

Addressing the Human Papillomavirus vaccine uptake: A multi-component culturally driven educational program fox parents of adolescent patients

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#### Introduction

Human Papilloma Virus (HPV) is the most common sexually transmitted disease worldwide with an estimated 14 million new cases each year (Office of Disease Prevention and Health Promotion, 2019). The disease process of HPV is commonly asymptomatic and self-limiting but select strains of HPV are associated with precancerous cells, cancers, genital warts, and respiratory papillomatosis with the highest disease burden affecting African Americans (Office of Disease Prevention and Health Promotion, 2019).

The purpose of this study to examine the knowledge, perceptions, and beliefs that African American parents of adolescent patients have regarding the Human Papillomavirus vaccine, and to give providers insight on the HPV vaccine educational needs and useful resources for Non-Hispanic black parents of adolescent patients

# Significance

- The CDC recommends HPV vaccination starting at age 9
- HPV vaccination rates remain suboptimal compared to other nationally recommended vaccines
- Literature shows that parents of adolescent patients are poorly informed regarding the HPV vaccine
- Studies show that multicomponent education as well as culturally tailored interventions are more favorable to parents of adolescent patients
- Even with slight increases in HPV vaccination rates, knowledge gaps remain apparent among parents of unvaccinated and vaccinated adolescent patients (Lee et al., 2018).

## Methodology

Author

- Survey design with pre- and post-education surveys, and a 2 week follow up telephone call to determine HPV vaccination intention.
- Each participant watched a public service announcement developed by the Boston Department of Public Health regarding HPV and received an HPV vaccine brochure, both with African American actors and images.
- Duration of the study was 6 weeks

# Sample

- Parents of adolescent patients, ages 9-17 years
- Identify as African American or non-Hispanic black
- Adolescent child has not initiated or completed the HPV vaccine series.
- Must be able to read and understand the English Language.

## Setting

 A private family medical practice in Suburban New Jersey

#### Measures

 A modified version of the Carolina HPV Immunization Attitudes and Beliefs Scale (CHIABS), a standardized measure with 1year test-retest reliability and acceptable scale alphas.

### **Analysis**

- Descriptive statistics were used to analyze the data.
- A paired t-test was used to measure differences in means of the CHIABS before and after the study education
- Regression analysis was used to determine the correlation of post education CHIABS means and intent to vaccinate at 2-week follow up
- Chi-square analysis used to compare the gender of the adolescent patient and intent to vaccinate, and insurance held and the intent to vaccinate.
- Level of statistical significance is <0.05 with a confidence interval of 95%.

#### Results

- 16 participants
- Paired samples T-test indicates that there was not a statistically significant difference in pre- and post-survey total scores (sig=.456)
- Survey items which assessed perceived uncertainty and perceived benefits of HPV vaccination yielded statistically significant differences between pre-education and posteducation survey means.
- Regression analysis indicated that there was not a statistically significant association between post-survey CHIABS-modified total scores and intent to vaccinate at follow up (sig=0.235) or perceived benefits post survey scores and intent to vaccinate at follow up (sig=0.086).
- There was not a significant association between adolescent child gender and intent to vaccinate at 2-week follow up (sig= 0.057), and medical insurance type and intent to vaccinate at 2-week follow up (sig= 0.520).

#### Discussion

- Despite parents of adolescent patients receiving formal education with multiple teaching modalities and culturally relative content, there was no significant change in knowledge
- Most parents of adolescent patients reported the intent to vaccinate their adolescent child (75%).
- No parent of an adolescent male patient had the intention of HPV vaccination

## **Implications**

- Parents are not making informed decisions
- Develop educational programs that effectively educate parents of adolescent patients about HPV and the HPV vaccine to yield adequate knowledge
- Need to better understand the rationale for HPV vaccination by Interviewing parents of adolescent patients after their child has completed the HPV vaccine

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