

operational definitions for each dimension (aggregating sexual minority women into one group and disaggregating sexual minority women into subgroups). Weighted logistic regression models determined how HPV infection outcomes (any HPV type, high-risk HPV type, and vaccine-preventable HPV type) varied by dimension. Results: Similar patterns emerged for sexual identity and sexual behavior. In bivariate analyses, HPV infection outcomes were more common among non-heterosexual women compared to heterosexual women (any type: 49.7% vs. 41.1%; high-risk type: 37.0% vs. 27.9%), as well as among women who reported any same-sex partners compared to women who reported only opposite-sex partners (any type: 55.9% vs. 41.0%; high-risk type: 37.7% vs. 28.2%; vaccine-preventable type: 19.1% vs. 14.0%) ( $P < 0.05$ ). When we disaggregated dimensions of sexual orientation into subgroups, bisexual women and women who reported partners of both sexes had greater odds of HPV infection outcomes ( $P < 0.05$  in bivariate analyses). Multivariate models attenuated several of these differences, though lesbian women and women who reported only same-sex partners had lower odds of most HPV infection outcomes in multivariate analyses ( $P < 0.05$ ). Conclusions: HPV infection is common among sexual minority women. However, prevalence estimates vary slightly between sexual orientation dimensions and greatly depending on how a dimension is operationally defined. These findings highlight the importance of measuring sexual orientation in various ways and can help inform targeted HPV and cervical cancer prevention efforts for sexual minority women.

Published online March 4, 2016

doi: 10.1158/1055-9965.EPI-16-0085

©2016 American Association for Cancer Research.

### Perspectives from Healthcare Providers and Women about Completing Human Papillomavirus (HPV) Self-Testing at Home

Zimmermann BJ, Katz ML, Moore D, Paskett ED, Reiter PL

Purpose: Cervical cancer (CC) incidence and mortality rates are increased and CC screening rates are low among women living in Ohio Appalachia. Mailing human papillomavirus (HPV) self-tests to women to complete at home is a potential new strategy in the United States to engage women in the CC screening process. Our study sought to understand both providers' and women's perspectives on an HPV self-test that could be mailed to women and how those viewpoints may differ and/or concur. Methods: Focus groups were conducted (2014–2015) among: 1) healthcare providers practicing in four Federally Qualified Health Centers (FQHCs) located in three Ohio Appalachia counties; and 2) women living in Ohio Appalachia. Results: Providers ( $n = 28$ ) and women ( $n = 15$ ) were accepting of HPV self-testing, however, the reason for acceptance differed between groups. Providers thought HPV self-testing would increase the possibility that under-screened women would return to the healthcare system, while women thought completing HPV self-tests at home would eliminate logistical/psychological CC screening barriers. Facilitators of completing an HPV self-test at home reported by women included decreased

embarrassment, and the time and money saved by avoiding a doctor's appointment. Barriers to completing an HPV self-test at home reported by providers and women included women not being aware of the test, concerns about incorrectly completing the test and potential contamination of the obtained specimen, potential discomfort associated with completing the test, safety of the sample when returning it through the mail, issues associated with communicating test results (timing, channel, findings), and needed follow-up care. Both providers and women stressed the importance of including educational information about HPV and cervical cancer and detailed HPV self-test instructions with the mailed device. Conclusions: Findings provide insights into the facilitators and barriers of completing an HPV self-test at home, returning it, reporting results, and providing needed follow-up care. This information will be useful in developing CC screening programs that include mailed HPV self-tests.

Published online March 4, 2016

doi: 10.1158/1055-9965.EPI-16-0086

©2016 American Association for Cancer Research.

### Association Between Post-Cancer Diagnosis Dietary Inflammatory Potential and Survival in WHI Observational Study and Dietary Modification Trial

Zheng JL, Tabung FK, Zhang JJ, Shivappa N, Ockene JK, Caan B, Kroenke C, Hebert JR, Steck SE

Background: Inflammation regulates key biologic processes in chronic disease and can be modulated by diet. Our objective was to use the dietary inflammatory index (DII), a novel tool to characterize the inflammatory potential of diet, to examine how post-cancer diagnosis dietary quality is associated with overall survival in the Women's Health Initiative (WHI) Observational Study (OS) and Dietary Modification Trial (DM). Methods: After excluding baseline cancers and energy outliers, the analytical cohort had 4,241 postmenopausal women (19% of total cancer cases), aged 50 to 79 years at baseline, in the WHI OS ( $n = 1,852$ ) and DM ( $n = 2,389$ ), who developed invasive cancer during follow-up and completed a food frequency questionnaire after diagnosis. These women were followed from dietary assessment until death from any cause. Energy-adjusted DII scores from food only and from food plus supplement (any reported dietary supplement related to DII parameters) after cancer diagnosis for each subject were calculated by multiplying the inflammatory effect scores determined based on extensive literature review and intake values for each food parameter, and then summing across all the food parameters. Death was ascertained by clinical center follow-up or by searching the National Death Index with central or local adjudication. Cox proportional hazards models were fit to estimate multivariable-adjusted hazard ratios (HRs) and 95% confidence intervals (CI) for all-cause mortality comparing women in higher DII quartiles with those in the first quartile. Results: After a median 11.2 years of follow-up, 1,470 deaths occurred. After adjustment for key covariates, women who consumed a more pro-inflammatory diet (in higher quartiles of DII score from food only) after a cancer diagnosis had a significantly

# Cancer Epidemiology, Biomarkers & Prevention

AACR American Association  
for Cancer Research

## Perspectives from Healthcare Providers and Women about Completing Human Papillomavirus (HPV) Self-Testing at Home

BJ Zimmermann, ML Katz, D Moore, et al.

*Cancer Epidemiol Biomarkers Prev* 2016;25:560.

**Updated version** Access the most recent version of this article at:  
<http://cebp.aacrjournals.org/content/25/3/560.1>

**E-mail alerts** [Sign up to receive free email-alerts](#) related to this article or journal.

**Reprints and Subscriptions** To order reprints of this article or to subscribe to the journal, contact the AACR Publications Department at [pubs@aacr.org](mailto:pubs@aacr.org).

**Permissions** To request permission to re-use all or part of this article, use this link <http://cebp.aacrjournals.org/content/25/3/560.1>.  
Click on "Request Permissions" which will take you to the Copyright Clearance Center's (CCC) Rightslink site.