

providers to take advantage of any opportunities to vaccinate, both acute and preventive care visits, to ensure adolescents receive the vaccines they need and reduce these MOs going forward.

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## RESEARCH POSTER PRESENTATION II: HEALTH EQUITY/PRIMARY CARE

152.

### FACTORS IMPACTING HPV VACCINATION RATES AMONG MINORITY ADOLESCENTS AND YOUNG ADULTS (AYA)

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**Purpose:** In 2018, there were 43 million Human papillomavirus (HPV) infections, majority were among adolescent and young adults (AYA). To decrease risk of HPV, individuals aged 9-26 years old should get vaccinated. However, vaccination rates have remained stagnant in the last several years. There are racial/ethnic and gender disparities in knowledge, awareness, and overall vaccine uptake. Cost of the vaccine is a barrier to vaccine uptake among uninsured AYA. The purpose of this is to examine factors impacting HPV vaccination uptake and completion rates among AYA utilizing a clinic-system located in Southeast Texas.

**Methods:** The setting was a nine-clinic system that, through state funds, provides free preventive primary and reproductive health services to >10,000 Medicaid, low-income, and uninsured AYA ages 13 – 24 years old annually. Services include free immunizations including the HPV vaccine. Majority (97.9%) of patients fall below the 250% Federal Poverty Level threshold and 96% belong to racial/ethnic minority groups. We retrospectively collected demographic information, immunization status, and billed services data among clinic AYAs from March 2018 to December 2020. We set statistical significance at  $p < 0.05$ .

**Results:** A total of 19,045 AYAs were seen between March 2018 and December 2020 with 2,258 HPV vaccines administered and 3,119 having completed their HPV vaccination series. There were statistically significant differences in HPV vaccine uptake between females and males (6.7% vs. 3.2%, respectively), minors and adults (6.9% vs. 3.1%, respectively), and between school-based and community-based clinic locations (7.8% vs. 2.1%, respectively). Around 49% of AYAs who received an HPV vaccine also received additional vaccines during their visit versus 51% who only got the HPV vaccine. Additionally, those who had any sexually transmitted infection screening during the visit had a lower HPV administration rate than those who did not have an STI screening (2.3% vs. 5.6%, respectively). A logistical regression model found age, income, sex, clinic location type and having additional vaccines given during the visit were significantly correlated with receiving an HPV vaccine ( $R^2=0.28$ ). There were statistically significant differences in series completion between females and males (17.7% vs. 12.7%, respectively), minors and adults (19.3% vs. 15.3%), and clinic location type (27.0% vs. 10.9%). A logistical regression model found age, income, sex, and clinic location type were significantly correlated with series completion ( $R^2=0.06$ ). However, both logistical

regression models had negligible to weak correlation meaning there are additional factors impacting HPV vaccination uptake and series completion.

**Conclusions:** Clinic HPV completion rates were lower than state and national averages. Some barriers may be the lack of vaccine records for AYAs that access primary care elsewhere, and health seeking behavior specifically for sexual health. The findings support policies such as removing cost barriers, and creative strategies including gender-neutral and school-based sexual health messaging that includes HPV vaccine promotion as it may provide a critical time window for AYA to get vaccinated earlier. Targeting AYA who only utilize reproductive health care may be another tactic to reach unvaccinated AYA. Future studies should explore other factors such as systems-related factors impacting HPV vaccination uptake and series completion.

**Sources of Support:** NA.

## RESEARCH POSTER PRESENTATION II: COVID/ VACCINES

153.

### AYA SUBSPECIALTY PATIENT AND PARENT VIEWS ON COVID-19 VACCINATION

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**Purpose:** Adolescents/young adults (AYA) with hematologic and oncologic (heme-onc) conditions are important targets for vaccine outreach because they are at increased risk for complications from COVID-19. AYA patients may also need additional support, as they are transitioning from parent to independent vaccine decision-making. AYA with sickle cell disease (SCD) are of particular concern because a high proportion are African American and experience structural racism in addition to their illness. Our objective was to examine AYA and parent attitudes regarding the COVID-19 vaccine among heme-onc populations.

