No Increase in Sexual Risk Behaviors Seen After Men at Risk of HIV Start Preexposure Prophylaxis

Receipt of HIV preexposure prophylaxis (PrEP) is not associated with a compensatory increase in sexual risk behaviors, suggests a randomized international trial among men who have sex with men or who identify as transgender or female.[1] Participants had reductions from baseline in both acute HIV infection and syphilis infection. Those who believed that they were receiving PrEP instead of placebo had neither an increase in receptive anal intercourse without a condom while on study medication nor a decrease in this behavior after stopping it. Placebo recipients who believed that they were receiving PrEP did not have any rise in HIV infection relative to peers who believed that they were receiving placebo; the finding was the same if they also believed that PrEP was highly effective.

Researchers analyzed data from the Preexposure Prophylaxis Initiative (iPrEx) trial, which enrolled men who have sex with men or who identify as transgender or female at 11 sites in Peru, Ecuador, South Africa, Brazil, Thailand and the United States during 2007–2009. Participants were assigned to once-daily oral PrEP (emtricitabine plus tenofovir) or placebo on a double-blind basis. At various intervals, they were counseled about risk reduction, were screened for HIV and syphilis, completed questionnaires pertaining to sexual risk behaviors in the past three months, and indicated which treatment group they believed they had been assigned to and how effective they thought PrEP was at preventing HIV. Treatment lasted nearly three years, and a final visit took place eight weeks after participants stopped taking the study medication. The investigators used Poisson regression, t tests and chi-square tests to assess and compare temporal trends in sexual behaviors and infection rates, and developed mixed log-binomial regression models to identify correlates of changes in behavior from baseline.

Analyses were based on 2,408 participants who completed at least one quarterly study visit during which they reported on sexual behavior. All were male at birth, but 13% identified as women or transgender. They were 25 years old, on average. Three-fourths had previously been tested for HIV.

At baseline, 0.4% of participants had acute HIV infection and 6% had syphilis. At the end of the treatment period, the incidence of acute HIV infection had fallen to 0.06% in the PrEP group and to 0.1% in the placebo group; the incidence of syphilis had dropped to zero in each group.

At the first quarterly study visit, 25% of participants believed they were in the PrEP group, 10% believed they were in the placebo group and the rest responded that they did not know their group assignment. Overall, 24% believed that PrEP was highly effective. Eight weeks after they discontinued their medication, participants did not differ according to perceived treatment with respect to the change from baseline in reported number of recent receptive anal intercourse partners. The number fell both among those who believed that they had been receiving PrEP (from 13 to four) and among those who believed that they had been receiving placebo (from eight to two). The reported proportion of receptive anal intercourse partners who used condoms remained essentially unchanged.

At baseline, 39% of participants reported that they had not recently had receptive anal intercourse without a condom. Within this subset, the risk of reporting this risk behavior at any time during follow-up was elevated for participants who were younger than 25 (risk ratio, 1.3), identified as transgender or female (1.7), or had symptoms of depression (1.6). In contrast, these participants had a reduced risk of reporting unprotected receptive anal intercourse during follow-up if they had never been tested for HIV before starting the study (0.7). Notably, the risk was not elevated for participants who believed they were receiving PrEP, for participants who believed that PrEP had high effectiveness or for those who held both of these views.

On the other hand, among the 58% of participants who reported recent unprotected receptive anal intercourse at baseline, the risk of not reporting this behavior during follow-up was reduced for those who were younger than 25 (risk ratio, 0.8), identified as transgender or female (0.8), or had symptoms of depression (0.7); the risk was increased for those who had never been tested for HIV (1.4). Again, there was no association for perceived treatment group or perceived effectiveness of PrEP.

Among participants who provided behavioral data both when they stopped using the study drug and eight weeks later, the proportion who reported receptive anal intercourse without a condom fell from 26% to 23% during that interval. Participants who believed they were receiving PrEP did not have an elevated risk of a decrease in this behavior; moreover, findings were similar for the subset who believed PrEP was highly effective.

