How Obesity Impacts Teen HPV Vaccinations

Adolescent Health & Well-Being

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Two big problems American teenagers face today are high rates of obesity and high rates of sexually transmitted infections. Though they are both common, it is rare that we consider how these two issues may affect each other. Whether due to the stigma associated with obesity, provider biases that influence which patients are offered certain services or trust issues between patients and providers, obesity negatively affects how youth interact with the health care system and whether they receive health care services. For example, women with obesity are less likely to use preventative health services such as cervical and breast cancer screening.

When it comes to teens, we are particularly interested in preventing sexually transmitted infections. One of the most crucial tools we have to do so is with the human papillomavirus (HPV) vaccine. The vaccine is recommended for young people starting at age 9 through 26 years, and it dramatically reduces the chances that people will become infected with the HPV virus. In doing so, it protects against both genital warts and cervical cancer. Until recently, there was little information about the association between obesity and rates of HPV vaccinations, but our research team has uncovered some interesting findings over the past year.

Our team, comprised of researchers from PolicyLab and the Magee-Womens Research Institute in Pittsburgh, examined survey data from 2009-2016 to understand whether young women with and without obesity who were between the ages of 9-30 years were more or less likely to receive the HPV vaccine. We found that of 5,517 women included in the study, adolescents and young adult women with obesity were significantly less likely to have ever received the HPV vaccine than the general population. Moreover, young women with obesity who were vaccinated received the vaccination at a later age than their normal-weight peers. This is problematic as the vaccine is more helpful if it is received before an individual is exposed to the virus—meaning before teens start having sex.

Beyond highlighting a disturbing inequity in the use of one preventive service, this study reveals the important need to understand why there are disparities like this if we are to improve access to this and other preventative health services for young girls and women with obesity. Our study documents the disparity but cannot explain why it exists.

So, what can we do to ensure all adolescents have equitable access to and use of the HPV vaccine? As we recognize disparities in access to HPV vaccine, we should use this information to target education to patients and families at risk. We also need to conduct more research to understand why young people with obesity may not receive the vaccine from their point of view and use that information to tailor messages for physicians, health educators, parents and HPV vaccine awareness campaigns to ensure our messaging resonates with their concerns.

Similarly, it is important to identify whether health provider biases or parental vaccine refusals may explain differences in vaccination rates. This knowledge could inform provider training or guidelines for care. These types of strategies can go a long way to preventing worse health outcomes for young people with obesity.

On the other hand, one way to mitigate the effects of these biases would be to implement interventions that increases vaccine uptake in all populations. As previous PolicyLab research has shown, interventions that support pediatricians and other clinicians in recommending the HPV vaccine and support parents by reminding them when their child is due for the vaccine can successfully increase vaccine uptake.

Fully understanding existing disparities and removing barriers to youth receiving HPV vaccines and other important preventive health services is critical to ensuring every teen has the opportunity to grow into a healthy, productive adult.

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