Poster # 7

Assessment of Emergency Department Patients' Interest in Human Papillomavirus Vaccination

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Introduction

Emergency departments (EDs) provide ready access to underserved groups often not encountered elsewhere.

Human papillomavirus (HPV) vaccination is a compelling cancer prevention initiative,[1] but uptake nationally is inadequate:

- 47% of young adults 18-26
- 16% of adults aged 27-45

Even a single dose of HPV vaccination can be efficacious.

Our objective was to estimate the need for and perceived acceptability of HPV vaccination during an ED encounter.

Methods

Design: Cross-sectional pilot survey study

Sample: Randomly approached, consenting patients aged 18-64 between May and August 2024

- Midwestern urban academic ED and an affiliated urban community ED
- English speaking, capacity to participate, not a prisoner

Measurement: Structured survey administered by trained staff

- Self-reported demographics and HPV-related health history
- 13-item HPV knowledge questionnaire [2]
- Willingness to be vaccinated for HPV, if it had been available during the ED encounter in which they were enrolled

Outcomes:

- Primary: proportion eligible and willing to undergo ED HPV vaccination if it had been available
- Secondary: sociodemographics, HPV vaccination history, HPV knowledge

Results

Table 1: Participant Characteristics

	Overall N=65	Age 18 - 26 N=12	Age 27- 45 N= 22	Age 46 - 64 N=31
Race				
White	34 (52.3%)	5 (41.7%)	10 (45.5%)	19 (61.3%)
Black	26 (40.0%)	4 (33.3%)	12 (54.6%)	10 (32.3%)
Other	5 (7.7%)	3 (25.0%)	0 (0.0%)	2 (6.5%)
Sex at Birth				
Male	22 (33.9%)	4 (33.3%)	8 (36.4%)	10 (32.3%)
Insurance				
None (self-pay)	5 (7.7%)	1 (8.3%)	1 (4.6%)	3 (9.7%)
Medicaid	22 (33.9%)	5 (41.7%)	9 (40.9%)	8 (25.8%)
Medicare	5 (7.7%)	0 (0.0%)	0 (0.0%)	5 (16.1%)
Private	31 (47.7%)	6 (50.0%)	10 (45.5%)	15 (48.4%)
Other	2 (3.1%)	0 (0.0%)	2 (9.1%)	0 (0.0%)
Education				
Some High school	5 (7.7%)	0 (0.0%)	4 (18.2%)	1 (3.2%)
High School or GED *	25 (38.5%)	6 (50.0%)	10 (45.5%)	9 (29.0%)
Post secondary education	35 (53.8%)	6 (50.0%)	8 (36.4%)	21 (67.8%)
Has a usual place of care	53 (81.4%)	8 (66.7%)	18 (81.8%)	27 (87.1%)
PCP or specialty care *	38 (58.5%)	6 (50.0%)	11 (50.0%)	21 (67.8%)
ED or Urgent care *	10 (15.4%)	2 (16.7%)	3 (13.4%)	5 (16.1%)
Other/multiple locations	17 (26.2%)	4 (33.3%)	8 (36.4%)	5 (16.1%)

*GED: General Educational Development Test; PCP: primary care physician; ED: emergency department

Table 2: HPV Vaccination History, Acceptability, and Knowledge

	Overall N=65	Age 18 - 26 N=12	Age 27 - 45 N= 22	Age 46 - 64 N=31
Prior HPV vaccination	14 (21.5%)	8 (66.7%)	6 (27.3%)	0 (0.0%)
Documented HPV vaccination	4 (6.2%)	0 (0.0%)	4 (18.2%)	0 (0.0%)
If eligible, willing to receive ED HPV vaccine *	N=51 37 (72.5%)	N=4 3 (75.0%)	N=18 11 (68.8%)	N=31 23 (74.2%)
Number of 13 HPV knowledge questions correct (mean, SD)	8.14 (2.1)	7.92 (1.9)	8.05 (2.0)	8.29 (2.2)

* Eligibility defined as not having previously received HPV vaccine.

Discussion

Conclusions

The majority (58.9%) of surveyed HPV vaccine-eligible patients in the ED have not received recommended HPV vaccination.

Most (72.5%) vaccine-eligible patients were willing to begin HPV vaccination while in the ED, despite limited HPV knowledge.

Documentation of HPV vaccination status in the ED electronic medical record is unreliable.

Implications

HPV should be considered among the range of the ED-based primary prevention interventions.

Future investigations should focus on feasibility, operational optimization, and expected effectiveness of ED HPV vaccination.

Limitations

- Only participants consenting to research
- Small sample size
- Self-report data and institution-specific EMR review (vs state vaccine database)

References and Disclosures

1. Rincon, N. L. et al. (2024). Racial and ethnic disparities in human papillomavirus (HPV) vaccine uptake among United States adults, aged 27–45 years. *Human Vaccines & Immunotherapeutics*, *20*(1). https://doi.org/10.1080/21645515.2024.2313249

2. Garg A. et al. The Development and Psychometric Evaluation of the Mid-adult Human Papillomavirus Vaccine Knowledge Scale in the United States. Sex Transm Dis. 2022 Jun 1;49(6):423-428. doi: 10.1097/OLQ.0000000000001615. Epub 2022 Feb 8. PMID: 35608097.

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