In the placebo arm, the incidence of HIV infection during follow-up was not elevated for participants who believed they were receiving PrEP, who believed that it was highly effective or who held both beliefs. In the entire trial population, the incidence of syphilis during follow-up did not differ by perceived treatment group.

Study limitations included potential lack of generalizability to clinical settings and reliance on self-reported sexual practices, according to the investigators; also, the results may have been influenced by treatment adherence, and the trend toward safer behaviors may have reflected regression toward the mean or greater loss to follow-up of participants having risk behaviors. Nevertheless, the researchers note, the study's results show "no evidence of risk compensation that would offset the benefits of PrEP"; if anything, they suggest, the findings indicate trends toward safer sexual behavior and a reduction in HIV and syphilis infections. "Frequent clinic visits, HIV testing and counseling, and daily PrEP use itself may motivate and popularize safer sexual practices. Social interactions may be more important determinants of sexual decisions than individual weighing of risks and benefits," they conclude.—*S. London*

REFERENCE

1. Marcus JL et al., No evidence of sexual risk compensation in the iPrEx trial of daily oral HIV preexposure prophylaxis, *PLoS ONE*, 2013, 8(12): e81997, accessed Jan. 2, 2014.

Receipt of STD Services Is Up Among U.S. Women, But Not in All Subgroups

Receipt of STD services among U.S. women of childbearing age rose during a recent eight-year period, although methods of paying for these services have shifted, according to findings from a population-based cross-sectional study.[1] One in six women surveyed in 2006–2010 reported receiving STD services (counseling, testing or treatment) in the past year, up from one in eight in 2002; however, progress was uneven, as some groups, such as teenagers, saw no gain. Among women receiving STD services from a private doctor or health maintenance organization, the share paying with private insurance decreased, and the share paying with Medicaid increased. Also, between surveys, women paying with private insurance became more likely to have a copay, and women paying with Medicaid grew less likely to use public clinics.

Investigators analyzed data from the 2002 and 2006–2010 cycles of the National Survey of Family Growth, a nationally representative household survey conducted among 15–44-year-olds. They ascertained the proportion of women who reported receiving STD services in the past year; within that group, they assessed trends in women's demographic characteristics and source of health insurance, and characteristics of visits during which services were provided, such as where they occurred and how they were paid for. The investigators weighted analyses to represent U.S. women in the age-group studied, and used Cochran-Mantel-Haenszel and chi-square tests to assess changes during the study period.

The unweighted sample consisted of 7,633 women aged 15–44 from the 2002 survey and 12,272 from the 2006–2010 survey. Overall, the proportion who reported receiving STD services in the past year increased between 2002 and 2006–2010, from 13% to 16%. Increases were seen across most subgroups stratified by various characteristics. However, no increase was apparent among women of "other" race or ethnicity (not black, white or Hispanic); enrollees in Medicare, military or government health insurance plans other than Medicaid and the Children's Health Insurance Program (CHIP); the uninsured; and teenagers. Findings from a post hoc analysis indicate that receipt of services also remained unchanged for the subgroup of teenagers who had had sex in the past year.

Among women who reported receiving STD services, the setting of services was unchanged between 2002 and 2006–2010. The largest share of women, about six in 10, used private doctors or HMOs; two in 10 used public clinics; one in 10 used family planning (including Planned Parenthood) clinics; and one in 10 used other clinics or sites (e.g., employer or company clinics, school or hospital clinics, walk-in facilities). However, the method used to pay for STD services shifted during the study period: The share of women paying with private insurance decreased (from 54% to 50%), and the share paying with Medicaid increased (from 19% to 25%). No substantial change was evident in the share paying out of pocket.

In a first stratified analysis, women who reported receiving STD services were split according to where they received them. Among those using private doctors or HMOs, the proportion who had private insurance declined between surveys (from 75% to 67%), and the proportion who had Medicaid grew (from 13% to 20%); but no changes occurred in distributions by age, race or ethnicity, poverty-income ratio or the experience of a gap in health insurance during the past year. Among women receiving STD services at a public clinic, the proportion who were teenagers fell (from 28% to 18%), while the proportion who were 20–24 years old rose (from 25% to 33%); distributions of public clinic users remained essentially the same with respect to the other characteristics assessed. No changes occurred between surveys in the characteristics of women who received STD services at family planning clinics or at other clinics or facilities.

