

Impact of Dental vs. Medical Presentation Perspective on Parent Acceptance of the Human Papilloma Virus Vaccination

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INTRODUCTION

The human papilloma virus (HPV) vaccination is a powerful but under-utilized tool in the fight against HPV-related cancers. As with most vaccines, its uptake is primarily dependent on parents accepting the vaccination for their children; however, the HPV vaccination has shown significantly reduced uptake when compared to other childhood vaccinations. This study reports the significant differences in parental acceptance of the HPV vaccination when the vaccination is presented from a medical or a dental perspective in parents of children 7 to 17 years of age.

PURPOSE: To evaluate whether parental acceptance of the HPV vaccine increases when it is presented from a dental perspective in the context of oropharyngeal cancer rather than from the traditional medical perspective.

METHODS

A three-part, 27-question survey based on medical and dental pamphlets presenting the HPV vaccination from their respective perspectives was administered online to parents of children aged 7 to 17 years who requested the survey link via the *Pitt-me* database. Data collection began in April 2020 and ceased in December 2020. Participants who did not complete the survey were excluded from final analysis.

Data Collected in Section One:

- Demographics of parent and child
- Pre-survey HPV knowledge
- Pre-survey HPV attitudes and vaccination status
- Dental provider type and frequency of visits

Data Collected in Section Two:

- Parental vaccination acceptance levels after reading the medical and dental pamphlets
- Assessment of knowledge gained from pamphlet
- Perceived appropriateness of provider discussing HPV vaccination with parents

Data Collected in Section Three:

- Parents' views and intentions concerning the HPV vaccination after reading both pamphlets.
- Whether the medical or dental pamphlet was more influential.
- Evaluation of parental attitudes comparing both pamphlets
- Evaluation of parents' ultimate overall willingness to accept the HPV vaccination for their child.

Significant association was tested for between demographic categories and for differences in parental acceptance between the medical and dental pamphlets using Wilcoxon signed rank test, chi-squared analysis, Fischer's exact test, paired T-test analysis, and descriptive statistics. The level of significance was set at 0.05.

RESULTS

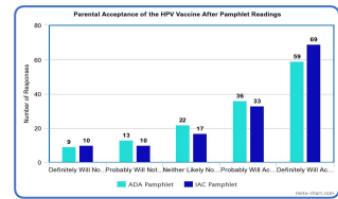
SECTION ONE RESULTS:

- The overall corrected response rate (189 completed of 346 surveys sent) was 62%, and the overall survey completion rate (196 completed surveys from 206 surveys started) was 95%.
- Respondents were overwhelmingly Caucasian (n=176) and female (n=190), and most respondents had completed at least a 2- or 4-year degree or above (n=165). Most parents (n=110) were 36 to 45 years old.
- Almost all parents (n=192) had heard of the HPV vaccination before the survey, and most parents (n=157) answered incorrectly regarding HPV knowledge in part one. Of the 196 parents, only 92 were considering the HPV vaccination for their child, and most (80.3%) believed it was appropriate for their dentist to discuss the vaccination with them for their child.

| CHILD DEMOGRAPHICS | | | | |
|--------------------------|------------|--------------|-------------|-------------|
| AGES | 7-9 years | 10-12 years | 13-15 years | 16-17 years |
| n=196 | 88 | 61 | 30 | 17 |
| CHILD SEX AT BIRTH | | | | |
| SEX | Male | | Female | |
| n=196 | 83 | | 113 | |
| CHILD VACCINATION STATUS | | | | |
| VACCINATION STATUS | Vaccinated | Unvaccinated | | Unsure |
| n=196 | 44 | 142 | | 110 |

SECTION TWO AND THREE RESULTS:

- Parents who reported their child had been vaccinated were directed out of the survey. The 16 missing/undecided answers in sections two and three were excluded from analysis by design.
- Parental acceptance of the HPV vaccination was significantly higher after reading the medical pamphlet than after reading the dental pamphlet ($p=0.035$).
- Increased child age was significantly associated with lower parental acceptance of the HPV vaccination after reading the IAC pamphlet ($p=0.030$).
- Increased parental education was significantly associated with increased parental acceptance of the HPV vaccination after reading the dental pamphlet ($p=0.021$).
- Overall, increased parental acceptance of the HPV vaccine after reading either pamphlet is associated with increased parental education and younger child age.
- Comparison of parental acceptance after reading the dental and medical pamphlets:



CONCLUSIONS

- Parents were significantly more accepting of the HPV vaccination after reading the medical pamphlet versus the dental pamphlet.
- Most parents believe it is appropriate for their child's dentist to discuss the HPV vaccination and were unaware of the connection between HPV and oropharyngeal cancer.