



Impact of COVID-19 Pandemic and Vaccine Perceptions on HPV Vaccine Hesitancy



Christina Ward MD, MS^{1,2}, Natalie Schelbar BA¹, Elaine Phillips BS¹, Sarah Acevedo, MD¹, Michael Herr PhD³, Rosemary Stocks, MD, PhD², Allen Greiner MD, MPH¹, Erin Corriveau MD, MPH¹
University of Kansas Dept. of Family Medicine & Community Health¹, University of Tennessee Health Science Center Dept. of Otolaryngology-Head & Neck Surgery²,
University of Alabama Dept. of Cell, Developmental, & Integrative Biology³

Introduction

- COVID-19 pandemic re-ignited global discussion of vaccine safety and efficacy
- Vaccine hesitancy = reluctance or refusal to vaccinate despite availability of vaccines¹
- Reduced HPV coverage data in 2020, with all-time low of 23% in April 2020²
- Studies have not addressed potential internal factors that may contribute to reduced HPV vaccination rates

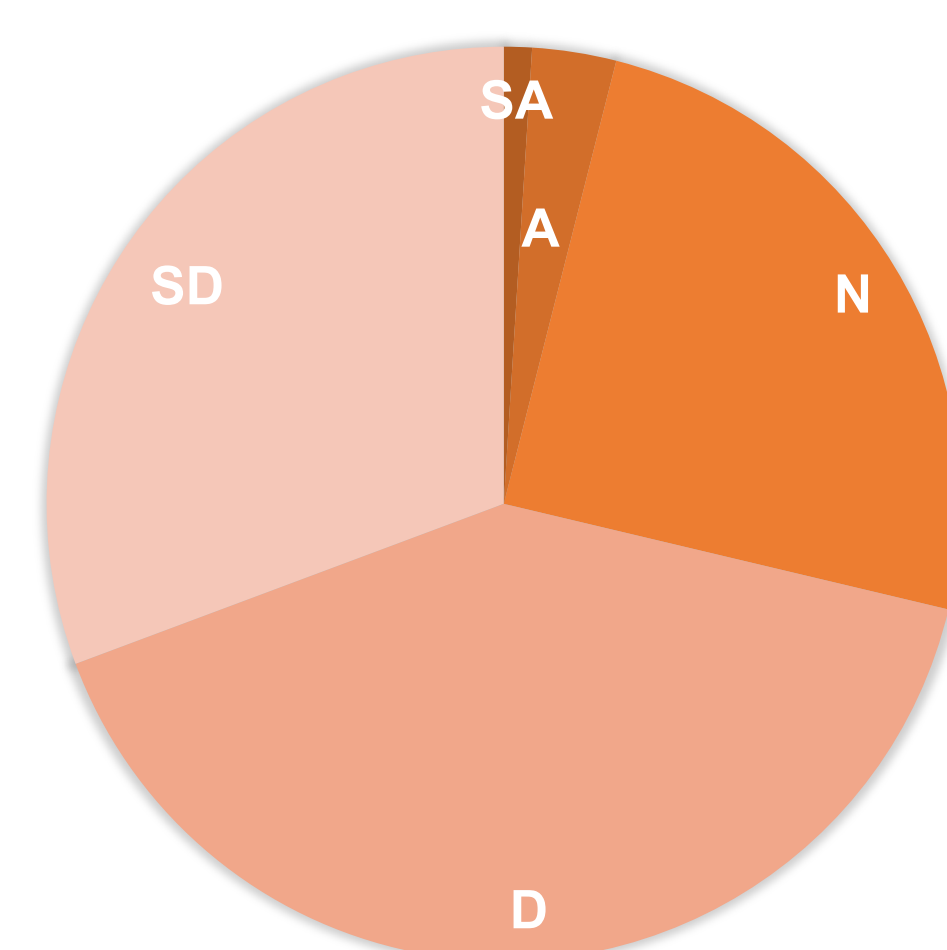
A: “I think there has been a push by the drug industry to push the HPV vaccine. I don't believe it to be a real health threat.”