In a second stratified analysis, women who reported receiving STD services were split according to their method of payment for those services. Among those paying with Medicaid, increases were evident in the proportions using private doctors or HMOs (from 48% to 52%), family planning clinics (from 8% to 11%) and other clinics (from 7% to 12%); the proportion using public clinics decreased (from 37% to 25%). Women paying for their STD services with private insurance were more likely to have a copay in 2006–2010 than in 2002; the proportion rose from 61% to 70%. There were no changes according to the characteristics studied among women paying out of pocket or women who said that they did not have to pay for their services.

The study's findings show continuation of a favorable earlier trend toward increased receipt of STD services in the United States, although some noteworthy subgroups—teenagers, Medicare enrollees and the uninsured—appear to be lagging, according to the investigators. Health care providers should be aware of these findings, they note, "especially in a changing health care system." The study was limited in that it could not discern the specific services received, may have been affected by self-report bias and was too small to look at certain settings individually, the investigators acknowledge. "Our findings highlight important changes in the use and payment of STD services among reproductive-aged women and may be useful for health care providers (public and private), health departments, and public health programs," they conclude.—*S. London*

REFERENCE

1. Haderxhanaj LT et al., Trends in receipt of sexually transmitted disease services among women 15 to 44 years old in the United States, 2002 to 2006–2010, *Sexually Transmitted Diseases*, 2014, 41(1):67–73.

Male and Female High School Youth May View Abstinence Differently

A sample of sexually inexperienced Missouri high school students viewed abstinence in largely positive terms and saw abstinence and virginity as essentially the same, but males and females differed in some respects.[1] Overall, the students associated an average of five of 10 "positive" words and phrases (such as "beneficial" and "wise") with abstinence, but just one of 10 "negative" words and phrases (such as "difficult" and "something I dislike"). Among key differences seen between the sexes, females associated a greater number of "positive" words and phrases with abstinence than did males, whereas males associated a greater number of negative words and phrases with abstinence than did females.

The majority of students overall indicated that "not going all the way" and "not having vaginal sex" were definitions of both abstinence and virginity; female students were more likely than males to select "not thinking about sex" as a definition of virginity.

In 2006, investigators surveyed freshman from three Missouri high schools implementing education programs that promoted abstinence until marriage. The surveys, completed immediately before students began the program, asked about demographic characteristics and such issues as abstinence pledges, satisfaction with sexual status and acceptability of sex before marriage. Students were also presented with a list of 10 "positive" words and phrases (e.g., "easy," "moral") and a list of matching opposite "negative" words and phrases (e.g., "difficult," "immoral"), and were asked to indicate which they associated with "being sexually abstinent"; selection of a word was considered endorsement. Finally, they were asked to select from six phrases their definitions of "abstinence until marriage" and "being a virgin." The investigators performed chi-square and t tests to compare students' characteristics and word associations by sex, and used Wilcoxon signed-rank tests to assess concordance between word and phrase pairs associated with abstinence and between phrases defining abstinence until marriage and virginity.

Analyses were restricted to the 216 students who reported never having had intercourse, of whom 53% were male, 73% were 15 years old and 81% were non-Hispanic white. One-quarter had taken an abstinence pledge, and half perceived religion to be very important. Nearly nine in 10 indicated that their parents thought they should abstain from sex until marriage, while six in 10 indicated that their best friends held this view. Eighty-two percent were satisfied with their current sexual status. Half viewed sex before marriage as highly acceptable. Female students were more likely than males to report that at least one friend had taken an abstinence pledge (57% vs. 37%) and that their parents (92% vs. 82%) and best friends (73% vs. 49%) thought they should abstain from sex until marriage. Male students were more likely than females to be dissatisfied with their sexual status (26% vs. 9%) and view sex before marriage as highly acceptable (59% vs. 39%).

