KNOWLEDGE AND PERCEPTION OF HUMAN PAPILLOMAVIRUS AMONG COLLEGE-AGED STUDENTS

Weinick ED PA-S, O'Keefe BM PA-S, Corrubia AL PA-S, Facciani DB PA-S, Bell KS PA-S

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

• Human papillomavirus (HPV) is the most common sexually transmitted infection in the United States with nearly all sexually active people acquiring it at some point in their lifetime. Despite being at high-risk for sexually transmitted infections, research has shown that many college-aged students do not believe they will contract HPV. Additionally, while most recent guidelines urge both sexes to receive the vaccine, vaccine uptake is still higher among women as compared to men.

The purpose of this study is to gain insight into the knowledge and perceptions of HPV among college aged students and make recommendations for both college students and patient educators.
Methodology

• Students on a small private campus located in New Jersey (enrollment: 10,000) between the ages of 18 and 24, who volunteered to participate, were given short surveys to complete on campus. Surveys were adapted from the HPV Knowledge and Perceptions Survey (KAPS), initially created by McPartland and then modified by Lopez, which assessed the applicants’ demographic information and knowledge of HPV. Frequencies and percentages were calculated using SPSS. Statistical significance was determined utilizing chi-square analysis and a $P < 0.05$ and CI 95%.
Results

- Nearly one fifth (18.7%) of participants had never heard of HPV and around one half (47.3%) rated their knowledge of HPV as “poor”.

- The majority of students were aware that HPV can cause cervical cancer (79.3%).

- Less than half (46.7%) knew that HPV is also associated with oral cancers.

- Only 30.7% of participants knew that HPV was the cause of genital warts.

- Many participants knew that HPV could be transmitted when asymptomatic (88%), that pap smears can indicate changes consistent with HPV (80.7%), and that a vaccine exists to prevent infection (76%).

- Females were significantly more knowledgeable about the relationship between HPV and cervical cancer and that changes in a Pap smear may indicate an HPV infection (p < .05).

- Younger participants (18-22 years) were more aware of the existence of the HPV vaccination when compared to older participants (23 - 24 years) (p < .05).
Results

1. HPV can cause herpes.
2. Genital warts are caused by HPV.
3. HPV can cause cervical cancer.
4. If a woman’s Pap is normal, she does not have HPV.
5. Changes in a Pap smear may indicate a woman has HPV.
6. Genital warts are caused by the herpes virus.
7. Pap smears will always detect HPV.
8. HPV can cause oral cancer.
9. HPV can be vertically transmitted.
10. A negative test for HPV means that you do not have HPV.
11. A vaccine exists to prevent HPV infection.
12. Most people with genital HPV have no visible signs or symptoms.
13. Having one type of HPV means that you cannot acquire new types.
14. I can transmit HPV to my partner even if I do not have symptoms.
Conclusions

- The results of this study show the importance and benefits of HPV education in college-aged students. However, there are still shortcomings in knowledge among both males and females, specifically in regards to oral transmission of HPV and its ramifications. Continued education is of utmost importance to minimize the spread of HPV infection and ultimately to prevent the development of cervical and oral cancers.
Introduction

Human papillomavirus (HPV) is the most common sexually transmitted infection in the United States with nearly all sexually active people acquiring it at some point in their lifetime. Despite being at high-risk for sexually transmitted infections, research has shown that many college-aged students do not believe they will contract HPV. Additionally, while most recent guidelines urge both sexes to receive the vaccine, vaccine uptake is still higher among women as compared to men. The purpose of this study is to gain insight into the knowledge and perceptions of HPV among college-aged students and make recommendations for both college students and patient educators.

Hypothesis

College-aged students have poor knowledge of the presentation and risks of HPV as well as the existence of a vaccination to prevent the infection.

Methods and Materials

Students on a private college campus in NJ (~9,627 total students) between the ages of 18 and 24 were surveyed via convenience sampling. Surveys were adapted from the Knowledge and Perceptions Survey (KAPS), initially created by McPartland and then modified by Lopez, which assessed the applicant's demographic information and knowledge of HPV. Frequencies and percentages were calculated using SPSS. Statistical significance was determined utilizing chi-square analysis and a P < 0.05 and CI 95%.

Results

Of the 222 students who took surveys, 150 were included in the study and 72 were excluded due to incomplete or incorrect responses or age older than 24. Seventy-five percent (75%) of participants who took the survey were between the ages of 18 and 19 years old. Nearly one fifth (18.7%) of participants had never heard of HPV and for those who were aware of the STI, around one half (47.3%) rated their knowledge of HPV as "poor." The majority of students were aware that HPV can cause cervical cancer (79.3%), but less than half (48.7%) knew that HPV is also associated with oral cancers. Only 30.7% of participants knew that HPV was the cause of genital warts. However, many participants knew that HPV could be transmitted when asymptomatic (88%), that pap smears can indicate changes consistent with HPV (80.7%), and that a vaccine exists to prevent infection (76%). Figure 1 displays participant responses to the survey questions.

Chi-square analysis of the data was conducted to determine whether age or gender significantly affected knowledge of HPV. Females were significantly more knowledgeable about the relationship between HPV and cervical cancer and that changes in a Pap smear may indicate an HPV infection (p < .05). Younger participants (18-22 years) were more aware of the existence of the HPV vaccination when compared to older participants (23-24 years) (p < .05).

Discussion

As students begin college, it is important they are aware of common diseases within their population. The authors sought to determine the amount of knowledge regarding the most common sexually transmitted infection, HPV, within college-aged students.

Previous research has also reported on young adult knowledge of HPV transmission, outcomes of the infection, and prevention via vaccination. Similar to our results, other studies have found that the vast majority of students know that HPV is sexually transmitted and can cause genital warts and cervical cancer. Since HPV is also the leading cause of oropharyngeal cancer, the authors aimed to fill the void in research by surveying college-aged students about their knowledge of HPV and its relationship to oral cancer. Data analysis demonstrated that less than half of the participants were knowledgeable about the association between HPV and oral cancer.

Limitations of this study include convenience sampling, a small sample size, and a disproportionate amount of students who were between the ages of eighteen and nineteen.

Conclusion

The results of this study show the importance and benefits of HPV education in college-aged students. However, there are still shortcomings in knowledge among both males and females, specifically in regards to oral transmission of HPV and its ramifications. Continued education is of utmost importance to minimize the spread of HPV infection and ultimately to prevent the development of cervical and oral cancers.

References