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The Upshot

Good Talks Needed to Combat HPV Vaccine Myth

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When people hear about vaccine deniers — anti-vaxxers, to some — they most often think about parents who are refusing to vaccinate their children. But there's another type of vaccine refusal, and it's important that we not ignore that. Doctors sometimes promote the use of some vaccines with less enthusiasm than others. Sometimes, they don't talk about them at all.

This occurs most often with the human papillomavirus, or HPV, vaccine. The low immunization rates with this vaccine, and the behaviors of the physicians who might be contributing to that, have consequences.

HPV is a sexually transmitted infection that is very, very common, so much so that almost all sexually active people will get at least one of more than 40 types at some point in their lives. The C.D.C. estimates that almost 80

million Americans are currently infected with HPV, and that about 14 million people will become newly infected this year.

Most people don't suffer any real negative health consequences. But some do. About 1 percent of those infected will have genital warts at any given moment. More important, about 17,500 women and 9,300 men will be affected by cancers that HPV causes each year. These include cervical, oropharyngeal, anal, vaginal and penile cancers.

This is preventable. The C.D.C. recommends that all children, boys and girls, begin receiving the first of three vaccinations when they are 11 or 12 years old. The reason we start that young is that it's important that children be immune well before they become sexually active. Once they are exposed to the virus through sexual activity, the vaccine may be less effective.

Let's also be clear. Regardless of what some presidential candidates say, the vaccine is safe. The scary emails and Internet horror stories you might have read can easily be explained away. The vaccine works, and it's not dangerous.

Our immunization rates for HPV fall far short of other vaccine rates. Last year, less than 42 percent of those ages 13 to 17 received at least one dose of the HPV vaccine. Fewer receive all three shots.

Even this rate of vaccination has made a difference, though. A study published two years ago in The Journal of Infectious Diseases examined the prevalence of HPV infections in girls and women both before and after the vaccine was introduced. Among those 14 to 19, the prevalence of HPV decreased from 11.5 percent before 2006 to 5.1 percent after. This drop could not be accounted for by changes in demographics or sexual activity.

The remarkable reduction in HPV prevalence occurs even though only about a third of girls 13 to 17 received all three doses of the vaccine in 2010. The C.D.C. director, Tom Frieden, estimated then that if we could increase the

vaccination rate to 80 percent, far lower than we see with most other vaccines, we could prevent 50,000 cases of cervical cancer in women. He argued that every year we did not achieve this goal would result in an additional 4,400 women getting cervical cancer at some point in their lives.

Policy is partly to blame here. Although states pretty much mandate all childhood vaccines as necessary for entry into school, fewer focus on diseases affecting adolescents. However, all states and the District of Columbia require immunity to chickenpox; 47 states and D.C. require vaccination against hepatitis B; and 29 states and D.C. require it for meningococcus.

Only two states, Rhode Island and Virginia, and the District of Columbia require vaccination against HPV.

Parental and adolescent beliefs certainly come into play. Myths about the safety of the HPV vaccine persist despite overwhelming evidence that the immunization is safe.

Doctors bear responsibility here as well. A recent study by Melissa Gilkey, a behavioral scientist at Harvard Medical School, surveyed pediatricians and family physicians to examine their communication practices around vaccines. She found that more than a quarter of doctors didn't endorse the vaccine strongly. About a quarter did not make timely recommendations for girls, and almost 40 percent didn't make timely recommendations for boys. Only half recommended same-day vaccinations, and almost 60 percent used a risk-based approach, recommending the vaccine more often to patients they thought were at higher risk of HPV infection, such as those more likely to be sexually active.

This is, of course, a problem. If a child is already sexually active, it may be too late to protect them.

Ms. Gilkey's prior work found that physicians felt that talking to patients about the HPV vaccine took significantly more time than for other vaccines,

which may make them less likely to engage. Further, some physicians believe many parents don't think HPV vaccination is important for their 11- and 12-year-olds. While three-quarters of doctors reported perceiving parental support for the Tdap vaccine, for instance, only 13 percent believed parents supported the HPV vaccine.

That's not the case. A study published last year in the journal Vaccine found that doctors underestimated how important vaccines were to parents and overestimated parental concerns about how many shots their children were getting. Other research shows that the most common reason for adolescents not to receive the HPV vaccine isn't parental refusal; it's a lack of physician recommendation.

Even if there are parental concerns, it's up to the physician to address them. One of the nation's pre-eminent experts in HPV vaccine behavioral research, Greg Zimet, has an office downstairs from me at Indiana University School of Medicine. His research has also found physician communication to be a significant predictor of HPV coverage.

A point that Mr. Zimet has made repeatedly, however, is that the number of behavioral studies of the HPV vaccine is far, far greater than for any other vaccine. There's something about this vaccine that causes people to behave differently when discussing, considering and administering it.

The elephant in the room is, of course, sex. This vaccine prevents a sexually transmitted infection, and there is a pervasive belief that when parents, or even doctors, give the vaccine, they may be condoning sexual activity in young adolescents.

This is, of course, not true. Many engage in sexual activity with or without the vaccine. We administer the immunization to protect them regardless. Moreover, research is abundant in this domain. A 2012 study published in JAMA Pediatrics found that girls perceived no less need for safer sexual behaviors after getting the HPV vaccine. A 2014 cohort study of more than

260,000 girls found that those who received the HPV vaccine were no more likely to get pregnant or to contract a non-HPV-related sexually transmitted infection than girls who were unvaccinated. This confirmed findings from a smaller cohort study from 2012.

The good news is that this is all fixable. Research consistently shows that doctors have a lot of influence on parents' decision making about HPV vaccination. They should just talk about it as they do with all other vaccinations in a straightforward, unambiguous way. As Ms. Gilkey told me, "Just by letting parents know that HPV vaccination is very important for all 11- and 12-year-olds, physicians and other vaccine providers can do a lot to overcome the barriers that have kept coverage low in the U.S."

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