When students were asked which positive words and phrases they associated with sexual abstinence, the majority endorsed "safe" (84%), "wise" (69%), "beneficial" (67%), "good" (61%) and "right" (54%). About half endorsed "moral" (47%); only a minority endorsed "easy" (27%), "something I like" (24%), "pleasant" (16%) and "enjoyable" (16%). Overall, the students endorsed an average of five of the 10 positive words offered. When students were asked which negative words and phrases they associated with sexual abstinence, they most commonly endorsed "difficult" (39%), "something I dislike" (20%), "not enjoyable" (19%) and "unpleasant" (16%). Overall, they endorsed an average of one of the 10 negative words and phrases. Female students were more likely than males to endorse the positive words and phrases "easy," "pleasant," "beneficial," "enjoyable," "something I like" and "wise"; on average, females endorsed more of these words and phrases than males (four vs. five). Male students were more likely than females to endorse the negative words and phrases "difficult," "unpleasant," "not enjoyable" and "something I dislike"; on average, they endorsed more of these words and phrases (two vs. one). Students gave concordant responses for seven of the 10 word and phrase pairs—that is, they endorsed the positive expression and did not endorse the corresponding negative one. For example, concordance was evident between "moral" and "immoral."

Students largely chose the same phrases to define abstinence until marriage and virginity. For both, large proportions endorsed "not going all the way" (67% for each) and "not having vaginal sex" (63–67%), whereas much smaller proportions endorsed "not thinking about sex" (12% for each), "not wanting to have sex" (17–25%) and "not kissing another person" (3% for each). Notably, nearly half of students (46–47%) endorsed "not having oral sex." Female students were more likely than male peers to endorse "not thinking about sex" as the definition of virginity. Students gave concordant responses for five of the six phrases, meaning that they endorsed the same phrase as the definition for both abstinence and virginity or they did not endorse it as the definition for either. The exception was that students more commonly associated "not wanting to have sex" with abstinence until marriage than with virginity.

Study limitations, the investigators acknowledge, included the self-reported nature of the data, students' possible concerns about the confidentiality of their answers or provision of answers reflecting classmates' norms, limited generalizability of the findings, and the fact that students were not given a definition of sex. Nevertheless, the study's findings can help inform sex education programs for sexually inexperienced high school students, according to the investigators, who encourage educators to take into account differences in male and female students' views on premarital sex when developing and implementing programs. "By using terms that resonate with adolescents, sexuality educators can create and disseminate relevant educational materials and engage in more coherent discussions with their students," they conclude.—*S. London*

REFERENCE

1. Wilson KL, Smith ML and Menn M, Abstinence-related word associations and definitions of abstinence and virginity among Missouri high school freshmen, *Journal of School Health*, 2013, 83(11):787–794.

Many Minors Involve Their Parents, Partners In Abortion Decisions

The majority of minors in a single-clinic study of women seeking abortion services in 2008 had involved their parents and male partners when making the decision to have an abortion, and most had found these individuals to be supportive.[1] Overall, more than six in 10 had told their mothers of their decision, and more than eight in 10 had told their partners; in the large majority of cases, informed mothers and partners had supported the decision. At the same time, one in 10 minors had felt pressured by someone else (most commonly their mothers) to have the abortion; relative to others, these minors had 90% lower odds of expressing high confidence in their decision and more than five times the odds of anticipating that they would have trouble coping with it afterward.

Investigators retrospectively reviewed data for women who had sought abortion services at the clinic, regardless of whether the abortion had been provided; the clinic was located in a state that did not have a parental notification requirement at the time. They ascertained demographic and reproductive characteristics from medical records, and information on women's emotional status, confidence in their decision, sources of support for their decision and anticipated reactions to having an abortion from a self-administered survey

completed during a preprocedure counseling session. The investigators compared characteristics and responses between minors (women aged 17 or younger) and adults with chi-square and t tests, and used multivariate logistic regression analyses to identify, among minors, correlates of maternal and partner notification and support, of high confidence in the decision to have an abortion and of anticipated poor coping afterward.

