

School Condom Program Reduced STIs in Males

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VANCOUVER, B.C. — A program that provides access to condoms through the school nurse significantly decreased sexually transmitted infections among inner-city high school males, but not among females.

Rates of gonorrhea and chlamydia among males (aged 15-19 years) decreased 47% within 3 years after implementation of the program in the Holyoke, Mass., public schools, compared with a 23% increase observed during the same time period among males attending the nearby Springfield public schools, with a similar socioeconomic status, but no condom program, Dr. Sharon R. Wretzel reported.

Nationally, two-thirds of new gonorrhea and chlamydia diagnoses in 2007 were in 15- to 24-year-olds.

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cases per 100,000. The districts also have vied for the dubious honor of having the top two highest teenage pregnancies rates in the state for 4 of the last 5 years, she said.

Unfortunately, sexually transmitted infections (STIs) remained constant at about 3,440 cases per 100,000 among Holyoke girls; they dropped slightly among Springfield girls from a high of 5,280 cases per 100,000 in 2005 to 4,717 per 100,000 in 2008, when the study period ended.

The lack of effect in Holyoke girls could be because teenage girls view condoms as a “male form” of birth control, or—as has been shown in other studies—they do not utilize condom availability programs as often as males do.

There may also be a more “insidious cause,” said Dr. Wretzel, a pediatrician at Baystate Medical Center in Springfield. “If you are a female, you may not have the power in that relationship to be able to state that you are going to use a condom and have the male use a condom every single time. So it may not be shocking that there’s not a change in the rate of STIs,” she explained.

The program was implemented by the school district because of the high STI and pregnancy rates in Holyoke; it went through a lengthy debate among parents, students, and school officials before it was approved. This increased discussion in the community could have influenced condom usage outside of the

intervention, Dr. Wretzel acknowledged.

Access to condoms at Holyoke was limited, however, in that parents could deny access for their child, and students could get condoms only during school or lunch breaks through the school nurse. They had to receive written educational materials from the nurse and discuss those materials (including how to use a condom) before receiving up to four condoms per visit.

No records were kept on how many students utilized the program or how many condoms were given away, she said. STI rates were derived using public health data.

The study also did not control for the impact of ethnicity on STI rates. There is some debate in the literature over whether Hispanic or black men are more likely to use condoms that are distributed in a condom availability program, Dr.

Wretzel explained in an interview.

Nationally, 48% of high school students report that they are sexually active, including 67% of blacks, 52% of Hispanics, and 44% of whites.

Among the 39,765 Holyoke students, 3.7% reported they were black, 41.4% Hispanic and 65.8% white, with adolescents able to self-identify in more than one category.

Among the 151,176 Springfield stu-

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VITALS

Major Finding: Rates of gonorrhea and chlamydia among males decreased 47% after implementation of school-based condom availability program, compared with a 23% increase among males attending a school district with no condom program.

Data Source: Observational study in two public school districts, one with and one without a condom availability program.

Disclosures: Dr. Wretzel and her coauthors reported no conflicts of interest.

dents, 21% were black, 27.2% Hispanic, and 56.1% white.

Roughly 29% of students at both schools were younger than age 18 years, and one-quarter lived below the poverty level.

The baseline pregnancy rate was 94.8 per 1,000 women at Holyoke and 80.7 per 1,000 women at Springfield. Postintervention pregnancy rates were not evaluated because of many confounding factors that impact teenage preg-

nancy rates, Dr. Wretzel said.

During a discussion of the study, moderator Dr. Steven Federico, a pediatrician at Denver Health Medical Center, questioned when Massachusetts began using polymerase chain reaction (PCR) assay, as this could have influenced the results.

Massachusetts was using PCR assays of swabs or urine throughout the study period, Dr. Wretzel replied.

An audience member asked if there were plans to survey the girls at Holyoke about barriers to the program, noting that there is a great gender difference surrounding the issue, with boys more

likely to view sex as prowess and girls being more embarrassed to access condoms under such strict conditions.

Dr. Wretzel responded that there has been discussion about including ways for girls to negotiate condom use in a relationship as part of the comprehensive sex education program slated to start this fall in the Holyoke schools.

The researchers also are advocating for a condom availability program in Springfield, and are studying schools with similar programs across Massachusetts to see if STI rates follow similar trends, she said. ■

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Pentacel vaccine is manufactured by Sanofi Pasteur Limited and Sanofi Pasteur SA and distributed by Sanofi Pasteur Inc.

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