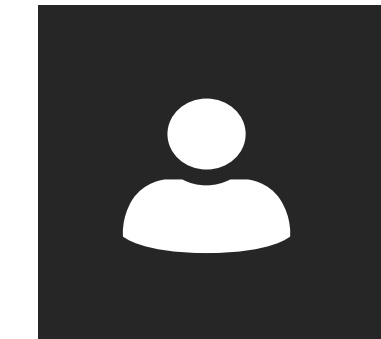


Title: The American Misconceptions About the HPV Vaccine



PRESENTER:

Brooke Cahill

The Purpose of Vaccination

A vaccine is a substance that prepares the immune system to fight a disease-causing germ or other pathogen by imitating infection. Vaccination helps populations gain herd immunity against a foreign pathogen as a way of mitigating disease transmission. Without the promotion of vaccines in society, there is no possible way to obtain herd immunity, which puts populations at risk. As the efficacy of vaccines has been clinically proved, it comes down to the encouragement of health providers to ensure that the public is educated in order to increase vaccine uptake.

The Importance of HPV Vaccination

Considering HPV is the most common sexually transmitted infection in the United States, the health of the public relies on scientific discoveries (Torre et al. 2007). Human papillomaviruses are responsible for causing many types of cancers and genital warts. Research has suggested that “in the USA about 75% of individuals from 15 to 50 years of age are infected with genital HPV during their lifetime” (Torre et al. 2007). Although there is no treatment for those infected with the virus, scientists suggest that prophylactic vaccines are able to lower the risks of infection and decrease the development of various cancers in the body.

Why Do Individuals Refuse?

Refusal can be attributed to lack of knowledge and necessity, reported adverse effects, distrust in the government and misinformation from the media. Choosing to obtain a vaccine comes down to simply the amount of confidence one has in a vaccine itself, and the system in which produces them. As social media has become one of the most popular and efficient ways of sharing thoughts and opinions, individuals are easily misinformed. Even more so, parents are deprived of the proper knowledge needed to formulate an opinion about vaccination from primary care physicians.

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<https://youtu.be/1RwJbhkCA58>

Despite the social stigma and medical injustices, the HPV vaccine is an efficient method of preventing many cancers in both men and women, at a mitigated risk. With physician recommendations and public health campaigns, medical professionals can increase the rate of children that receive the HPV vaccine in order to decrease the burden of HPV-related diseases.

