



# Parental Perceptions of HPV and the Pediatric Dentist

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## Introduction and Background

- The current American Academy of Pediatric Dentistry (AAPD) policy is to “...counsel patients, parents, and guardians regarding the HPV vaccination, in accordance with the CDC recommendations, as part of anticipatory guidance for adolescent patients.” (1)
- There is an increasing awareness of the association between human papillomavirus (HPV) and oropharyngeal cancer (OPC) as HPV has been linked to **70%** of OPCs in more recent times (2)
- Rates of HPV related OPC are steadily rising while vaccination rates remain relatively low (2,3)
- Two doses of the HPV vaccine (Gardasil-9) are recommended for children 11-12 years of age; however, the series can be started as young as 9 years (2)
- The vaccine protects against HPV types 6, 11, 16, 18, 31, 33, 45, 52, and 58; 16 and 18 are responsible for oral cancers (2)
- Parents may be receptive to learning about HPV and the vaccine from oral health care providers (4)
- No current studies look at the pediatric dentist’s role – pediatric dentists have the perfect opportunity to spread awareness and educate families due to their patient population

## Purpose

To investigate parental perceptions of the pediatric dentist’s role in human papillomavirus (HPV) education, vaccination recommendation and administration in a dental setting

## Materials and Methods

- A 24-item survey was administered to English-speaking parents of patients at the University of Iowa, College of Dentistry, Pediatric Dental Clinic
  - Survey instrument available upon request*
  - Topics addressed: basic demographics, parental knowledge and beliefs about HPV and OPC, parental perception of the pediatric dentist’s role in education and vaccination administration
- 350 surveys were distributed from August-October 2021
- Statistical bivariate and descriptive analysis was completed
  - Bivariate analysis compared specific demographic information (ethnicity, education level, insurance type, and age of oldest child at appointment) with questions of interest
  - Questions of interest were also compared with each other

## Acknowledgements

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## Results

Table 1. Demographic Information (N = 284)

Relationship to Child	
Mother	52 (18.9%)
Father	223 (81.1%)
Race/Ethnicity	
Multiracial	11 (4%)
White	184 (66.9%)
Black/African American	38 (13.8%)
Asian	15 (5.45%)
Native American/Indigenous	4 (1.45%)
Pacific Islander	4 (1.45%)
Latino/a/x	4 (1.45%)
Hispanic	27 (9.82%)
Other	1 (0.36%)
Prefer not to answer	3 (1.09%)
Marital Status	
Married	152 (55.7%)
Single*	121 (44.3%)
Employment Status of Respondent	
Full-Time Employee	145 (52.9%)
Part-Time Employee	47 (17.2%)
Homemaker	35 (12.8%)
Medical Leave	2 (0.73%)
Retired	1 (0.36%)
Unemployed	39 (14.2%)
Full-Time Student	2 (2.55%)
Part-Time Student	5 (1.82%)
Education	
High School or less	153 (59.8%)
Some college or more	103 (40.2%)
Insurance (of the Child)	
Medicaid**	178 (71.5%)
No Insurance	3 (1.20%)
Private Insurance	68 (27.3%)