Analyses were based on 5,109 women aged 10–48, of whom 9% were minors. Fifty-six percent of the women were white, and 39% were black. Nearly half overall (but only one in 10 minors) had previously had an abortion. Eight in 10 women were in the first trimester of pregnancy.

Relative to adults, minors sought services an average of one week later in gestation (10.7 vs. 9.6 weeks) and were more likely to be in the second trimester (27% vs. 18%); they also were more likely not to have the planned procedure (12% vs. 7%). The most common reasons for not having the procedure were that women were too late in gestation and that they changed their minds. A smaller share of minors than of adults had high confidence in their decision to have an abortion (81% vs. 88%), and a larger share were seeking an abortion primarily because they had felt pressured by someone else (10% vs. 3%).

Minors were more likely than adults to have shared their decision with their mothers (64% vs. 33%) and their fathers (38% vs. 29%); more than nine in 10 minors who had told their mothers indicated that their mothers had been supportive of the decision. The large majority of women overall reported that they had told their partners of their decision (82%) and that informed partners had been supportive (87%); these proportions did not differ significantly by age-group.

In multivariate analyses, 10–14-year-olds and 15-year-olds were more likely than 17-year-olds to have told their mothers about their decision to have an abortion (odds ratio, 5.0 for each); minors' odds of having told their mothers were reduced if they had a supportive male partner (0.6). The odds of having told their partner were reduced for 10–14-year-olds (0.4), minors seeking a second-trimester procedure (0.4) and daughters of supportive mothers (0.6). Among the subset who had told their mothers, black minors and those who thought that abortion was the same as killing a baby that had already been born were less likely than others to report that their mothers had been supportive (0.3 and 0.4, respectively).

Minors had an increased likelihood of having high confidence in their decision to have an abortion if they had a supportive male partner (odds ratio, 1.9), but a reduced likelihood if they were black (0.5), had felt pressured by someone else to have the procedure (0.1), equated abortion with killing a baby (0.3) or were concerned about God's forgiveness (0.5). The odds of anticipated poor coping after the abortion were sharply elevated for minors who were 10–15 years old (4.0–6.7), had felt pressured to have the procedure (5.6) or thought that abortion was tantamount to killing a baby (5.2).

In a final chi-square analysis, compared with peers who had not told their mother about their decision to have an abortion, minors who had told a nonsupportive mother were less likely to be confident in their decision (14% vs. 37%) and to feel relieved (29% vs. 65%); on the other hand, they were more likely to anticipate poor coping (33% vs. 7%) and to feel ashamed (29% vs. 6%), angry (10% vs. 2%) or very sad (29% vs. 9%). Minors who had told a supportive mother were less likely to feel a little guilty than were their peers who had not told their mother (23% vs. 29%), but they were more likely to feel very sad (14% vs. 9%).

The study was limited in that it had a cross-sectional design, could not probe how women defined support (and lack thereof) and may not be generalizable to other populations, the investigators acknowledge. Yet its findings confirm that many minors may voluntarily involve their mothers and male partners in abortion decisions, while also underscoring the importance of ensuring that they can make these decisions without "undue influence," they note. The less favorable anticipated emotional outcomes for minors who involved nonsupportive mothers may have implications for mandating a parental role in this context, the investigators contend. "This evidence suggests that broad mandates for parental involvement, particularly more stringent forms that require parental consent, without consideration of the unique and diverse circumstances of young women, may not be the best policy to ensure the health and well-being of all minors," they conclude.—*S. London*

REFERENCE

1. Ralph L et al., The role of parents and partners in minors' decisions to have an abortion and anticipated coping after an abortion, *Journal of Adolescent Health*, 2013, doi: 10.1016/j.jadohealth.2013.09.021, accessed Dec. 19, 2013.

