Infectious Diseases

Pediatric News • September 2005

CLINICAL

Dating Violence Link to STDs

Approximately 1 in 3 girls (31.5%) in grades 9-12 who reported sexual activity also reported sexual or physical violence from their dating partners in a study of 1,641 girls, reported Michele R. Decker of Harvard School of Public Health, Boston, and her colleagues (Pediatrics 2005;116:e272-6). A similar number (32.9%) reported being tested for an STD or HIV. Overall, girls who reported physical and sexual violence or physical violence alone were significantly more likely to be tested for an STD (odds ratio 2.4 or 1.6, respectively) than were girls who did not report any violence. In addition, the odds of a positive diagnosis were significantly higher for girls reporting physical and sexual violence or physical violence alone (odds ratio 2.6 or 2.2, respectively) compared with girls who did not report any violence. The study was limited by several factors, including possible underreporting of testing behaviors.

Predicting STI Risk in Teens

Teenagers who thought that their parents would strongly disapprove of their having sex were less likely to have developed sexually transmitted infections 6 years later, said Carol A. Ford, M.D., of the University of North Carolina at Chapel Hill, and her associates. The study included data on 11,594 adolescents from the National Longitudinal Study of Adolescent Health, a prospective cohort study initiated in 1995 when the participants were in grades 7-12 (Arch. Pediatr. Adolesc. Med. 2005; 159:657-64). Approximately half (52.8%) of the subjects were female, and the mean age at follow-up was 22 years. Overall, 5.5% of adolescents who thought that their parents strongly disapproved of sex during adolescence tested positive for Chlamydia trachomatis, Neisseria gonorrhoeae, or Trichomonas vaginalis, compared with 8.0% and 8.9%, respectively, of those who thought that their parents' disapproval was moderate or low. In a bivariate analysis, factors associated with an increased likelihood of sexually transmitted infections included low grade point average, a perception of looking younger than one's peers, and a higher average daily school attendance rate. However, in a stratified, multivariate analysis, family, school, and individual factors associated with prolonged virginity—such as a high grade point average, working at least 20 hours per week, and attending a parochial school—were not predictive of STI status among boys at follow-up.

Knowledgeable but Not Using It

Adolescent girls at high risk for pregnancy and sexually transmitted infections who participated in a recent study were knowledgeable about common birth control methods, but most reported having unprotected sex.

Of 332 girls aged 12-18 from a cohort with a high rate of pregnancy and sexually transmitted infections, 90% were aware of major birth control methods, including condoms and hormonal contraceptives. The majority (84%) knew that condoms could help prevent sexually transmitted infections, but only 66% reported using a male or female condom the last time they had vaginal intercourse. Only 43% used

CAPSULES

condoms each of the last five times they had vaginal intercourse, Ligia Peralta, M.D., of the University of Maryland, Baltimore, reported in a poster at the annual meeting of the North American Society for Pediatric and Adolescent Gynecology in New Orleans.

As for the use of hormonal contraceptives, 56% of 87 girls who used them said they use a long-acting injectable, 23% said they use a contraceptive patch, and 18% said they use OCs. More than 70% said they would use combined, user-controlled hormonal contraceptives in the next 6

months, with the patch being the most popular choice (30% of respondents).

Hepatitis Rates Decline

The incidence of hepatitis dropped from 35% to 19% among children aged 2-18 years between a baseline period of 1990-1997 and 2003, said Annemarie Wasley, Sc.D., of the Centers for Disease Control and Prevention, Atlanta, and her colleagues. The greatest decline occurred among children aged 2-9 years (89%), followed by declines in children aged 10-18 years (83.7%) and children younger than 2 years (79.5%). Overall, 9 of the 10 states with the greatest declines in infection rates

were states that had implemented hepatitis vaccination, which became widely available in 1995 (JAMA 2005;294:194-201). In an accompanying editorial, Pierre Van Damme, M.D., and Koen Van Herck, M.D., of the University of Antwerp, Belgium, said that given the proven existence of antibodies more than 10 years after vaccination, and the odds that antibodies will persist for more than 25 years after vaccination, boosters should be unnecessary for healthy people, and childhood immunizations can be reasonable for countries where hepatitis rates are declining (JAMA 2005;294:246-8).

-Heidi Splete and staff reports

18,957 Cases

of Pertussis Reported in 2004—a 40-year high*1-3

Prevent Them

Safety Information

There are risks associated with all vaccines. Local and systemic adverse reactions to DAPTACEL vaccine may include redness, swelling, pain or tenderness at the injection site, fever, irritability, prolonged crying, drowsiness, vomiting, and anorexia. Other local and systemic adverse reactions may occur.

DAPTACEL vaccine is contraindicated in persons with a hypersensitivity to any component of the vaccine. In addition, it is contraindicated in persons with any immediate anaphylactic reaction or encephalopathy not attributable to another identifiable cause.

Indications and Usage

DAPTACEL vaccine is indicated for the active immunization of infants and children 6 weeks through 6 years of age (prior to 7th birthday) for the prevention of diphtheria, tetanus, and pertussis (whooping cough). DAPTACEL vaccine is recommended for administration as a 4-dose series at 2, 4, 6, and 17 to 20 months of age. The interval between the 3rd and 4th dose should be at least 6 months. It is recommended that DAPTACEL vaccine be given for all doses in the series because no data on the interchangeability of DAPTACEL vaccine with other DTaP+ vaccines exist. As with any vaccine, vaccination with DAPTACEL vaccine may not protect 100% of individuals. Please see brief summary of Prescribing Information for DAPTACEL vaccine on adjacent page.

References: 1. Centers for Disease Control and Prevention (CDC). Provisional cases of selected notifiable diseases, United States, week ending January 1, 2005 (52nd Week). MMWR Morb Mortal Wkly Rep. 2005;53:1218. 2. CDC. Summary of notifiable diseases—United States, 2002. MMWR Morb Mortal Wkly Rep. 2004;51:69-84. 3. CDC. Summary of notifiable diseases, United States 1994. MMWR Morb Mortal Wkly Rep. 1995;43:69-80. 4. Gustafsson L, Hallander HO, Olin P, et al. A controlled trial of a two-component acellular, and a whole-cell pertussis vaccine. N Engl J Med. 1996;33:439-355. 5. Gustafsson L, Hallander H, Olin P, et al. Efficacy trial of acellular pertussis vaccines: technical report trial I with results of preplanned analysis of safety, efficacy and immunogenicity. Stockholm, Swedens: Swedish Institute for Infectious Disease Control; 1995. Contract N01-Al-15125. 6. WHO meeting on case definition of pertussis: Geneva, 10-11 January 1991; Geneva, Switzerland: 4-5. Issue MIM/EPI/PERT/91.1. 7. Edwards KM, Decker MD. Pertussis vaccine. In: Plotkin SA, Orenstein WA, eds. Vaccines. 4th ed. Philadelphia, Pa: Elsevier Inc; 2004:471-528.