

Uptake of HPV vaccination in high-risk vulnerable women: Intersection of reproductive health and preventative care

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Disclosures

- No financial relationships or conflict of interest to disclose

Background

- Estimated 31,000 people diagnosed with Human Papillomavirus (HPV) related cancers every year in the U.S. (CDC, 2017)
- Poor completion of the HPV vaccination series exists, despite efficacy and safety information (CDC, 2013)
- Only 42% of U.S. women receive full series (MMWR, 2016)
 - This may vary by race/ethnicity or sociodemographic factors

Background

- HPV related morbidity and mortality disproportionately affects racial and ethnic minorities and persons of lower socioeconomic status.
(Bednarczyk, 2014; Holman, 2014)
- African American women in Chicago may have limited knowledge of HPV, cervical cancer and HPV vaccine (Strohl, 2015)
 - Barrier to vaccination
 - May result in inconsistent access to preventative and screening services

Background

- John H. Stroger Jr. Hospital of Cook County
 - Safety net institution for Cook County, Illinois
 - Care provided regardless of ability to pay

GAP

- **No existing surveillance efforts at our institution to measure knowledge of HPV, cervical cancer or HPV vaccination status in young at-risk women receiving health services**

AIM

- Determine HPV vaccination rates in women presenting for reproductive health services
- Identify facilitators and barriers to vaccine uptake

Methods

- Women between 13 to 25 years old
- Presenting for abortion care at John H. Stroger Jr. Hospital of Cook County, IL in 2015-2016
- One-on-one interview with a health educator about sexually transmitted infection (STI) prevention
 - Information on history of sexual behaviors, STI testing and HPV vaccination
 - Collected age, race/ethnicity, insurance status, and educational attainment

Statistical Analysis

- Descriptive summary of patient sample using contingency tables
- Calculated prevalence of HPV vaccination
 - Count of dose completion among those vaccinated
 - Summarized responses among women who were not vaccinated
- Log-binomial regression modeling to estimate prevalence ratios
 - Determine factors associated with receipt of HPV vaccine

Results

- **4,039** health interviews
- Women were 21 (SD=2.3) years old
- 89% African American
- 76% had Medicaid insurance

- 25.3% (n=1,020) had previously received the HPV vaccine
 - Half of these women (n=570; 55.9%) reported receiving three doses

Results

- Majority (n=3,200) reported having received STI testing in the previous two years
 - 18.6% (n=750) had a STI in previous year
- 74.5% (n=3,008) reported having a primary care physician

Results

- Vaccine prevalence increased with age and education
- Medicaid users and uninsured women less likely to be vaccinated

Factors associated with vaccination in multivariable log-binomial regression model (n=4,039)			
		Received HPV Vaccine (n=1,020)	
Variable		PR (95% CI)	p-value
Age			
13-15 years		0.80 (0.41, 1.56)	0.52
16-20 years		1.23 (1.10, 1.37)	0.0002
21-25 years		1.0 (ref)	
Race			
African-American, nH		0.90 (0.75, 1.08)	0.27
Latina		1.17 (0.96, 1.43)	0.12
White/Other, nH		1.0 (ref)	
Education			
Less than high school		0.62 (0.52, 0.73)	<0.0001
High school		0.77 (0.69, 0.87)	<0.0001
More than high school		1.0 (ref)	
Insurance status			
Medicaid		0.76 (0.64, 0.92)	0.004
Uninsured		0.65 (0.52, 0.81)	0.0001
Private		1.0 (ref)	
STI test in last two years			
Yes		1.05 (0.92, 1.21)	0.42
No		1.0 (ref)	
STI in previous year			
Yes		0.92 (0.80, 1.06)	0.26
No		1.0 (ref)	
Primary care provider			
Yes		1.13 (0.99, 1.29)	0.06
No		1.0 (ref)	

Results

- Common responses among women who were not vaccinated:
 - Never heard about HPV
 - Didn't know there was a vaccine
 - Unsure if vaccine is safe or a good choice for herself
 - Don't know where to go for vaccine
 - Never offered the vaccine

Discussion

- Low HPV vaccination rates observed in our clinic
 - Privately insured women more likely to be vaccinated
- Need to understand settings where STI testing is taking place
 - Potential opportunity to educate women about HPV and the availability of the vaccination
- More specific information is needed about use of primary care
- Target women without private insurance to ensure they know HPV vaccine is available to them in our health system

Discussion

- Suggests a need to educate women about HPV and the availability of the vaccination
- Abortion care settings may be a unique opportunity to offer education and referral and/or provide the first dose of vaccine for eligible women
- Further collaboration between reproductive health and primary care providers may improve access and uptake of this vaccination