

## ABSTRACTS • 39<sup>th</sup> Annual Meeting • American Society of Preventive Oncology, University of Alabama at Birmingham, March 15–17, 2015

*The following are the 20 highest scoring abstracts of those submitted for presentation at the 39th Annual ASPO meeting held March 15–17, 2015, in Birmingham, AL.*

### The Role of Geographic Factors in Human Papillomavirus (HPV) Vaccine Uptake Among Adolescent Girls in the United States

Henry KA, Warner EL, Ding Q, Kepka D

There has been limited research examining the role of geographic factors in human papillomavirus (HPV) vaccine uptake among adolescent girls. This study is one of the first to investigate and identify community-level geographic factors that may be associated with HPV vaccine uptake in the United States. We analyzed data from the 2011 and 2012 National Immunization Survey-Teen to examine associations of HPV vaccine initiation (receipt of at least one dose based on healthcare provider records) among female adolescents aged 13 to 17 years ( $N = 20,565$ ) with ZIP code level geographic factors that were linked to the survey. Analyses were conducted using weighted logistic regression that included state-random effects. HPV vaccine initiation was approximately 53% in both 2011 and 2012. Racial composition and urban/rural residence were both independently associated with vaccine initiation ( $P < 0.05$ ). Initiation was higher among girls living in communities where the majority (>50%) of the population was Hispanic compared to communities where the majority of the population was non-Hispanic white (69.0% vs 49.9%; Adjusted Odds Ratio (AOR) 1.55, 95% CI, 1.33–1.80). Girls living in high population density areas (urban) had higher HPV vaccine initiation compared to those living in low population density areas (rural) (56% vs 44.6%; AOR 1.37, 95% CI, 1.13–1.65). Initiation was also higher among girls living in the most impoverished communities compared to girls living in the least impoverished communities (61% vs 50.4%), but community-level poverty was not significant in the adjusted analysis. Higher HPV vaccination coverage in poor urban communities with a high proportion of racial/ethnic minorities may be partly attributable to targeted interventions and the continued effectiveness of the Vaccines for Children program (VFC), which provides recommended vaccines at no cost to eligible children. Learning more about factors that influence higher HPV vaccination initiation rates among certain groups might inform intervention strategies for groups with lower initiation rates.

Published online April 1, 2015.

doi: 10.1158/1055-9965.EPI-15-0095

©2015 American Association for Cancer Research.

### Cervical Cancer Prevention Services at College Health Centers: Historically Black Colleges and Universities (HBCUs) Compared to Predominantly White Institutions (PWIs)

Barnett KB, McRee AL, Reiter PL, Paskett ED, Katz ML

Cervical cancer (CC) incidence and mortality rates are increased among African American women. We sought to examine the availability of CC prevention services, such as the HPV vaccine and Pap tests, at college health centers among Historically Black Colleges and Universities (HBCUs) compared to Predominantly White Institutions (PWIs). Methods: We analyzed data from a sample of colleges and universities identified using the National Center for Education Statistics' College Navigator tool. Identified HBCUs were matched with a randomly selected four year PWI within the same state, resulting in an analytic sample of 162 colleges and universities. We collected data on health services and institutional characteristics via the institutions' websites, the College Navigator Tool, and by telephone interviews with health centers. We examined whether institutions provided HPV vaccine or Pap tests to students and identified correlates of each using logistic regression. Results: A total of 131 (81%) colleges and universities had operating health centers, of which 121 (92%) were successfully contacted via telephone. HBCUs were less likely than PWIs to offer the HPV vaccine (21% vs. 46%;  $p$ -value < 0.05) or Pap tests (49% vs. 67%;  $p$ -value < 0.05). However, in multivariate logistic regression models, the difference was no longer statistically significant. Significant variables were setting (non- rural vs. rural) and enrollment size. Institutions in a non-rural setting (OR = 4.42; 95% CI, 1.01–19.42) were more likely to offer the HPV vaccine, and institutions with higher enrollments (per every 1,000 increase) were more likely to offer the HPV vaccine (OR = 1.24; 95% CI, 1.10–1.39) or Pap tests (OR = 1.18; 95% CI, 1.0–1.39) to students. Conclusion: Many colleges and universities are not offering the HPV vaccine or Pap tests to students. Student enrollment size and non-rural setting of the institution are important determinants of whether a college or university offers CC prevention services. Given that HBCUs support a large concentration of minority students who are at risk of cervical cancer, a greater effort should be employed at these smaller institutions to increase the availability of CC prevention services.

Published online April 1, 2015.

doi: 10.1158/1055-9965.EPI-15-0096

©2015 American Association for Cancer Research.