

Introduction

According to the Centers for Disease Control and Prevention (Centers for Disease Control and Prevention [CDC], 2017). Human papillomavirus (HPV) is the most common sexually transmitted infection. A gap in practice exists as it relates to the gender gap in HPV vaccination rates between pre-teen and teenage boys and girls. It is proposed that a vaccine hesitancy project focusing on parents can increase rates of childhood vaccines. Previous studies have focused on differences in provider recommendation of HPV vaccinations between boys and girls. Fear of side effects and uncertainty about vaccine effectiveness, as well as cost and lack of healthcare, were barriers to HPV vaccination.. An intervention specifically a vaccine hesitancy project that focuses on educating parents as well as individualized feedback should increase HPV vaccination rates in pre-teen and teen boys. The primary purpose of this evidence-based practice project is to identify facilitators and barriers as well as best evidence clinical guidelines for improving the suboptimal HPV vaccination rates of pre-teen and teenage boys.

Clinical Question

For pre-teen and teenage boys (P), does a standard vaccine hesitancy project focused on parents (I) , as compared with no vaccine hesitancy project (C) , increase HPV vaccination rates (O)?

Background and Significance

HPV Vaccination Rates and Gender

- The rates of HPV vaccination are lower than many other adolescent vaccines.
- Lower rates of vaccination for boys compared to girls.
- This data is alarming as it links the suboptimal HPV vaccination rates to the high rates of HPV infections in the United States.

Effects of HPV Vaccination Gender Gap

- Decreased HPV vaccination rates require drastic measures as HPV is responsible for 70% of cervical cancers and 90% of genital warts in the United States.
- HPV can also cause penile cancer in men, oropharyngeal and anal cancer in both women and men.

Impact on General Population

- The prevalence of any genital HPV is higher among men than women overall.

Aims of this Project.

- The project's aim was to bring about a significant increase in both parents and caregivers' intent to administer HPV vaccination to pre-teen and teenage boys.
- To educate parents and caregivers on the importance of HPV vaccination by assessing their knowledge and attitudes pre and post an education intervention.

Methodology

DESIGN

- A single group pre-test/posttest design with no control group with surveys distributed to participants to assess vaccine hesitancy and to provide the most optimal educational intervention specifically, content that targets attitudes, beliefs and concerns.

SETTING

- A private pediatric clinic in East Orange, New Jersey

STUDY POPULATION

- Purposive sampling of 19 participants who are parents or caregivers of pre-teen and teenage boys.
- Inclusion criteria are parents of boys from age 9-17 who are not yet vaccinated for HPV.

INTERVENTION

-Participants in this study were asked to fill out an 8-item questionnaire which explores their knowledge on HPV, attitudes towards vaccination and their intention to vaccinate their child/children in a pre and post survey with one to one HPV education session. Participants were provided with information developed by the US Centers for Disease Control and Prevention (CDC). Post education intervention, participants were asked to fill out the same 8-item questionnaire to assess changes in knowledge, attitude and intention to vaccinate their child/children.

Results

- A summary of scores was computed with pre-attitudinal average score of 24.15 and a post-attitudinal average score of 28.42 indicating increased mean and attitudes towards HPV vaccination following the intervention in this study.
- The results indicate that the after measurements show an increased positive attitude towards HPV vaccination (average rank of 6.50 vs. Average rank of 10.41). The SPSS output resulted the z-value of -3.305 and p=0.001 with the Wilcoxon signed rank test showing that the observed difference between both measurements is significant.
- Using a McNemar test with use and recoding of dichotomous variables , shows a statistically significant value of p=.012 (p < .05), which is a statistically significant result that the proportion of participants with a likelihood to vaccinate following the intervention was significantly different and higher post intervention.
- Specifically, 31.6 % of participants intended to vaccinate at baseline compared to 78.9% of participants post intervention

Discussion and Implications

KEY FINDINGS

- Targeting attitudes toward HPV vaccination should include safety, efficacy, risk of transmission and sexual initiation.
- There were significant changes in the proportion of participants who were more likely to vaccinate their 9-17 year old boys after the intervention as compared to before.
- Evaluation of concerns regarding vaccine safety, efficacy and sexual initiation reflected the trends of both the pre and post education attitudes as wells as the likelihood of vaccinating of the participants.

LIMITATIONS

- Small sample size
- Lack of control group
- Lack of diversity between participants regarding gender and age of child.
- Minimal ethnic/racial diversity.

IMPLICATIONS

- Differences in HPV vaccination rates between pre-teen and teenage boys and their female counterparts may also be due to the lack of public awareness that males are also susceptible to other types of cancer.
- A closer look at the factors that prevent timely HPV vaccination in this gender group may be the sexual component of the vaccine.
- Developing strategies that promote policy changes at local, state and national levels regarding HPV education.

References

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