Sexually Transmitted Infections in Pregnancy

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Sexually transmitted infections (STI) occur during pregnancy and can have serious consequences for women and infants. Recent data on STIs during pregnancy reported by the Centers for Disease Control and Prevention (CDC) were collected from selected prenatal clinics and focused on women ages 15 to 24 years. The median state-specific chlamydia test positivity was 7.7 percent, ranging from 2.8 percent to 16.3 percent, and gonorrhea test positivity was 0.8 percent, ranging from 0.0 percent to 3.8 percent (CDC, 2012a).

The rate of congenital syphilis in the United States decreased between 2008 and 2011, with a reported total of 360 cases in 2011 (CDC, 2012a). On the other hand, the rate of women with HIV giving birth had increased 30 percent from 2000 to 2006, approximating nearly 9,000 births in 2006 (CDC, 2012b).

The CDC recommends testing all pregnant women for chlamydia, syphilis, HIV and hepatitis B at the first prenatal visit. Testing

Abstract Sexually transmitted infections (STI) occur during pregnancy and can have serious consequences for women and infants. National guidelines include recommendations for STI screening in all pregnant women; however women continue to be underscreened, and risks related to infection during pregnancy persist. Nurses caring for women of childbearing age should be aware of screening guidelines and approaches for testing. This column reviews two recent studies: The first examines compliance with recommended prenatal STI testing and the second highlights a novel concept to reduce the female-gender-specific approach to STI testing during pregnancy. DOI: 10.1111/1751-486X.12095

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for gonorrhea should be done at first prenatal visit for women with risk factors for gonorrhea. Chlamydia testing should be repeated during the third trimester for all women younger than 25 years and for those at increased risk. Retesting for women with positive tests should occur within 3 to 6 months, ideally in the third trimester (CDC, 2011).

If providers don't encourage recommended STI testing during pregnancy, adverse outcomes for women with untreated STIs can include premature birth, miscarriage, stillbirth, preterm labor and premature rupture of membranes

Despite this guidance, women remain underscreened for STIs during pregnancy (Blatt, Liberman, Hoover, & Kaufman, 2012). According to Ruhl (2013), "This oversight is detrimental to all those concerned about women's and infants' risk to suffer potentially devastating effects" (p. 146). If providers don't encourage recommended STI testing during pregnancy, adverse outcomes for women with untreated STIs can include premature birth, miscarriage, stillbirth, preterm labor and premature rupture of membranes (CDC, 2013). Potential adverse neonatal outcomes include neonatal infection, neonatal ophthalmia, neonatal pneumonia, physical and mental development disabilities, low birthweight, small for gestational age and prematurity (CDC, 2012a, 2013).

Two Recent Studies

The purpose of this column is to provide a summary and commentary on two recent studies in which researchers investigated rates of STI testing and STI testing approaches during pregnancy. Our goal is to reinforce nurses' understanding and critical thinking of these two studies as well as highlight an area of practice necessitating nursing intervention.

In the first study, Blatt et al. (2012) uncover rates of chlamydia and gonorrhea testing in a large nationally representative sample of pregnant women. Although this study focuses only on chlamydia and gonorrhea, it's valuable to review as it's the most current and comprehensive national report highlighting trends on recommended STI testing. In the second study, Christianson, Boman, and Essen (2013) explore a novel approach to improve upon STI testing during pregnancy by involving the male partner. This study highlights the male viewpoint on a new concept to consider

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Box 1.

Levels of Evidence

The quality of evidence for a study is based on a grading system that evaluates the scientific rigor of a design, as developed by the U.S. Preventive Services Task Force. The levels are as follows:

- I: Evidence obtained from at least one properly randomized controlled trial.
- II-1: Evidence obtained from well-designed controlled trials without randomization.
- II-2: Evidence obtained from well-designed cohort or case-control analytic studies, preferably from more than one center or research group.
- II-3: Evidence obtained from multiple time series with or without intervention. Dramatic results in uncontrolled experiments (such as the results of the introduction of penicillin treatment in the 1940s) could also be regarded as this type of evidence.
- III: Opinions of respected authorities, based on clinical experience; descriptive studies and case reports; or reports of expert committees.

Source: United States Preventive Services Task Force (1996).