



HPV Vaccination: Perceptions and Acceptance Among College Students

Elizabeth Brambilla, PA-S, Grace Groh, PA-S, Brianna Hicks, PA-S, Jennifer Kalash, PA-S, Michael Maddaloni, PA-S, Rebecca Parada, PA-S, Michelle McWeeney, PhD, PA-C, Christine Fernandez, MD

Department of Physician Assistant, School of Health and Medical Sciences, Seton Hall University



Introduction

The Human Papillomavirus (HPV) is prevalent worldwide, causing over 33,000 cases of cancer and over 7,000 deaths in America per year.^{1,2} Current Center for Disease Control and Prevention guidelines recommend the HPV vaccine for males and females ages 9 to 26.³ The HPV vaccine does not prevent cancer once an individual has HPV, but rather prevents contracting HPV if exposed.⁴ Despite this benefit, the HPV vaccine is often refused in the United States.⁵ While essential to evaluate reasons for vaccine hesitancy, there is no current literature reviewing HPV vaccine perception among college-aged students. The purpose of this study is to determine if there is a relationship between one's college major and the perception of HPV vaccination among participants aged 18-26. Identifying any potential relationships between college major and perceptions of the HPV vaccine can highlight opportunities for education, which may increase vaccination rates, thus decreasing the rates of cancers of the cervix, vulva, vagina, penis, anus and oropharynx and complications related to HPV.

Research question

Is there an association between level of education, college major, and having a primary care provider with HPV vaccination rate and knowledge?

Methods

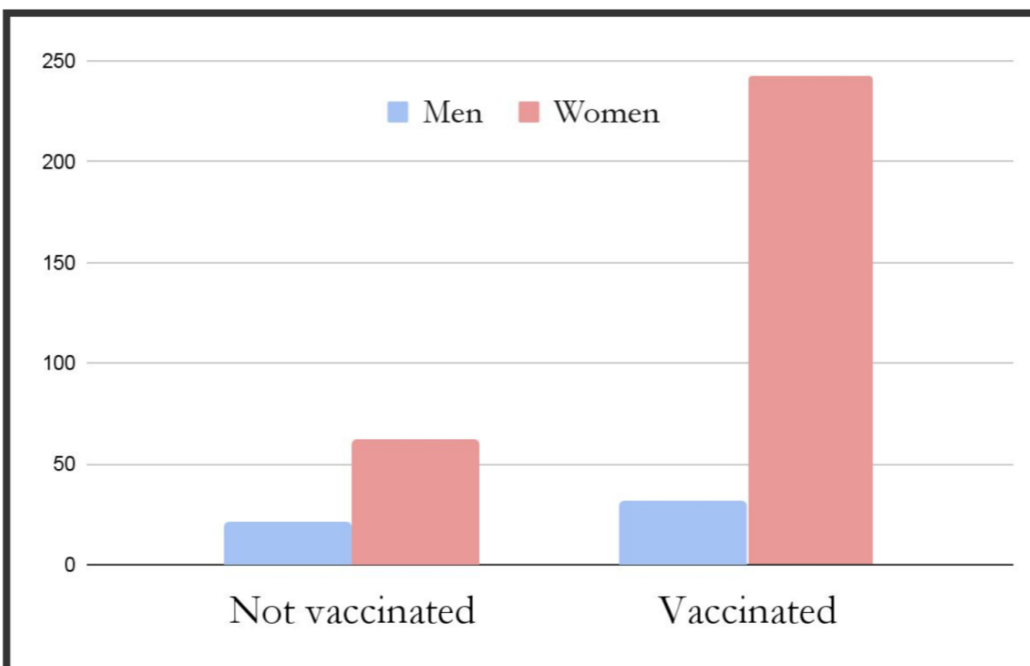
This is a non-experimental study utilizing an anonymous 27 question Qualtrics survey. The survey link was available via researchers' social media accounts and sent to all students that attend the researchers' university via email. Inclusion criteria were individuals aged 18-26 who are currently enrolled in undergraduate or graduate courses and have completed at least one semester of college. Logistic regression and Chi-square were performed to analyze the data via SPSS software.