Methods

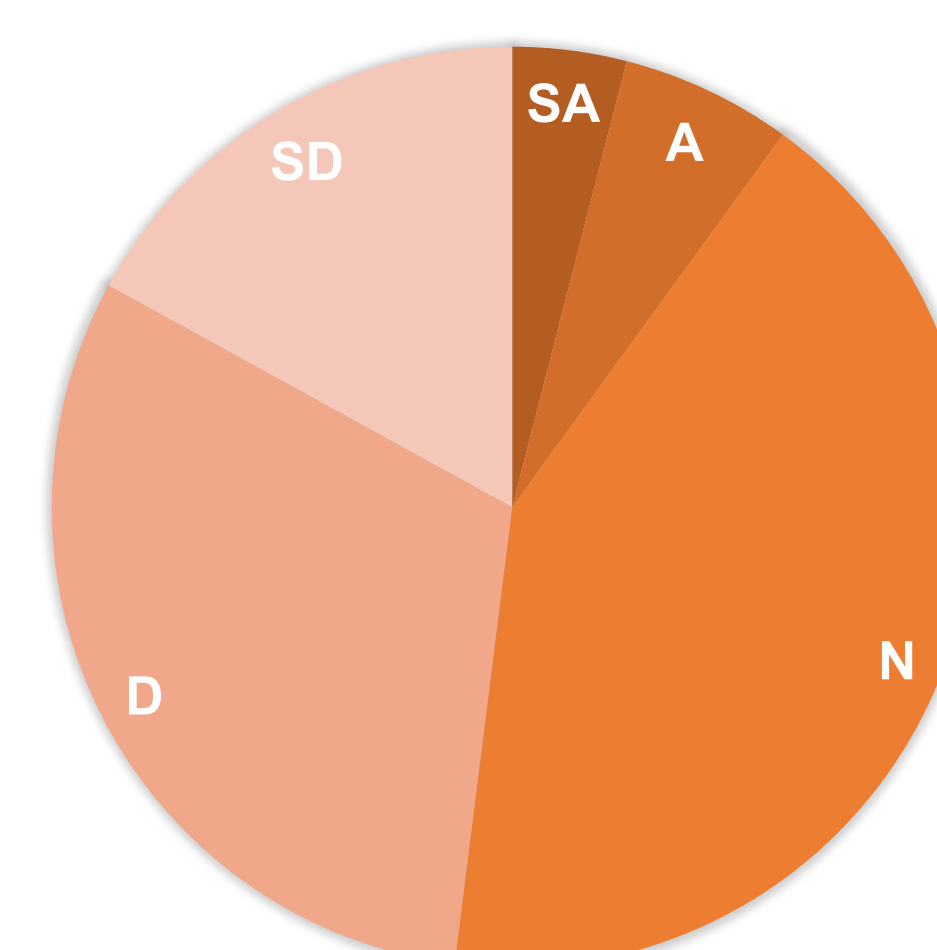
- Cross-sectional study of Wyandotte County, KS residents aged 30-58 years old, concurrently parent/guardian of a child aged 13-17, n=101
- Surveys: demographics, HPV and COVID vaccine rates and perceptions, social determinants of health (SDoH)
- Descriptive statistics, contingency statistics, chi-squared analyses

Results

#1: There was minimal change in parents' perceptions of the HPV vaccine due to the COVID-19 pandemic and vaccine.



Q: My opinion about the HPV vaccine has changed because of events in the COVID-19 pandemic



