sexually transmitted diseases?" (3) "Have you talked to your parents (child) about delaying sexual activity?" (4) "My parents and I (your child and you) have talked about what is right and wrong in sexual behavior," (5) "How often does your mother or father tell you about his or her high expectations for you?" or "How often do you tell your child about your high expectations for him/her?" (6) How often does your mother or father tell you that he or she loves you and wants good things for you?" or "How often do you tell your child that you love him/her and want good things for him/her?" The first three items used a yes/no response set, and the last three items used a Likert four-response set that included almost never, some of the time, usually, almost always.

A positive agreement scale was constructed with a range of 0 (parent and child agreed on no items) to 6 (parent and child agreed on all items). This scale was used to assess associations between youth and parent positive agreement and use of birth control if a teen was sexually active. To assess the importance of agreement in the decision not to be sexually active, the birth control use and STD prevention items were deleted from the scale since this talk usually occurs after youth become sexually active. Deleting the two items resulted in a scale range of 0 to 4.

Four items assessed study outcomes related to youth sexual risk behaviors. For sexual risk behavior, "has had sexual intercourse" was the primary behavior of interest and was assessed by the question "Have you ever had sexual intercourse (the survey provided alternative wording of "done it," "had sex," "made love," "gone all the way")?" Youth responded either "yes" or "no" to the item. "Has not had sexual intercourse" was coded "1."

Birth control use was assessed by the item, "The last time you had sexual intercourse, did you or the other person use birth control?" (coded "1" if "yes"). The number of lifetime sexual partners was measured by the item, "With how many different people have you ever had sexual intercourse?" (coded "1" if more than one partner). Age at first sexual intercourse was assessed by the question, "How old were you when you had sexual intercourse for the first time?" Youth selected actual age from a pick list. Only youth who were at least 17 years of age were included in this analysis to create an indicator of delayed first sexual activity. Youth responses were dichotomized into two age categories: youth had first sexual activity at 16 years or younger and youth who delayed first sexual activity until 17 years or older.

Statistical Analysis

The primary analyses in this study involved responses from 1,281 subjects. Some youth were not included in the analyses for one or more of the following reasons: missing demographic data (41 parental income, 8 race/ethnicity), race/ethnicity other than Non-Hispanic Caucasian, Non-Hispanic African American, Hispanic, or Non-Hispanic Native American (20 other race). Both parent and youth had to respond to be included in the analysis. The numbers of pairs ranged from 1,223 to 1,279, depending on the question. For the analyses assessing the association between positive agreement and the outcomes, only youth and parents who answered all questions in the positive agreement scale were included. Youth also had to answer the outcome of interest to be included.

Statistical analyses were performed with SPSS for Windows, Release 10.0 or the SAS System for Windows, Release 8.01. An alpha value of .05 was used to determine statistical significance unless otherwise noted. To determine the level of agreement between the youth and the adult, a weighted Kappa statistic and 95% confidence interval were calculated. The weighted Kappa puts more weight on the diagonals closest to the cell. A McNemar (for questions with yes/no response) or a Bowker's test of symmetry (for items with more than two responses) was calculated to determine if among those parent/child paired responses that did not agree, the proportion in which the parent responded yes and the child responded no was different from the proportion in which the parent responded no and the child responded yes. Logistic regression was used to examine the relationship between the outcome and the positive agreement scales taking into account potentially confounding demographic variables.

Results

Data from 1,281 youth and parent pairs were available from randomly selected inner-city teens in two Midwestern cities with populations of 506,132 and

396,049. The youth sample was 52% female, the mean age was 15.4 years (SD=1.7), and the racial/ethnic makeup consisted of 48% Caucasians, 23% African Americans, 19% Hispanics, and 10% Native-Americans. Thirty-seven percent (n=426) of the youth reported being sexually active.

Positive Agreement Analyses

Table 1 contains the agreement analyses associated with the three items that were measured with a four-response Likert scale. Items related to communication about parental love (67% agreed), high parental expectations (43% agreed), and what is right and wrong in sexual behavior (39% agreed) showed significant youth-parent agreement. However, when pairs that did not agree were analyzed, there were also significant discrepancies, in that youth were significantly more likely to report that their parents had told them that they loved them than parents were to report that this communication had occurred. When disagreeing pairs about high expectations were analyzed, parents were significantly more likely than youth to report that they had communicated high expectations. Likewise, in 76% of the disagreeing pairs regarding communication about what is right and wrong in sexual behavior, parents reported that they had communicated this information significantly more often than youth reported such conversations.

Table 2 contains the result for the three items that used a yes/no response set. All of these items showed significant agreement. That is, in general, youth and parents agreed about having conversations about delaying sexual activity, birth control use, and preventing

STDs. However, for all three items, when parents and youth disagreed, significantly more parents than youth reported that communication regarding these topics had occurred.

Positive Agreement and Youth Sexual Risk Behavior

Table 3 contains the adjusted odds ratios for the association between youth-parent positive agreement and four sexual risk behaviors. Two behaviors, having only one sexual partner and delaying first sexual activity until age 17, were not significantly associated with youth-parent positive agreement scores. However, both sexual abstinence and use of birth control if sexually active were significantly associated with youth-parent positive agreement. These results suggest that for each point increase in the youth-parent positive agreement scores, youth were almost 15% more likely to abstain from sexual intercourse and almost 20% more likely to use birth control if sexually active.

