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HPV and Cancer Prevention: It's Not Just About the Warts

Matthew Dier

University of Vermont

Elizabeth Hahn

University of Vermont

Rachel Madhur

University of Vermont

Francis Mtuke

University of Vermont

Carley Mulligan

University of Vermont

See next page for additional authors

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Recommended Citation

Dier, Matthew; Hahn, Elizabeth; Madhur, Rachel; Mtuke, Francis; Mulligan, Carley; Schlusel, Lauren; Valentine, Kristina; Couzens, Bill; and Carney, Jan, "HPV and Cancer Prevention: It's Not Just About the Warts" (2020). *Public Health Projects, 2008-present*. 291.

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Authors

Matthew Dier, Elizabeth Hahn, Rachel Madhur, Francis Mtuke, Carley Mulligan, Lauren Schlusssel, Kristina Valentine, Bill Couzens, and Jan Carney



HPV and Cancer Prevention: It's Not Just About the Warts

M. Dier, L. Hahn, R. Madhur, F. Mtuke, C. Mulligan, L. Schluskel, K. Valentine, W. Couzens, J. Carney
Larner College of Medicine and Next Generation Choices

Introduction

- Human papillomavirus (HPV) infections cause an estimated 34,800 cancers in the United States annually, including cancers of the cervix, vagina, vulva, penis, anus, rectum, and oropharynx.¹
- Despite the HPV vaccine's efficacy in preventing the majority of HPV-related cancers, vaccination of U.S. adolescents against HPV remains low compared to that of other transmittable diseases.²
- Underlying this low vaccination rate is a lack of accurate information regarding the virus, its consequences, and its preventability. For example, past studies have shown that many people are unaware that HPV can cause cancer,³ that these cancers affect both males and females, and that the vaccine can be given to both females and males.^{4,5}
- There is evidence that some healthcare professionals may be unaware of the connection between HPV and noncervical cancers.^{6,7}

Objectives

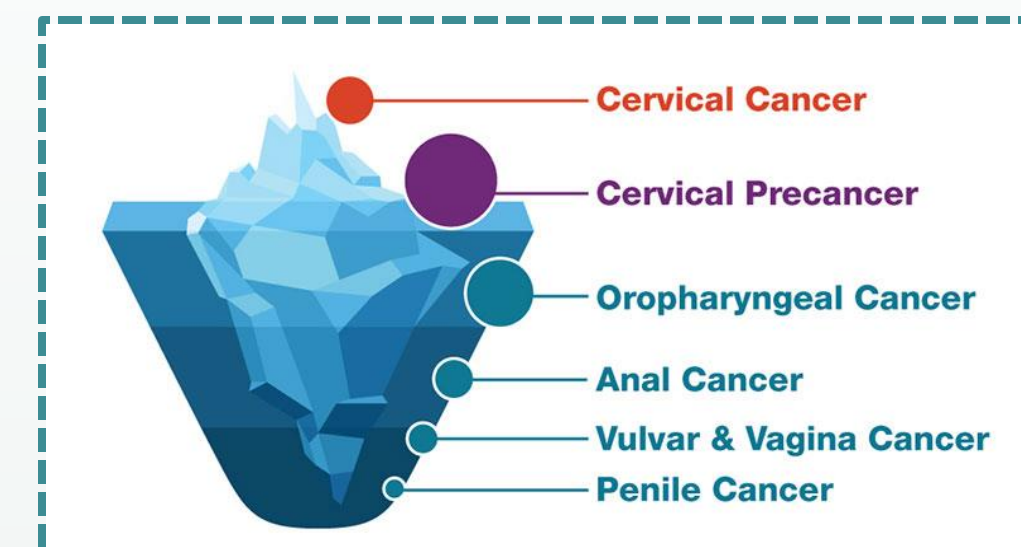
- Assess the understanding of HPV in a group of people likely to be well-informed about cancer risks.
- Determine which knowledge gaps persist in this group to identify points for improvement in initiatives seeking to improve education and awareness about the benefits of the HPV vaccine.

