GYNECOLOGY

Missed opportunities for HPV immunization among young adult women

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Background
Despite the availability of a safe and efficacious vaccine against human papillomavirus, uptake of the vaccine in the United States is low. Missed clinical opportunities to recommend and to administer human papillomavirus vaccine are considered one of the most important reasons for its low uptake in adolescents; however, little is known about the frequency or characteristics of missed opportunities in the young adult (18–26 years of age) population.

Objective
The objective of the study was to assess both the rates of and the factors associated with missed opportunities for human papillomavirus immunization among young adult women who attended an urban obstetrics and gynecology clinic.

Study Design
In this cross-sectional study, medical records were reviewed for all women 18–26 years of age who were underimmunized (<3 doses) and who sought care from Feb. 1, 2013, to January 31, 2014, at an urban, hospital-based obstetrics and gynecology clinic. A missed opportunity for human papillomavirus immunization was defined as a clinic visit at which the patient was eligible to receive the vaccine and a dose was due but not administered. Multivariable logistic regression was used to test associations between sociodemographic variables and missed opportunities.

Results
There were 1670 vaccine-eligible visits by 1241 underimmunized women, with a mean of 1.3 missed opportunities/person. During the study period, 833 of the vaccine eligible women (67.1%) had at least 1 missed opportunity. Overall, the most common types of visits during which a missed opportunity occurred were postpartum visits (17%) or visits for either sexually transmitted disease screening (21%) or contraception (33%) (Figure). Of the patients with a missed opportunity, 26.5% had a visit at which an injectable medication or a different vaccine was administered. Women who identified their race as black had higher adjusted odds of having a missed opportunity compared with white women (adjusted odds ratio, 1.61 [95% confidence interval,
1.08–2.41], \(P < .02\). Women who reported a non-English- or non-Spanish-preferred language had lower adjusted odds of having a missed opportunity (adjusted odds ratio, 0.25 [95% confidence interval, 0.07–0.87], \(P = .03\)). No other patient characteristics assessed in this study were significantly associated with having a missed opportunity.

**Conclusion**

A majority of young-adult women in this study had missed opportunities for human papillomavirus immunization, and significant racial disparity was observed. The greatest frequency of missed opportunities occurred with visits for either contraception or for sexually transmitted disease screening.

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