

PERCEIVED RISK AND SUBSEQUENT SEXUAL BEHAVIORS AFTER HPV VACCINATION IN ADOLESCENTS

Allison Mayhew BA, Lili Ding PhD, Tanya Mullins MD MS, Susan Rosenthal PhD, Greg Zimet PhD, Charlene Morrow CNP, Jessica Kahn MD MPH; Division of Adolescent Medicine, Cincinnati Children's Hospital Medical Center

Introduction Despite concerns about adolescent risk compensation after HPV vaccination, it is unknown whether risk perceptions after vaccination impact subsequent sexual behaviors. Thus, we examined whether perceived risk of sexually transmitted infections (STIs) and need for safer sexual behaviors following the first HPV vaccine dose predicted sexual behaviors over the next 6 months.

Methods Participants were 13-21 year-old girls (n=339) receiving their first HPV vaccine dose, who completed questionnaires assessing risk perceptions at baseline and sexual behaviors at baseline, 2 and 6 months. Participants were stratified for analysis by sexual experience at baseline. Independent variables were perceived risk of STIs other than HPV and perceived need for safer sexual behaviors after HPV vaccination. Dependent variables included: 1) sexual initiation among those who were sexually inexperienced at baseline, and 2) number of sexual partners and condom use at last sex among those who were sexually experienced at baseline. Univariate logistic regression was used to examine associations between risk perceptions and behaviors.

Results The mean age of girls was 16.8 years (SD 2.5) and 259 (76.4%) were African-American. Most participants did not perceive less risk of other STIs (mean scale score 3.86/10) or less need for safer sexual behaviors (mean scale score 1.55/10) after vaccination. Of the 144 sexually inexperienced girls, 8 (6.9%) initiated sex between baseline and 2 months and 12 (12.1%) between 2 and 6 months. Of the 195 sexually experienced girls, 24 (21.8%) reported \geq 2 partners between baseline and 2 months, and 41 (34.8%) between 2 and 6 months; 68 (61.8%) and 74 (62.7%) reported condom use at last sex at 2 and 6 months, respectively. Logistic regression models demonstrated that perceived risk of STIs and perceptions of the importance of safer sexual behaviors after HPV vaccination were not significantly associated with subsequent sexual behaviors at 2 or 6 months.

Conclusions There were no significant associations between perceived risk of STIs and perceived need for safer sexual behaviors after HPV vaccination on subsequent sexual behaviors in this sample of 13-21 year-old young women. These data may provide reassurance to clinicians and parents concerned about impact of risk perceptions on sexual behaviors after vaccination.

This study was supported by grants: NIH R01 AI073713 and MSSRP T35 DK60444.