Methods

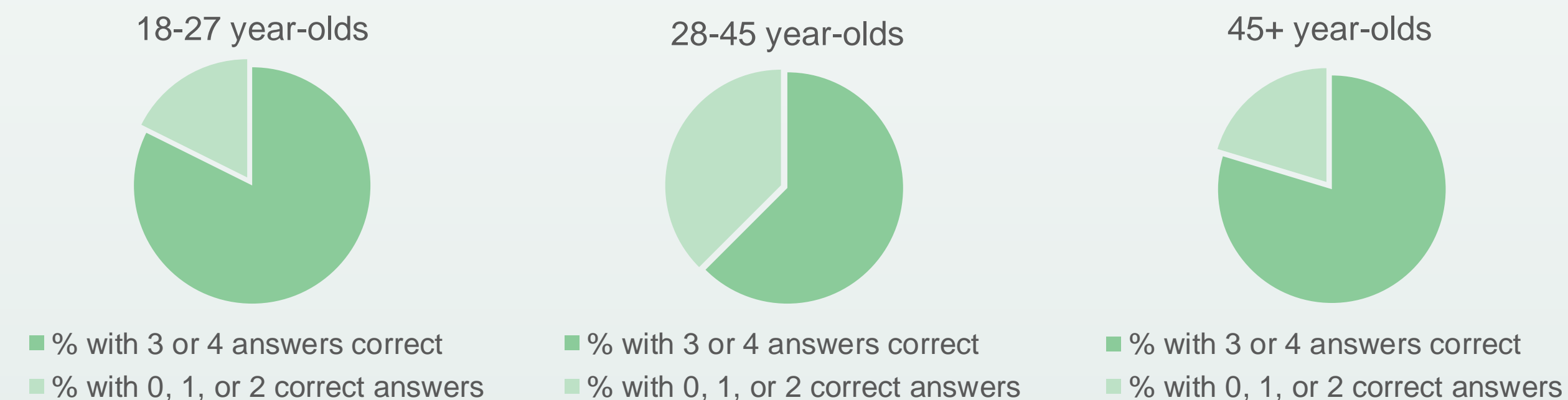
- A survey was generated to assess understanding of HPV and its vaccine among people thought to be more informed about cancer than the general population - the users of the website Less Cancer, an organization devoted to reducing preventable cancer risk factors.
- The survey consisted of a series of statements about HPV that participants were asked to designate as true or false. Participant age, gender, and residence were also collected.
- The survey was designed on Lime Survey and then promoted by Less Cancer on several social media outlets. Data collection was closed when the goal of 200 responses was reached.

