

Attitudes Toward Gardasil: A Survey of University of Florida Patients



Jennifer Mock PGY-4, Shireen Madani Sims, M.D., John D. Davis, M.D.

Departments of Obstetrics and Gynecology, University of Florida, Gainesville, FL

Objective

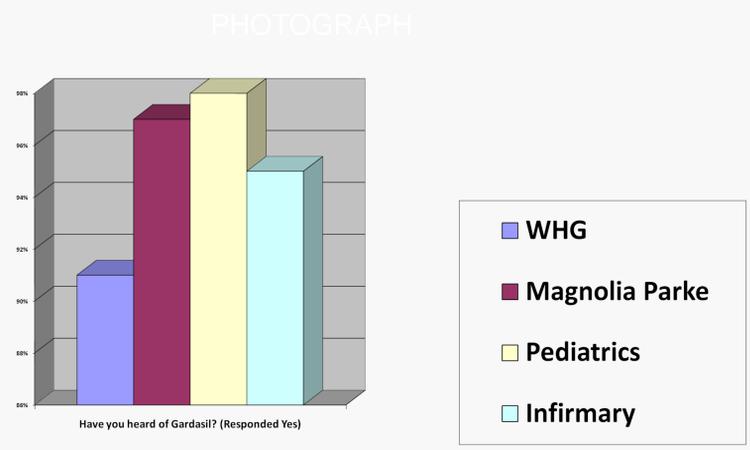
Human papillomavirus (HPV) is the most commonly diagnosed sexually transmitted infection (STI) in the United States. HPV types 16 and 18 are associated with 70% of cervical cancers. Types 6 and 11 cause 90% of genital warts. Gardasil (Merck and Co., Inc., Whitehouse Station, NJ) is a recombinant quadrivalent vaccine that is very efficacious at preventing HPV related infections and is directed against HPV types 6, 11, 16, and 18. Gardasil has had a very robust marketing campaign. The purpose of our study was to determine our patients' understanding of Gardasil and to identify potential barriers that would limit our patient's acceptance of the vaccine.

Study Design

After obtaining Institutional Review Board approval, a survey was created and given to guardians of girls between the ages of nine and 18 and women over age 18. The survey included 26 multiple choice and yes/no questions and assessed basic demographics, general knowledge about Gardasil, and opinions about the vaccine. It was distributed over a three month period at four University of Florida clinics. After collection, the survey results were analyzed using the chi-square and Fisher's exact tests. Where appropriate, the questions were assessed to see if responses differed by age group or clinic location.

Results

We received 476 completed surveys. Over 90% of patients who completed the survey had heard of Gardasil (Figure 1.). Half of them identified television as their source of information; only 20% identified their physician as their main source. Two thirds of the questions aimed at determining knowledge demonstrated correct knowledge. For example, 98% knew the recommended age to receive Gardasil, 96% knew that Gardasil does not protect against other STI's, and 81% recognized that the vaccine does not treat or cure cervical cancer. There was not consistent recognition among age groups and clinic location that HPV caused other diseases. While 68% knew patients could receive Gardasil if they had had an abnormal Pap smear in the past, only 40% recognized that they could receive the vaccine if they had previously been diagnosed with HPV.



Most patients also underestimated how much the vaccine series costs, with the majority estimating \$250. The answers to most of the opinion questions did not vary by age or clinic location. Some exceptions included the fact that over half of survey participants aged 16-30 and over half of respondents from the Women's Health Group clinic thought it should be mandatory for middle school or high school aged girls to be vaccinated, whereas only one third of those completing the survey from other age groups and clinic locations thought it should be mandatory. Over 60% felt boys should not receive Gardasil; however, 61% of respondents aged 51-60 thought boys should be offered the vaccine.

Conclusion

Overall, the vast majority of our patients at all clinic locations have heard of Gardasil, and two thirds have an accurate understanding of the indications, efficacy, and safety of the vaccine. We identified potential barriers to acceptance of the vaccine which we believe may be overcome with patient education. First, there may be a misunderstanding about whether you can receive Gardasil if you have had an abnormal Pap smear or if you have previously been diagnosed with HPV. Second, while most patients know that the vaccine consists of three injections, most underestimate the cost. Finally, while the majority of patient know that HPV causes cervical cancer, there is still some lack of knowledge that it also causes cervical dysplasia and genital warts. These three potential barriers to vaccine knowledge and acceptance may all be overcome with patient education.