Results

545 subjects took the survey, 472 were eligible, 84 did not complete the survey, leaving 388 final subjects for analysis. A p-value of .05 was determined to be statistically significant.

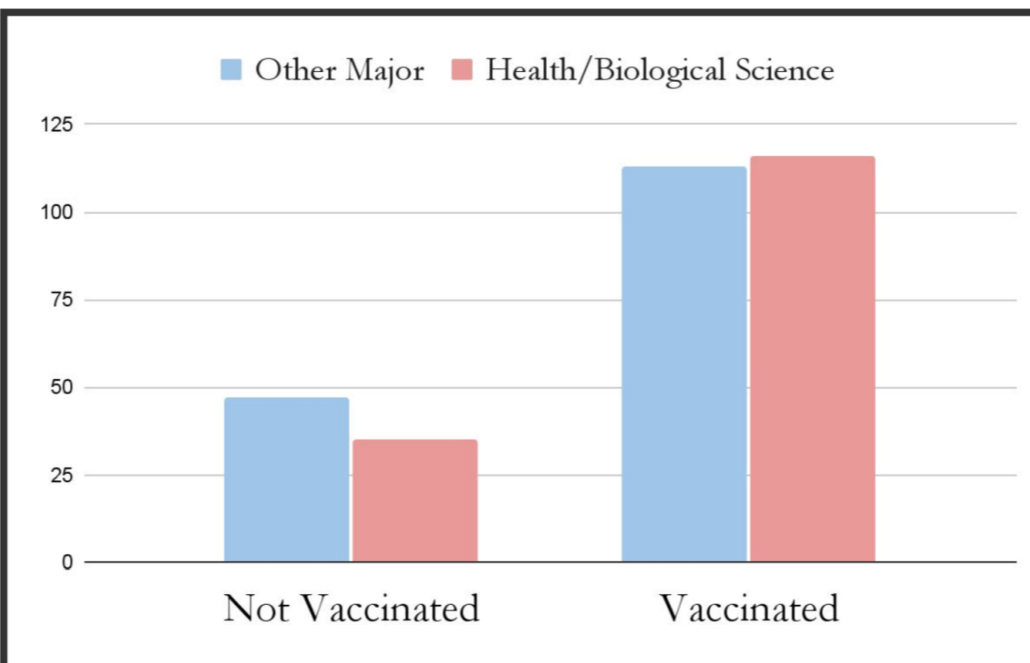
Results cont'd

Chi Square: **80%** of females vs. **61%** of males received the vaccine.



p < .05

Chi Square: **82.1%** of health/biological science students received the HPV vaccine vs. **70.6%** of students in other majors.



p < .05

Results cont'd: Logistic Regression

- Students were approximately 24.0 times more likely to get the HPV vaccine if they were offered it.
- For every 25% increase in knowledge score, students were approximately 8.4 times more likely to receive the HPV

Variable	Sig	Exp (B)
Primary Care Provider Status	0.829	1.103
White or Other	0.106	1.964
Undergrad or Other	0.612	1.258
Testing (+) for HPV or No	0.531	0.89
HS & BS or Other	0.878	1.054
Heterosexual or Other	0.895	1.057
Knowledge	<0.001	8.42
Offered Vaccine	<0.001	23.979
Sex	0.544	0.752
Age	0.543	0.951

Discussion

Two populations were found to have statistically significant higher frequencies of receiving the HPV vaccine, BS and HS majors and females. This higher frequency may be due to an increased understanding and awareness of HPV and vaccine education in both populations. Being offered the vaccine was the biggest predictor of receiving the HPV vaccine. If healthcare providers offer the HPV vaccine to all eligible patients, HPV vaccination rates could increase, likely decreasing HPV cases each year. Limitations of the study should not be generalized as the participants were mostly female, Caucasian, heterosexual and from the tri-state area.

Conclusions

HPV vaccination rates would likely increase if healthcare providers recommended the vaccine more often and if people were more knowledgeable about HPV and the vaccine. Further research is needed to analyze factors associated with increased HPV vaccination rates.

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References