Results

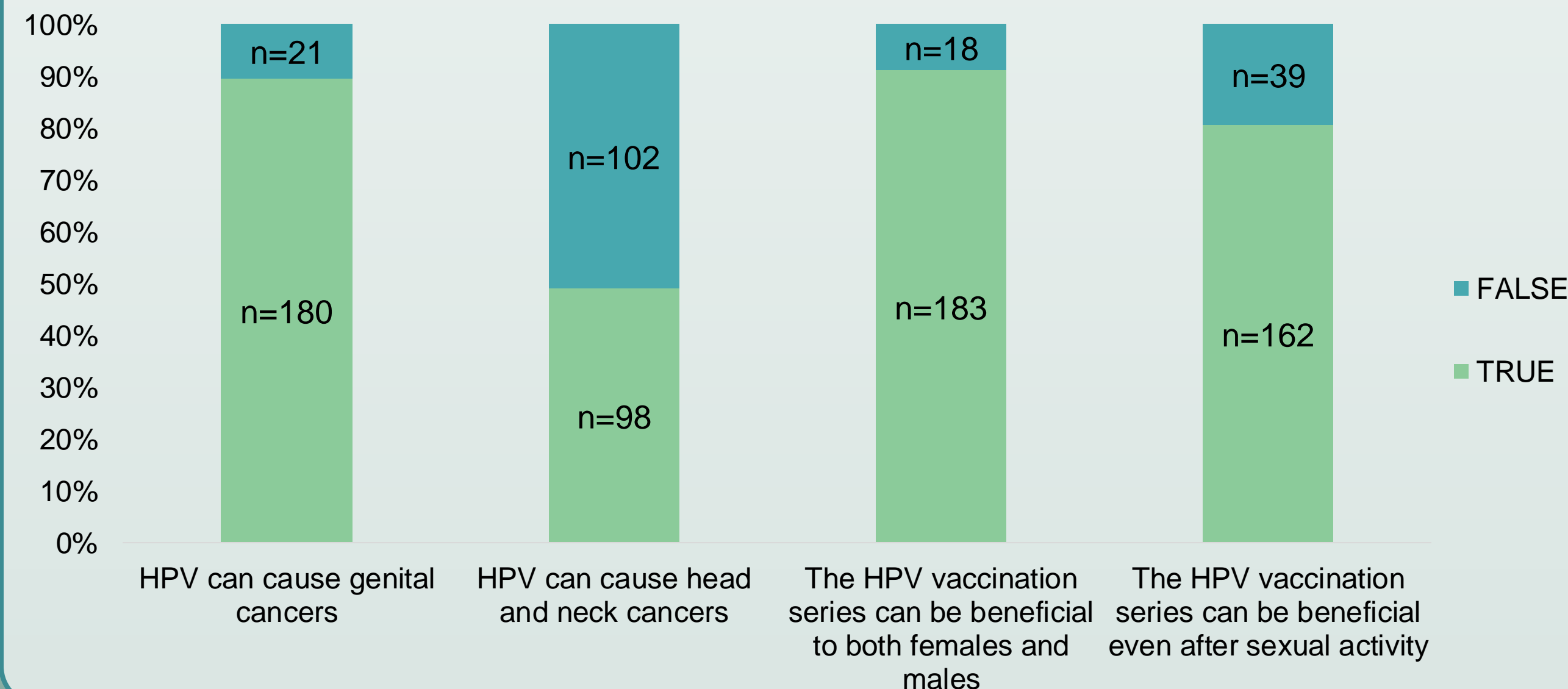
- 200 respondents
- 198 provided gender: 71% female, 26.5% male, 3.5% nonbinary
- 198 provided age: 25.8% 18-27, 12% 28-45, 62% 46+
- 83.5% within U.S., 16.5% international
- 154 provided zip code: 22% from Northeast, 24.6% from Midwest, 40% from South, 14.2% from West
- The percentages of correct answers for each question were significantly different from one another. (3,N=201)=183.481, p=.0029.
- Age, gender, and location were found to have no association with respondents correctly answering the survey questions.



Percent Correct Among Age Groups



True/False Responses to HPV Survey



Discussion

- There are widespread knowledge gaps regarding HPV and oropharyngeal cancer across all demographic groups surveyed.
- Current literature shows that while cervical cancer rates have plateaued, the rate of oropharyngeal cancer has increased – calling attention to the misinformation and stigma associated with the virus.
- The vaccine has been shown to prevent over 90% of cancers caused by HPV -including oropharyngeal.² However, the CDC's 2018 National Immunization Survey indicates that only 51.1% of adolescents aged 13-17 completed their HPV vaccination series.⁸
- Our data suggests that regardless of age, location, or gender, misconceptions surrounding HPV and its vaccines persist and may interfere with immunization rates.

Recommendations

- The knowledge gaps identified through this study should be addressed through evidence-based educational materials provided to the public and physicians.
- We anticipate that restructuring the dialogue around HPV vaccinations has the potential to decrease the burden of HPV-associated cancers across the United States.

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