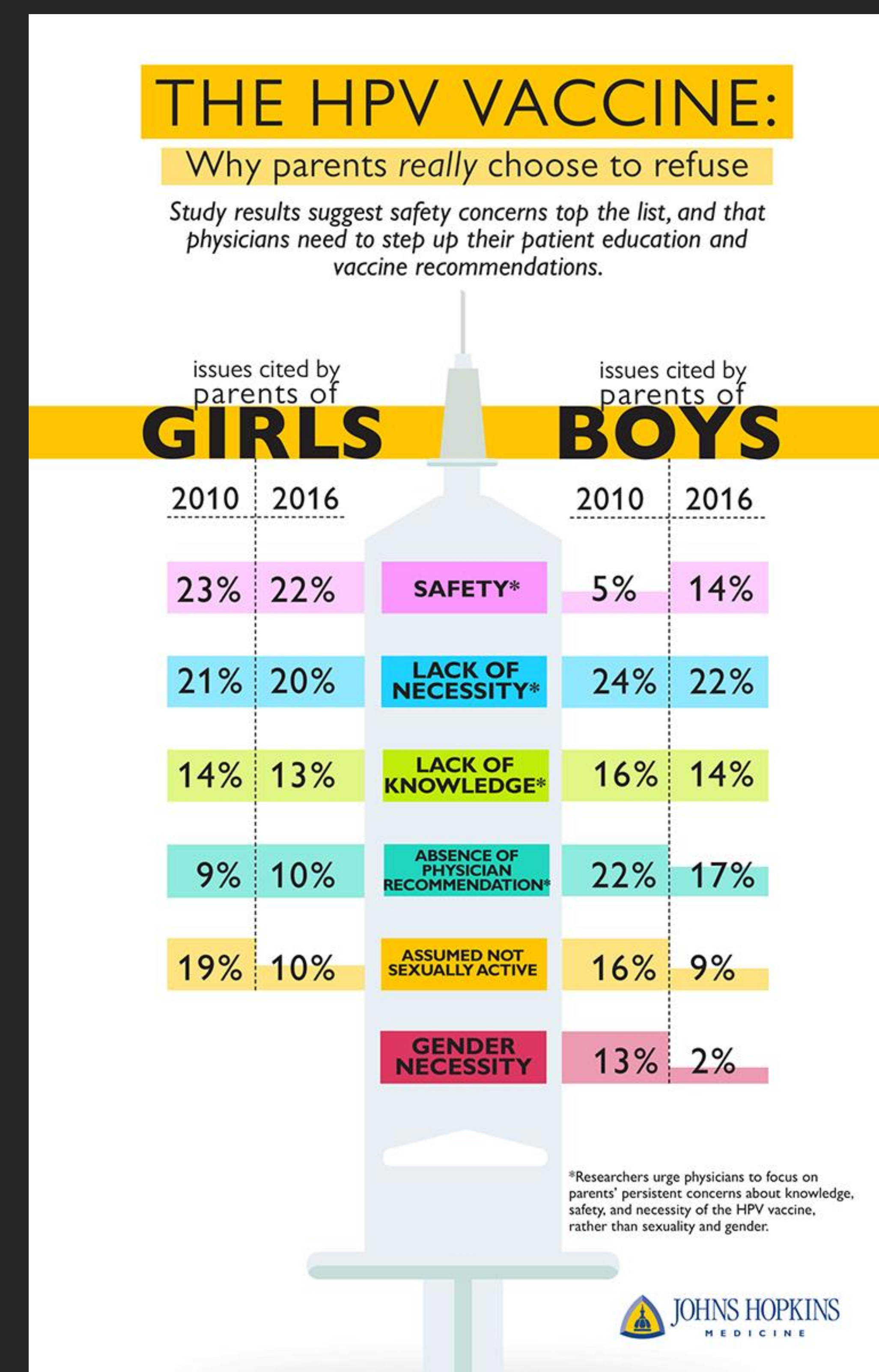


Figure 1. The main reasons for HPV vaccination refusal reported by physicians from parents of adolescents (Beavis et al. 2018).

The Efficacy of the HPV Vaccine

Despite the perceived risks associated with the human papillomavirus vaccine, researchers have proved the efficacy of the vaccine. Gardasil®, a quadrivalent HPV vaccine, was first introduced to the public to prevent against HPV 16 and HPV 18. Research confirmed that the Gardasil® vaccine’s pooled efficacy is 87% and 78% in preventing cervical persistent infections from HPV 16 and HPV 18, respectively. A recent study also concluded that the number of HPV 16 and 18 infections decreased significantly among vaccinated females. It has been concluded that after HPV vaccination was implemented into healthcare, there was an overall fifty-percent decrease in HPV related cancers. Despite the objections of the HPV vaccine, research has shown that the benefits of vaccination outweigh the risks and potential side effects. Individuals that are vaccinated are protected against the development of precancerous and malignant diseases caused by the human papillomavirus.

How to Combat this Issue

Although evidence demonstrates the impact vaccination has on decreasing the level of HPV associated cancers, lack of information and recommendation from physicians has a detrimental effect on public health. In order to combat this issue and increase vaccine uptake in the United States, physicians must gear recommendations towards parents. As safety remains a persistent concern among parents of young adolescents, physicians must properly educate parents about the scientific literature promoting the safety of vaccination. Health campaigns must be put in place to inform the public about the substantial effect HPV vaccination has on decreasing the risks of developing certain cancers in both girls and boys

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