Discussion

The results presented here suggest that parents and their adolescents tend to agree about the content of their communication regarding their relationship and about youth sexual behaviors. When they disagreed, parents reported significantly higher estimates of the frequency of such communications than did their children, with the exception of showing love; however, it is not possible from our data to determine if parents overestimated, if youth underestimated, or if the results represent a combination of the two.

Because youth-parent positive agreement scores about these conversations remained significantly as-

Table 1

Weighted Kappa, Bowker's Test of Symmetry, and P Values for Three Items

	% Agree	Weighted Kappa	P Value	Pairs Not Agreeing	Bowker's Test of Symmetry	P Value
Parent tells child he/she loves him/her. How often does parent tell you he/she loves you?	67	.165	<.0001	In 59% of these pairs, the child answered yes more often than parents	29.9	<.0001
Parent tells child about high expectations. How often does parent tell you about high expectations?	43	.046	.0326	In 55% of these pairs, the parent answered yes more often than youth	18.6	.0049
Parents have talked about what is right and wrong in sexual behavior. My parents and I have talked about what is right and wrong in sexual behavior.	39	.153	<.0001	In 76% of these pairs, the parent answered yes more often than youth	242.1	<.0001

Table 2
Kappa, McNemar Chi Square, and *P* Values for Three Items

	<i>% Agree</i>	<i>Weighted Kappa</i>	<i>P Value</i>	<i>Pairs Not Agreeing</i>	<i>McNemar Chi Square</i>	<i>P Value</i>
Parent reports talking about delaying sexual activity. Child reports talking to parents about delaying sexual activity.	56	.074	<.0001	In 93%, parents said yes and youth said no.	409.0	<.0001
Parent reports talking to child about birth control. Child reports talking to parent about birth control.	58	.199	<.0001	In 87%, parents said yes and youth said no.	296.5	<.0001
Parents report talking to child about preventing STDs. Child reports talking to parents about preventing STDs.	62	.123	<.0001	In 82%, parents reported yes and youth said no.	203.7	<.0001

sociated with youth abstinence and birth control use after controlling for youth age, race, gender, family structure, and parental income and education, it would appear critical that these conversations be encouraged, facilitated, and supported. Family physicians are the largest providers of care for middle- and late-adolescent males (ages 18–21)¹⁸ and thus have opportunities to encourage behaviors that show promise for promoting healthy sexual practices.

Our findings are consistent with previous studies associating youth-parent communication with delay of youth sexual activity and use of birth control.¹⁹⁻²² A unique contribution of this study, however, is the analyses of youth-parent disagreement.

Limitations

The data for this study were self-reported and potentially subject to youth's need to supply socially acceptable answers. The youth were allowed to read and enter their answers into a computer without any observers, however, which may have reduced the chances of their giving such socially acceptable responses. Another limitation is that the item measuring sexual intercourse did not

Table 3

Adjusted Odds Ratios (OR) with 95% Confidence Intervals (CI) for the Positive Agreement Scale for Four Sexual Risk Behaviors

	<i>n</i>	<i>Adjusted OR*</i>	<i>95% CI</i>	<i>P Value</i>
Never had sexual intercourse				
Positive agreement scale**	1,151	1.13	(1.01, 1.26)	.0364
For sexually active youth: Birth control use				
Positive agreement scale***	407	1.20	(1.06, 1.36)	.004
Only one sexual partner				
Positive agreement scale***	423	1.17	(.78, 1.74)	.456
Delayed first sexual activity until 17 or older				
Positive agreement scale***	183	.62	(.28, 1.38)	.419

* Adjusted for youth age, gender, and race; family structure; and parental income and education

** Four-item agreement scale

*** Six-item agreement scale

discriminate between consensual intercourse and rape or molestation. Thus, a positive answer may not reflect only those who chose to engage in sexual intercourse voluntarily.

It is improper to draw inferences from this data about the causal directions of the relationships found in this study because the design was cross sectional. Thus, concerns regarding the possibility that discussing birth control with youth may be interpreted by them as parental permission to engage in sexual activity are not addressed by these data.

Lastly, the moderately low response rate may cause question of the generalizability of these results. However, the profile of the study sample was not significantly different from the actual targeted neighborhood profiles when the racial/ethnic and household income results from the sample were compared to census data from the same neighborhoods, suggesting that the sample was representative of the targeted neighborhoods.

Conclusions

If parent-youth communication is important to youth sexual behavior, then it is critical to ensure that youth and parents agree about that communication. It appears that parents tend to overestimate the amount of communication with their youth regarding these matters. While we were unable to determine if youth were in error in their reports and underreported the conversations, the net effect is that youth did not believe that their parents had discussed these topics as frequently as their parents did. Although communication may be a proxy for a strong relationship²³ or parental monitoring,²⁴ it is also probable that both frequency of conversations and intensity of values communicated both play a role in the likelihood that youth will get the message their parents intend to communicate, but further research is needed for a definitive answer.

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