Patterns of Condom Use Among Adolescents: The Impact of Mother–Adolescent Communication

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ABSTRACT

Objectives. The association between the timing of discussions about condoms between mother and adolescent and adolescents' condom use during their first and subsequent sexual encounters was examined.

Methods. Sexually active adolescents reported whether and when they discussed condoms with their mother and answered questions about their own condom use.

Results. Mother–adolescent discussions about condoms that occurred prior to sexual debut were strongly associated with greater condom use during first intercourse and most recent intercourse, along with greater lifetime regular condom use.

Conclusions. Discussions about condoms prior to sexual debut are important in promoting condom use among adolescents. (*Am J Public Health.* 1998;88:1542–1544)

Efforts to promote condom use by sexually active young people are an important component of the public health strategy to prevent the transmission of sexually transmitted diseases, including HIV, during the adolescent years. Much attention has been directed toward individual,[1–3] peer,[4,5] and partner factors[6–10] associated with adolescent condom use, but few studies have focused on familial factors. Given that the family is a primary source of socialization for adolescents and can exert a strong influence on sexual attitudes and behaviors,[11] it is important to examine the role of parents in influencing condom use.

Research examining the influence of parent–adolescent communication on adolescent sexual behavior has yielded inconsistent results. Some authors have found that family discussions about sex are related to more knowledge about sexuality and AIDS among adolescents, as well as less adolescent sexual risk-taking behavior (K. S. Miller, R. Forehand, and B. A. Kotchick, unpublished data, 1997).[12–16] Others have found no association between parent–adolescent communication about sex and adolescent sexual knowledge, attitudes, or behavior.[17,18] Many of the inconsistencies have been attributed to crude measures and simplistic conceptualizations of the communication process.[19] Most of the research has focused on the occurrence of parent–teen communication,[20–22] with little regard for the content or process of the communication. Virtually no studies have examined the timing of communication in relation to the outcome variable.

This paper examines the association between the timing of mother–adolescent condom discussions (i.e., prior to sexual initiation, during the year of sexual initiation, after the year of sexual initiation, or never) and adolescents' condom use during their first and subsequent intercourse experiences. We hypothesized that early mother–adolescent condom discussions would promote condom use at first intercourse and that condom use at first intercourse would promote subsequent condom use.

Methods

Study Population

The sample was composed of 372 sexually active adolescents from the Family and Adolescent Risk Behavior Study, a cross-sectional interview study conducted in New York, Alabama, and Puerto Rico among 14- to 17-year-old adolescents and their mothers. A fuller description of the sample and methodology has been provided elsewhere.[23,24] The research instrument included items assessing various demographic, social, and psychological factors, but only the relevant measures are discussed here. All measures for this research were based on the adolescent's responses, since the adolescent's behavior was being examined.

Timing of Condom Discussions

Adolescents reported the age at which they first discussed condoms with their mother, along with their age at first sexual intercourse. A 4-category measure of the timing of the condom use discussion was developed: (1) discussed condoms before the year of first intercourse (n = 122), (2) discussed condoms during the year of first intercourse (n = 78), (3) discussed condoms after the year of first intercourse (n = 63), and (4) did not discuss condoms (n = 109).

Three binary measures of condom use were included: condom use during first intercourse (yes or no), condom use during most recent intercourse (yes or no), and lifetime regular condom use (more than 50% of the time or less than 50% of the time). Only participants who had engaged in sexual inter-

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TABLE 1—Logistic Regressions on Timing of Condom Communication With Mother and Gender

Predictor	First Use (n = 362) β	First Use (n = 362) Odds Ratio (95% Confidence Interval)	Regular Use (n = 314[a]) β	Regular Use (n = 314[a]) Odds Ratio (95% Confidence Interval)	Last Use (n = 314[a]) β	Last Use (n = 314[a]) Odds Ratio (95% Confidence Interval)
Communication timing[b]						
Before	1.073**	2.92 (1.60, 5.34)	1.056**	2.87 (1.52, 5.43)	1.312**	3.71 (1.88, 7.32)
During	–0.014	0.99 (0.53, 1.83)	0.524	1.69 (0.89, 3.19)	0.563	1.75 (0.92, 3.34)
After	–0.395	0.67 (0.35, 1.30)	0.381	1.46 (0.73, 2.91)	0.782*	2.19 (1.04, 4.57)
Female gender[c]	1.152**	3.17 (1.96, 5.12)	–0.047	0.95 (0.59, 1.54)	–0.49	0.61 (0.37, 1.01)
Constant	–0.200		0.194		0.458	
Model χ^2	44.42**		11.48*		21.39**	
df	4		4		4	

Note. Ten participants with missing data were excluded.
[a]Includes only participants who had sexual intercourse more than 1 time.
[b]Reference category: no discussion of condoms with mother.
[c]Reference category: male.
*$P < .05$; **$P < .01$.

course more than once completed the latter 2 measures (n = 314).

