

Hormonal contraception and risk of sexually transmitted disease acquisition: results from a prospective study

Abstract:

OBJECTIVES: To examine the relationship between use of oral contraceptive pills or depot medroxyprogesterone acetate and sexually transmitted disease acquisition. **STUDY DESIGN:** Prospective cohort included 948 Kenyan prostitutes. Multivariate Andersen-Gill proportional hazards models were constructed, adjusting for sexual behavioral and demographic variables. **RESULTS:** When compared with women who were using no contraception, users of oral contraceptive pills were at increased risk for acquisition of chlamydia (hazard ratio, 1.8; 95% confidence interval, 1.1-2.9) and vaginal candidiasis (hazard ratio, 1.5; 95% confidence interval, 1.2-1.9) and at decreased risk for bacterial vaginosis (hazard ratio, 0.8; 95% confidence interval, 0.7-1.0). Women using depot medroxyprogesterone acetate had significantly increased risk of chlamydia infection (hazard ratio, 1.6; 95% confidence interval, 1.1-2.4) and significantly decreased risk of bacterial vaginosis (hazard ratio, 0.7; 95% confidence interval, 0.5-0.8), trichomoniasis (hazard ratio, 0.6; 95% confidence interval, 0.4-1.0), and pelvic inflammatory disease (hazard ratio, 0.4; 95% confidence interval, 0.2-0.7). Consistent condom use was associated with significantly decreased risk of gonorrhea, chlamydia, genital ulcer disease, bacterial vaginosis, and pelvic inflammatory disease. **CONCLUSIONS:** The use of oral or injectable hormonal contraception altered susceptibility to sexually transmitted diseases, which may in turn influence transmission of human immunodeficiency virus type 1. Consistent condom use was protective with regards to sexually transmitted disease and should be encouraged for the prevention of sexually transmitted disease and human immunodeficiency virus type 1 among women who use hormonal contraception