\*includes separated, divorced, single, live with significant other, widowed

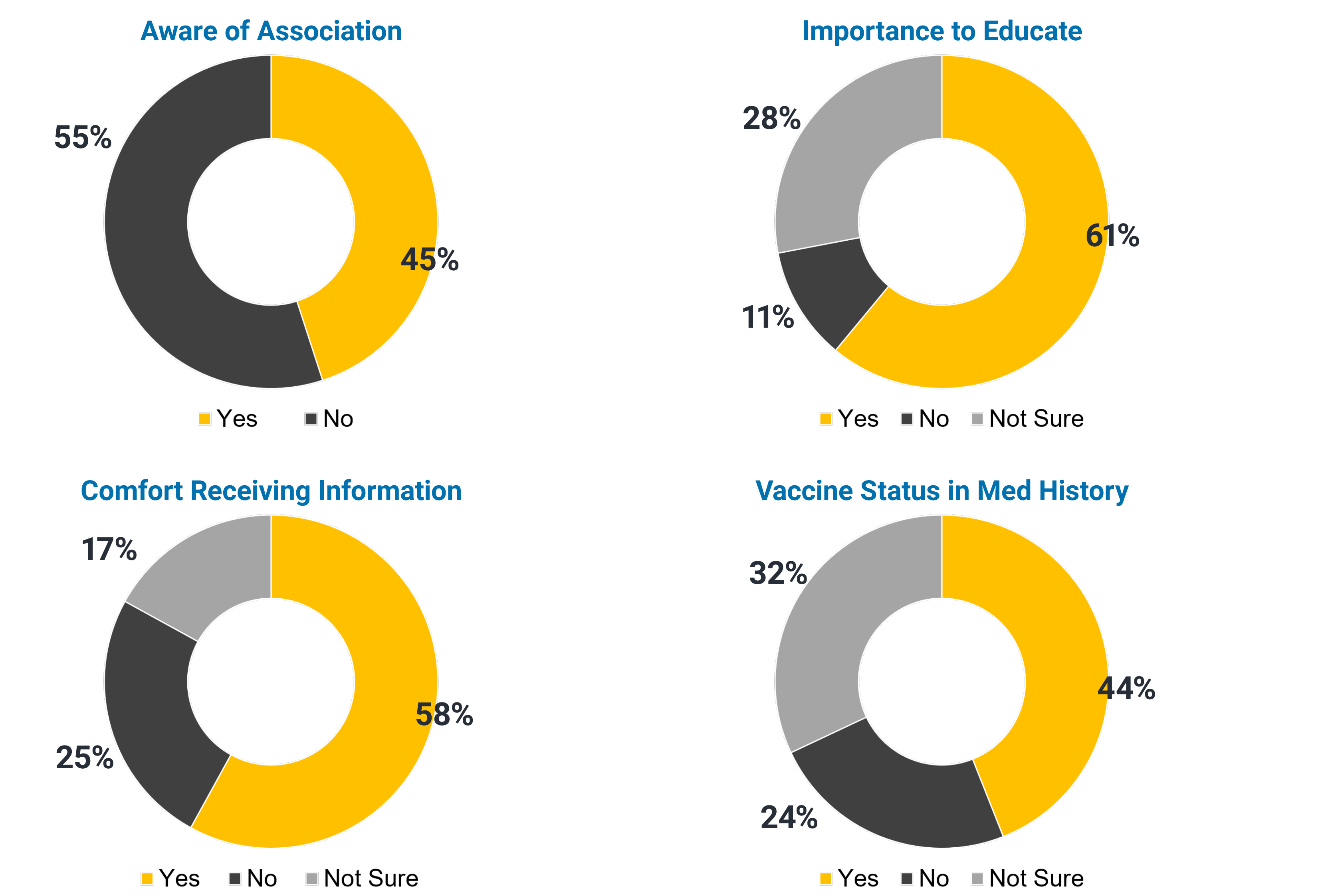
\*\*includes Medicaid, state children’s health insurance (SHCIP)

According to the results, significant associations noted in our bivariate analysis included

- Parents with some college education are... ( $P<0.05$ )
  - More willing to receive vaccine information
  - Okay with pediatric dentists providing HPV vaccination information
  - Agreeable to including HPV vaccination status in dental-medical history
- Those with private insurance are... ( $P<0.05$ )
  - Comfortable with a pediatric dentist giving the HPV vaccine
  - Agreeable to including HPV vaccination status in dental-medical history
- Parents having HPV vaccine is significantly related with the awareness of the association between HPV and oral cancer ( $P<0.01$ )

Table 2. HPV Related Questions (N = 284)

Do you know what human papillomavirus (HPV) is?	
No	50 (19.5%)
Yes	207 (80.5%)
Are you aware that there is a vaccination available for HPV prevention?	
No	39 (15.2%)
Yes	218 (84.8%)
Have you had the HPV vaccine?	
No	125 (49.0%)
Not Sure	41 (16.1%)
Yes	89 (34.9%)
Have any of your children been vaccinated for HPV?	
No	142 (55.7%)
Not Sure	52 (20.4%)
Yes	61 (23.9%)
If your child has been vaccinated for HPV, has your child completed the series of vaccinations?	
No	146 (59.3%)
Not Sure	53 (21.5%)
Yes	47 (19.1%)
Are you aware of the association between HPV and oral cancer?	
No	142 (55.5%)
Yes	114 (44.5%)
Do you feel it is important for a pediatric dentist to educate families about HPV vaccinations?	
No	27 (10.5%)
Not Sure	72 (28%)
Yes	158 (61.5%)
Would you be comfortable receiving information about HPV and oral cancer from a pediatric dentist?	
No	63 (24.4%)
Not Sure	45 (17.4%)
Yes	158 (61.5%)
Would you be comfortable with a pediatric dentist giving the vaccination, if that was an option?	
No	103 (40.4%)
Not Sure	77 (30.2%)
Yes	75 (29.4%)
Would it be appropriate for HPV vaccination status to be included in dental medical history?	
No	61 (23.9%)
Not Sure	83 (32.5%)
Yes	111 (43.5%)



## Conclusions

- Parental education level and insurance status are important in acceptance of HPV vaccination and comfort with receiving information from a pediatric dentist
- Parental vaccination status contributes to knowledge about HPV and OPC
- Many parents are unaware of the association between HPV and OPC
- The majority of parents feel it is important for pediatric dentists to educate families about HPV vaccinations and are comfortable receiving information from a pediatric dentist.

## Future Direction

- Continued research is needed to allow pediatric dentists to successfully address this topic with our patient population
- The pediatric dental office may be an appropriate setting for continued discussions about HPV and OPC as pediatric dentists can play a key role in HPV vaccination recommendation and potential administration

## References

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