Children's Hospital of Philadelphia PolicyLab

The HPV Vaccine Isn't Just for Girls

Adolescent Health & Well-Being

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While Human Papillomvirus (HPV) is often considered a women's health issue due to its association with cervical cancer, HPV is a common sexually transmitted infection that can cause serious health consequences, including genital warts and multiple kinds of cancer, in both men and women. Each year, HPV newly infects 14 million Americans and causes nearly 27,000 new cases of cancer. In males, HPV can cause anal, oropharynx (mouth and throat) and penile cancer, and among the approximately 35,000 HPV-associated cancers per year in the U.S, nearly 40% occur among males.

Fortunately, a vaccine was developed to prevent most strains of HPV that can cause cancer. The Centers for Disease Control and Prevention (CDC) added HPV vaccines to the list of routinely recommended vaccines for adolescent girls in 2006 and for boys in 2011. In spite of the vaccine's life-saving potential and support from the medical community, low rates of HPV vaccination leave many children unprotected. In 2014, only 40% of adolescent girls and 22% of boys had received the three doses that are needed for full protection.

Vaccinating males is important for two major reasons. First, males are not regularly screened for cancers – penile, anal, and oral – while women have routine health screenings to detect cervical cancer, the most common cancer caused by HPV. Secondly, vaccinating males improves the overall herd immunity to HPV infection – when a significant portion of the population is immunized, helping to slow or stop the spread of infection. This provides benefit to both men and women.

HPV vaccines are administered as three shots over the course of six months, and the CDC recommends initiating the vaccines at age 11 or 12. When adolescents receive the first dose, they are said to have "initiated" the vaccine series, but "completion" depends on receiving all three doses of the vaccine. Previous studies of HPV vaccination in women have shown that there are significant disparities based on race and socioeconomic status with minority and poor women initiating the HPV vaccine series more, but completing it less than non-minority and higher socioeconomic women. However, fewer studies have focused on socioeconomic status as a predictor of HPV vaccine series initiation among adolescent males, particularly 11 to 12 year olds.

In our recent study, my colleagues and I examined patterns of HPV vaccine initiation among adolescent males in The Children's Hospital of Philadelphia (CHOP) primary care network. We examined whether racial or ethnic minorities and those with Medicaid had higher rates of vaccine initiation than white patients or those with private insurance. We found that minority males initiated the vaccine series more frequently than non-minority males. Similarly, those with Medicaid initiated the vaccine series more frequently than those with private insurance. These findings mimic the racial and socioeconomic disparities in HPV vaccine initiation among women.

Our results demonstrate a need to better understand how socioeconomic status influences vaccine acceptance and provider recommendations. Particularly, will these disparities persist when we examine HPV vaccine series completion? Rectifying these disparities is critical as the populations who suffer most from the burden of HPV-related diseases are the same population of people who do not complete the HPV vaccine series. Identifying ways outside the doctor's office to augment delivery of the HPV vaccine is also vital. The Vaccines for Children program already provides access for poor children, but other possibilities include community service partnerships, outreach programs or even school-based immunization programs.