Results

Overall, 70.6% of adolescents reported having discussed condoms with their mother. Male adolescents discussed condoms with their mother at a younger age (mean = 12.9 years, SD = 1.61) than female adolescents (mean = 13.5 years, SD = 1.30) ($t = 5.51$, $df = 260$, $P < .001$).

We reasoned that adolescents who talk with their mother about condoms before their first sexual experience are more likely to use a condom during their first sexual encounter and that adolescents who use a condom during their first sexual encounter—regardless of whether they talked with their mother about condoms—should be more likely to use a condom during subsequent sexual encounters. Given this, we hypothesized that maternal discussions about condoms that occurred before the year of first intercourse would have a direct effect on condom use at first intercourse and an indirect effect on condom use during subsequent episodes of sexual intercourse.

Logistic regression was used to test the hypotheses, with gender controlled in all analyses. Initially, we regressed each of the 3 condom use outcomes onto the timing of condom discussion variable. The results, presented in Table 1, show that for all 3 models, talking about condoms before the first sexual encounter significantly increased the likelihood of condom use relative to no maternal condom discussions. The only other timing category that was related to condom use was discussion of condoms after the first year, which was associated with increased condom use during the most recent sexual encounter. Thus, maternal discussions about condoms in the year prior to first intercourse were strongly associated with greater condom use, but discussions during or after the year of first intercourse were not.

TABLE 2—Logistic Regressions, Controlling for First Use, on Timing of Condom Communication With Mother and Gender

Predictor	Regular Use (n = 314[a]) β	Regular Use (n = 314[a]) Odds Ratio (95% Confidence Interval)	Last Use (n = 314[a]) β	Last Use (n = 314[a]) Odds Ratio (95% Confidence Interval)
Communication timing[b]				
Before	0.365	1.44 (0.66, 3.13)	0.866*	2.38 (1.11, 5.07)
During	0.664	1.94 (0.89, 4.22)	0.632	1.88 (0.91, 3.87)
After	0.793	2.21 (0.97, 5.04)	1.097**	3.00 (1.33, 6.75)
Female gender[c]	–1.093**	0.335 (0.17, 0.66)	–1.327**	0.26 (0.14, 0.51)
Used a condom during first intercourse[d]	2.995**	19.99 (9.88, 40.4)	2.275**	9.72 (5.01, 18.89)
Constant	–0.861**		–0.322	
Model χ^2	109.32**		77.31**	
df	5		5	

[a]Includes only participants who had sexual intercourse more than one time.
[b]Reference category: no discussion of condoms with mother.
[c]Reference category: male.
[d]Reference category: did not use a condom during first intercourse.
*$P < .05$; **$P < .01$.

To demonstrate that the effect of early communication on condom use subsequent to first intercourse was mediated by condom use at first intercourse, we included both condom use at first intercourse and timing of condom discussion as predictors of lifetime regular condom use and condom use at most recent intercourse. As shown in Table 2, condom use at first intercourse was associated with a 20-fold increase in lifetime regular condom use and a 10-fold increase in condom use at most recent intercourse. Also, note that the effect of the timing of the maternal condom discussion was diminished for both measures, which indicates potential mediation by condom use at first intercourse. The mediating effect of condom use at first intercourse on subsequent condom use was computed by multiplying the relevant beta weights.[25] The estimates were significant for both lifetime regular condom use (3.21, SE = 0.997, $t = 3.22$, $P = .001$) and most recent condom use (2.44, SE = 0.787, $t = 3.10$, $P = .002$). For lifetime regular condom use, the direct effect of timing of discussion was no longer significant ($P = .26$), indicating full mediation. For most recent condom use, the direct effect of timing of discussion remained statistically significant ($P = .02$), indicating partial mediation.

Discussion and Conclusion

We found that the timing of maternal communication about condoms had a notable

effect on adolescents' condom use. Maternal condom discussions that occurred prior to sexual debut were associated with greater condom use for all measures examined. However, the relationship between timing of maternal communication and condom use after sexual debut was substantially weakened when condom use at first intercourse was controlled. Regardless of the occurrence or timing of maternal discussions about condoms, however, condom use at first intercourse was associated with a dramatic increase in later condom use. These data suggest that early maternal discussions about condoms promote condom use at first intercourse and that condom use at first intercourse promotes subsequent condom use.

These findings imply that it is of utmost importance that adolescents receive information about condoms before initiating sexual intercourse. Considering that the average age at sexual initiation in our sample was 13.8 years, this information should be conveyed early. Programs that emphasize abstinence only may not prepare adolescents and young adults to use condoms for their first sexual experience, and this, in turn, may increase the likelihood that they will later engage in unprotected (and thus risky) sexual behavior. Although we focused on maternal communication, other sources may also be important in promoting adolescent condom use. Physicians and sexuality education programs that provide adolescents, prior to their sexual debut, with information about and skills in using condoms can promote condom use at first intercourse and at subsequent sexual encounters. Physicians can also support adolescent condom use indirectly by providing parents with information and skills that help them discuss sexuality—including condom use—early with their teens. □

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