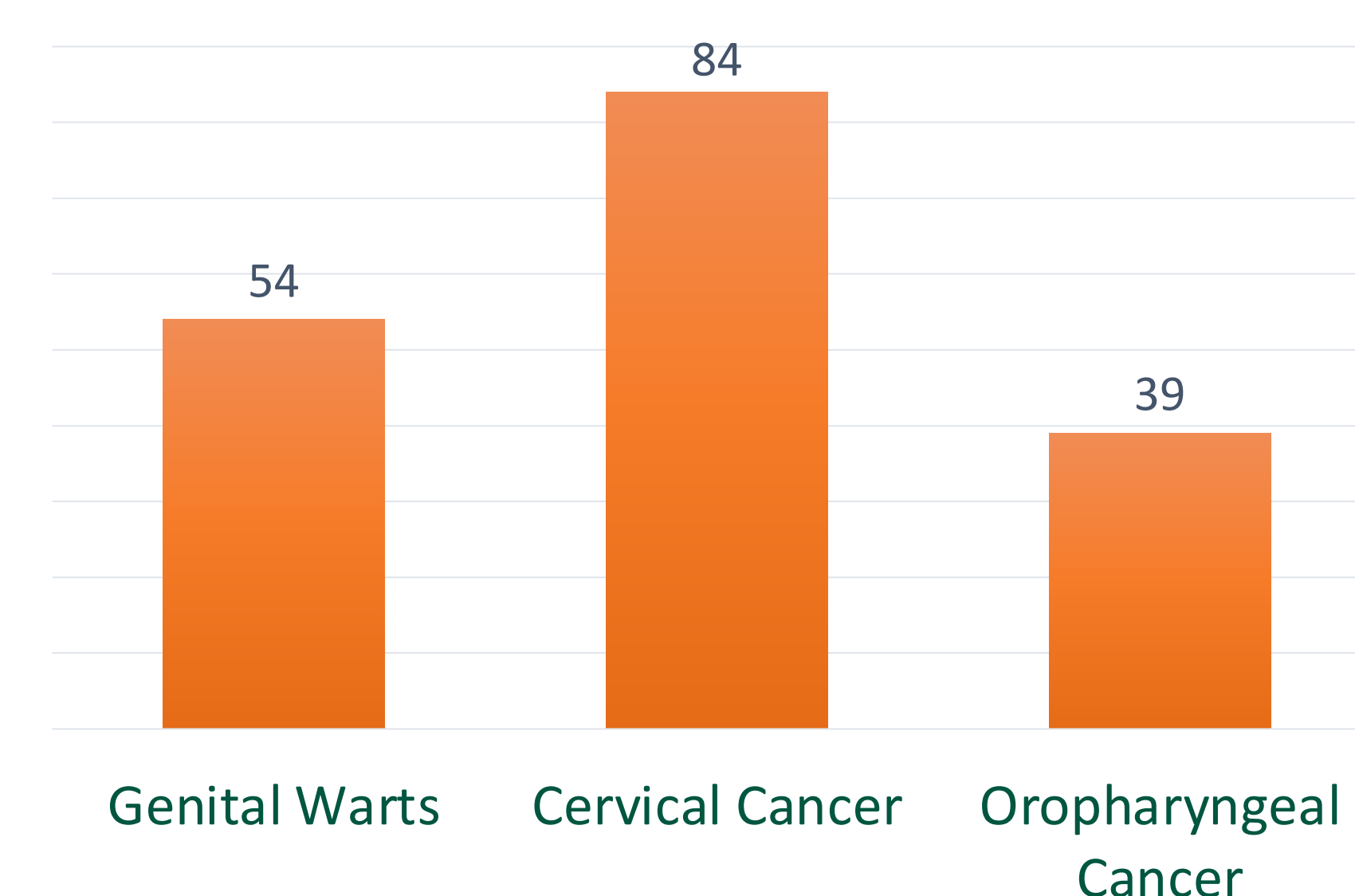
Q: The COVID-19 pandemic has made me more likely to vaccinate my child against HPV.

#2: Significantly more individuals started and did not finish the HPV vaccine series compared to the COVID-19 vaccine series (Fisher's p=0.0004).