Adolescents Who Acquire Bacterial STDs Have Elevated Risk of Later Testing Positive for HIV

Adolescents with bacterial STDs have a heightened future risk of acquiring HIV, finds a retrospective cohort study.[1] Relative to peers who never had any of the STDs studied (chlamydia, gonorrhea or syphilis), adolescents with these infections had more than two times the risk of testing positive for HIV within a median of five years; the elevation in risk was similar for males and females. Gonorrhea was a major driver of this association for both sexes, and syphilis was a major driver for males. The more episodes of STDs adolescents had had, the higher their risk of acquiring HIV.

The investigators retrospectively studied adolescents born in 1985–1993 who participated in at least one STD screening through the Philadelphia High School STD Screening Program during the years 2003–2010. The program was established in public high schools to provide STD and HIV education and voluntary annual screening for chlamydia and gonorrhea through urine-based tests. STDs and social and demographic characteristics were ascertained from the school program and health department surveillance data; HIV infections diagnosed more than 14 weeks after a first STD test were ascertained from a reporting system. The investigators performed bivariate and multivariate regression analyses to assess associations between STDs and the future risk of HIV.

Analyses were based on 75,273 adolescents. Two-thirds were non-Hispanic black, and slightly more than half were male. They were 16 years old, on average, at the time of their first high school STD test. About a third participated in more than one school screening.

Overall, 23% of the adolescents had at least one positive STD test between the ages of 11 and 19 years, and 12% had two or more. The most common STD was chlamydia

(seen in 22%), followed by gonorrhea (7%) and syphilis (fewer than 1%). Female adolescents were more likely than males to test positive for STDs (33% vs. 13%).

During a median follow-up of roughly five years, fewer than 1% of study participants had a positive HIV test. The time between a first high school STD test and an HIV diagnosis averaged about three years among females and four years among males. Heterosexual contact was the most common HIV risk factor for women (seen in 78% of cases), whereas same-sex sexual contact was the leading one for men (79%). Nearly four in 10 of those who became infected with HIV had had an STD during adolescence.

Relative to peers who had never tested positive for STDs as adolescents, both females and males who had tested positive had a more than doubling of the risk of acquiring HIV after race, ethnicity and birth year were taken into account (incidence rate ratios, 2.6 and 2.3, respectively). For both sexes, the risk of HIV was more than tripled after a gonorrhea diagnosis (3.5 and 5.1), and smaller increases were seen after a positive chlamydia test (2.6 and 1.6). Also, the likelihood of becoming infected with HIV was sharply higher for males who had had syphilis than for other young men (35.4).

The risk of HIV rose with the number of STDs diagnosed during adolescence, although the association varied between sexes and by type of infection. Female adolescents who had had three or more STDs had a sharply higher likelihood of becoming infected with HIV than their counterparts who had never had any (incidence rate ratio, 5.0); male adolescents had an elevation of risk after 1–2 STDs, and a further heightened risk after three or more (1.6 and 4.8). Females were more likely to acquire HIV if they had had at least three episodes of chlamydia (4.8) and if they had had one episode or two or more episodes of gonorrhea (3.4 and 3.8). Males were more likely to acquire HIV if they had had 1–2 episodes of chlamydia (1.6) and if they had had one episode or two or more episodes of gonorrhea (3.3 and 10.3).

The observed link between STDs and future infection with HIV is "quite worrisome," particularly given current national trends of increasing STD rates among adolescents, and might herald an upcoming epidemic of HIV among young adults, according to the investigators. However, they add, the results also point to a window of opportunity for intervention when an STD is diagnosed. The study was limited, they note, in that it evaluated only public high school students participating in school-based screening; furthermore, results may not apply to nonurban populations and those with lower STD and HIV prevalences, and information on risk factors for the former were largely unavailable. The investigators speculate that a combination of factors, such as biological mediation, risky behaviors and sexual activity in networks with high rates of infection, likely explains the STD-HIV association. "Strategies to modify risk behaviors of [U.S.] adolescents or to modify the environment that allows for increased [STD] and HIV risk need to be developed, assessed, and implemented widely to help avert future … acquisition and transmission," they conclude.—*S. London*

REFERENCE

1. Newbern EC et al., Adolescent sexually transmitted infections and risk for subsequent HIV, *American Journal of Public Health*, 2013, 103(10):1874–1881.

