University of Kentucky

Rural Cancer Prevention Center Core Project

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UK Rural Cancer Prevention Center

The Rural Cancer Prevention Center (RCPC) is a planned collaboration of community members, public health professionals, and researchers designed to reduce the health disparities associated with cervical, breast, and colorectal cancer among residents of the Kentucky River Health District in Appalachia Kentucky.



Estimated Annual Burden of HPV-Related Diagnoses in the United States

4,220 estimated deaths¹

12,170 new cases of invasive cervical cancer¹

330,000 new cases of high-Grade cervical dysplasia²

1 million new cases of genital warts³

1.4 million new cases of low-grade cervical dysplasia²

American Cancer Society. *Cancer Facts and Figures 2012*. Atlanta, Ga: American Cancer Society.
Schiffman M et al. *Arch Pathol Lab Med*. 2003;127:946-949.
Fleischer AB et al. *Sex Transm Dis*. 2001;28:643-647.



Data accessed March 30, 2012. Based on data released February 16, 2012. Copyright (C) 2012 Kentucky Cancer Registry



Percent of Kentucky Women who did not have a PAP Smear Test in the Past Three Years, by Area Development District, 2008



HPV Vaccination Rates for 2010

Two available HPV vaccines: Gardasil and Cervarix

- Adolescents ages13–17¹
 - ≥ 1 dose 48.7% nationally, 40.1% in Kentucky
 - \geq 3 doses 32% nationally, 27.3% in Kentucky
- Adult women ages19–26
 - $\circ \geq 1$ dose 20.7% nationally²

¹Dorell, C., Stokley, S., Yankey, D., & Markowitz, L. (2011). National and State Vaccination Coverage Among Adolescents Aged 13 Through 17 Years- United States, 2010. *Morbidity and Mortality Weekly Report, 60*(33), 1117-1123. ²CDC. (2012). Adult Vaccination Coverage-United States, 2010. *Morbidity and Mortality Weekly Report, 61*(4), 66-72.



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1-2-3 Pap

The Rural Cancer Prevention Center (RCPC) initiated a two-stage HPV vaccine promotion program for young women residing in rural Appalachia.

Stage 1 = social marketing and diffusion study Stage 2 = DVD-based intervention (randomized control trial)





















Ultimate Goal = HPV Vaccination!





Stage 2

In order to promote doses 2 and 3, community advisory board members suggested a visual- and audio-based educational program with local "actors" to increase the salience of the health messages.

Based on message testing with young adult women from eastern Kentucky, the RCPC partnered with the UK Department of Communication to develop a 12

Pos to Prevent C

Stage 2



The DVD features 3 young women from eastern Kentucky, 2 local female healthcare providers (a nurse practitioner and a physician), and a female television reporter from the regional news station.

The primary messages of the DVD include efforts to increase self-efficacy, understanding the value of the HPV vaccine, emphasizing the importance of all 3 doses, and understanding the importance of Pap testing.

After receiving dose 1, women are randomized to watch the DVD or receive standard of care and subsequently followed to monitor uptake of doses 2 and 3. From July 2010 until December 2011, 344 young women, ages 18–26, received dose 1 of the HPV vaccine as a result of outreach and social marketing efforts in the KY River District.



Preliminary Results

	Percent of Sample	
Lived in southeastern Kentucky more than 5 years	90%	
Age		Mean = 21.99 (SD 2.4)
Caucasian	96%	
Some college	48%	
Married	30%	
Children at home	39%	
Ever abnormal Pap test result	47.9%	
Not using birth control	49.3%	
Never had a Pap test	10.8%	
Sexually experienced	93.9%	
Lifetime partners		Mean = 4.7 (SD 7.2)

Preliminary Findings

Preliminary results suggest that the DVD intervention may have created a significantly (P = .008) greater return rate for series completion (66.7%) compared to the rate observed for women randomized to the control condition (47.2%) (Relative difference ~30%)

Intervention effects moderated by age (younger) and marital status (single).



Conclusion



Although these findings are only preliminary, they do suggest potential efficacy of this easyto-deliver, two-stage strategy for effectively protecting young rural women against cervical cancer.

Future plans to look at BRFSS self-report Pap testing data and pre-invasive cervical cancer rates using data from the Kentucky Cancer Registry.

Video dissemination within KY and in West VA

Questions?

Thank you!

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