

Introduction

High-risk human papillomavirus (HPV) is a known cause of oropharyngeal and cervical cancers. The incidence of HPV-related oropharyngeal cancers has increased over the past few decades and now exceeds that of cervical cancer. Though HPV vaccination is widely recommended for cervical cancer prevention, there are no formal vaccination guidelines for healthcare workers who may be potentially exposed to aerosolized HPV in surgical smoke. This study examines HPV vaccination status, perceived occupational exposure and attitudes toward vaccination among residents in the otolaryngology (ENT) and obstetrics and gynecology (ObGyn) departments.

Methods

A cross-sectional study was conducted via an online survey distributed to 34 ENT and ObGyn residents at the University of Florida. Respondents provided information on their program, age, vaccination status, perception of occupational HPV risk, barriers to vaccination and views on occupational exposures of HPV and HPV-related education. Descriptive statistics and Pearson's Chi-squared tests were used to analyze the data.

Results

Age		
25-30	14	
31-35	3	
Over 35	1	
Sex		
Male	10	
Female	8	
Specialty		
ENT	9	
ObGyn	9	

Table 1. Demographics and Characteristics of Survey Respondents

Sex	Fully Vaccinated		p value
	Yes	No	
Female	8	0	0.001051
Male	2	8	

Table 2. Survey responses by specialty with Pearson's Chi-square comparison of responses.

- There was a 53% response rate.
- 56% of respondents reported completing the full HPV vaccine series.
- 100% of female residents were vaccinated, compared to 22% of male residents.
 - This resulted in a significant difference.
- 61% believed that they were frequently exposed to HPV in their line of work.
- 89% agreed that more education on HPV exposure should be provided.

At what stage of life did you receive the HPV vaccine?		ENT	ObGyn	p value
During childhood (before age 18)	During childhood (before age 18)	3	4	0.76674
	During adulthood (age 18 or older)	3	3	
	I have not received the HPV vaccine	2	2	
	Not sure	1	0	

How often do you believe you are at risk of HPV exposure in your job?				
Very frequently	Very frequently	1	3	0.53421
	Frequently	4	3	
	Occasionally	3	1	
	Rarely	1	1	
	Never	0	1	

Do you think HPV poses a significant occupational risk for your specialty?				
Yes	Yes	4	6	0.165299
	No	2	3	
	Not sure	3	0	

How confident are you that the HPV vaccine can reduce occupational HPV risk?				
Very confident	Very confident	2	7	0.10856
	Neutral	1	0	
	Somewhat confident	5	2	
	Not very confident	1	0	

Table 3. Vaccination status by self-reported sex

Conclusion

Despite known exposure risks, HPV vaccination rates remain low among male residents. Residents reported variable confidence in vaccine protection and identified gaps in education.

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