Sexuality Talks During Adolescents' Checkups Often Lacking or Brief

One-third of adolescents participating in an observational cohort study had annual checkups that did not include any discussion of topics related to sex.[1] And when such discussions did occur, they lasted an average of only about half a minute. The odds of sexuality talk during adolescents' visits were 1.6 times as high for blacks as for whites; 2.6 times as high for females as for males; and 4.3 times as high for adolescents who spoke with the physician confidentially, without their parents present, as for others. Also, the likelihood increased with adolescents' age and the length of the visit.

Investigators analyzed data from Teen CHAT, a trial conducted at 11 practices (three academic and eight community-based) in North Carolina that assessed how health care providers talk to overweight adolescents about weight loss. Conversations that took place between physicians (pediatricians or family physicians) and their overweight adolescent patients during annual health maintenance visits from November 2009 through February 2012 were audio-recorded and coded for sexuality talk, defined as any comment, question or discussion related to sexual activity, sexuality, dating or sexual identity. The investigators ascertained total sexuality talk time, who brought up the subject and whether it was raised during a confidential discussion (in which the adolescent's parents were not in the room), and rated the extent of adolescents' participation on a seven-point scale. They computed descriptive statistics for the study sample, and used multivariate logistic regression analyses to identify correlates of sexuality talk and of adolescents' participating in such talk at a high level.

Analyses were based on visits by 253 adolescents aged 12–17 with 49 physicians. The adolescents were, on average, 14 years old, and slightly more than half were female; 40% were white, and 47% were black. On average, the physicians were 41 years old, and 12 years had elapsed since they had completed medical school; they were predominantly pediatricians (82%), white (84%) and female (65%). The visits lasted a mean of 22 minutes; in 31%, the physician explicitly discussed confidentiality, and in 54%, adolescents were seen alone at least some of the time.

Only 65% of visits included any sexuality talk, and the physician was always the party who brought up the topic. When such talk occurred, it lasted an average of just 36 seconds—less than 3% of the total visit time. Overall, 43% of adolescents participated in sexuality talks at high levels, meaning that they responded to questions beyond giving yes or no answers, made disclosures or engaged in conversation; the rest did not have any sexuality talk during their visit, or they merely listened to their physician speak, gave nonverbal responses or simply answered questions with a yes or no.

In a multivariate analysis, the likelihood of sexuality talk during visits was higher for female adolescents than for males (odds ratio, 2.6), for blacks than for whites (1.6) and for adolescents whose physicians spoke with them confidentially than for others (4.3). Additionally, the odds rose with each year of age (1.4) and with each minute of visit length (1.1). The same characteristics were associated with having a sexuality discussion lasting at least 36 seconds instead of a shorter discussion or none at all.

Another multivariate analysis revealed that females and adolescents whose discussions with their physicians were confidential had elevated odds of participating in sexuality talks at a high level (odds ratio, 2.5 for each), and the odds of a high level of participation rose with age (1.3) and visit time (1.04).

The study is limited in that it was restricted to overweight adolescents making health maintenance visits and lacked detail on the content of sexuality talks, the investigators acknowledge; also, the recording of conversations may have reduced discussion of sensitive topics. Nevertheless, according to the investigators, "the findings suggest that physicians are missing opportunities to educate and counsel adolescent patients on healthy sexual behaviors and prevention of sexually transmitted infections and unplanned pregnancy." In particular, young adolescents (who are relatively unlikely to have initiated sexual activity) and males may more often than others miss out on this chance to receive "accurate information in a safe and supportive environment." Therefore, the investigators conclude, "research is needed to identify successful strategies physicians can use to engage adolescents in discussions about sexuality." —*S. London*

REFERENCE

1. Alexander SC et al., Sexuality talk during adolescent health maintenance visits, *JAMA Pediatrics*, 2013, doi:10.1001/jamapediatrics.2013.4338, accessed Dec. 31, 2013.