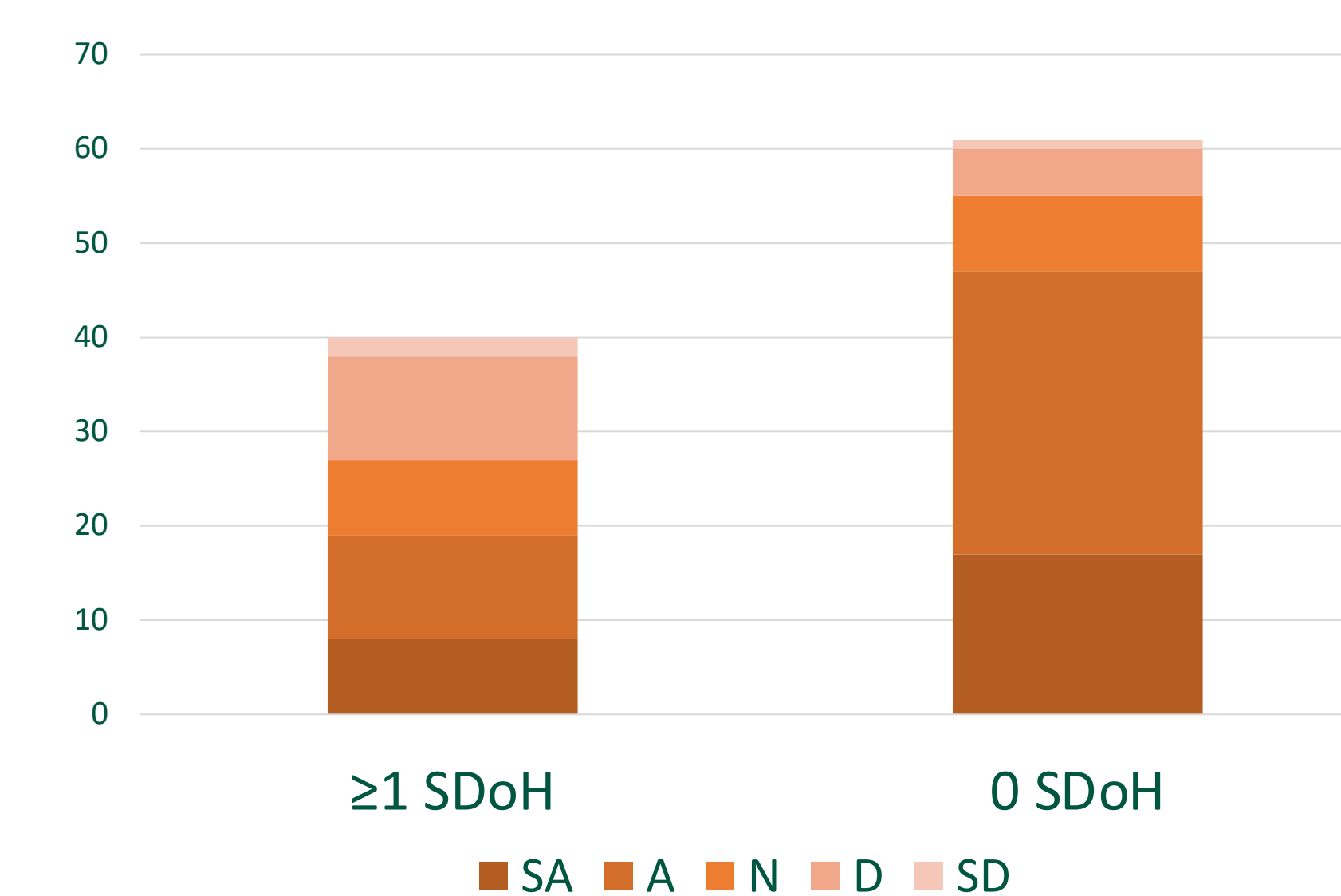
Vaccination Status	HPV	COVID-19
Incomplete*	33	14
Complete	57	87

*Including those who started but did not complete the vaccine series

#3: Fewer parents are aware of the link between HPV and oropharyngeal cancer compared to genital warts and cervical cancer.



#4: Individuals who answered 'yes' to at least one SDoH screening question felt safer taking their child(ren) to healthcare settings during the COVID-19 pandemic.



Discussion

- Intrinsic factors are not likely the cause of decreased HPV vaccination rates in Wyandotte county, KS
- Parents may feel more strongly about COVID-19 vaccination given perceived acuity of pandemic
- Otolaryngologists are in unique position to assist primary care colleagues in HPV vaccine counselling.

A: “The conspiracy theories around COVID-19 and vaccines have caused me to be MORE trusting of vaccines and healthcare providers.”

Conclusions

- Minimal to no change in parents' perception of the HPV vaccine
- Decreased rates of vaccination in this population likely due to extrinsic factors
- Opportunities for public health education on the link between HPV and oropharyngeal cancers exist

References

1. Ten threats to global health in 2019. Accessed March 22, 2022. <https://www.who.int/news-room/spotlight/ten-threats-to-global-health-in-2019>
2. Daniels V, Saxena K, Roberts C, et al. Impact of reduced human papillomavirus vaccination coverage rates due to COVID-19 in the United States: A model based analysis. Vaccine. 2021;39(20):2731-2735.