**Methods:** As part of a larger IRB-approved study, we recruited vaccine decision-makers in pediatric SCD and oncology survivor clinics, including parents of adolescents under 18 years ( $n=35$ ), AYA patients 18-21 years old ( $n=21$ ), and parents of AYA patients 18-21 years old ( $n=14$ ). After informed consent, participants completed a demographic survey and a semi-structured interview regarding their vaccine decision-making process. Example questions included "What do you see as the benefits of the COVID-19 vaccine?" and "What are your concerns about the COVID-19 vaccine?". Saturation was reached. Interviews were audio recorded, transcribed, and analyzed using thematic analysis. Codes were developed from the literature and early interviews. Examples included "attitudes against vaccine," "medical mistrust," "hesitancy," "vaccine side effects," and "vaccine interactions with disease process." Fisher exact statistical tests were performed to analyze quantitative data.

**Results:** In SCD clinic, we recruited 31 index patients (mean age:  $15.1 \pm 3.5$  years; 30 African American and 1 Other or Mixed), yielding 11 AYA and 26 parent interviews. In survivor clinic, we recruited 26 index patients (mean age:  $16.0 \pm 3.4$  years; 20 White, 2 Hispanic or Latinx; 2 Other or Mixed, 1 African American, and 1 Asian), yielding 10 AYA and 23 parent interviews. Out of the total index patients, 8 had already received the vaccine, 13 were planning to receive it, 27

were considering it, and 9 had declined it. There was no clear relationship between patients' diagnosis (SCD or cancer) and their vaccine decisions nor between the index patient's age (under or over 18) and their vaccine decisions. A high proportion of participants saw benefits to vaccination, such as lowering personal risk, community benefits of preventing the spread of COVID-19, and a possible return to "normal." However, many AYA and parent participants also had concerns toward the vaccine, including concerns about short-term side effects and the potential for unknown, long-term effects. Concerns were also voiced about how rapidly the vaccine was developed and misconceptions about the vaccine were common, namely the vaccine causing infertility or increasing one's susceptibility to contracting COVID-19. Medical mistrust toward either the vaccine or providers was explicitly stated by several participants, the majority of whom were from minoritized groups.

**Conclusions:** COVID-19 vaccines have the potential to protect medically and socially vulnerable AYA, however patient and parent concerns, misconceptions, and mistrust are still prevalent. These data provide insights into the design and implementation of vaccine counseling interviews for AYA subspecialty patients and families.

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## RESEARCH POSTER PRESENTATION II: COVID

154.

### ATTITUDES OF PARENTS AND TEENS REGARDING MITIGATION STRATEGIES AT THREE TIME POINTS DURING THE COVID-19 PANDEMIC

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**Purpose:** The Unity® Consortium surveyed adolescents and parents of adolescents across three time points, or "waves", over 10 months during the pandemic to assess participants' attitudes and beliefs regarding COVID-19 mitigation guidelines.

**Methods:** A third-party market research company conducted 15-minute, online surveys of teens ages 13-18 and parents/guardians of teens ages 13-18 from nationally representative panels. The surveys were conducted in three waves: 8/2020, 2/2021, and 6/2021. Waves 1, 2, and 3 included 300 teens each and 593/531/500 parents, respectively. Experiences with COVID-19 and demographic variables were collected. The primary outcome variables included the perceived importance of strictly following mask-wearing/social distancing guidelines and the perceived effectiveness of mask-wearing and social distancing in preventing the spread of COVID-19. Participants responded using a 5-point Likert scale (strongly agree to strongly disagree). Results reported are top 2 box responses (strongly agree/somewhat agree). Data were analyzed for differences across waves and demographic variables. Statistical analyses included frequencies, analysis of variance (ANOVA), and t-tests/z-tests.

**Results:** Significantly more parents and teens by Waves 2 and 3 knew someone who was hospitalized or died due to COVID-19 compared to Wave 1. Significantly fewer parents and teens in Wave 3 (65%/57%, respectively) compared to both Wave 1 (72%/67%) and Wave 2 (76%/68%) reported experiencing a lot/some stress and worry regarding the pandemic. By Wave 3, 58% of teens and 56% of parents had received  $\geq 1$  dose of COVID-19 vaccine. Despite these changes in experiences across waves, a strong majority of both parents and teens

(82-86%) consistently agreed across time regarding the importance and the effectiveness against COVID-19 spread of social distancing/mask guidelines. Examining data from Wave 3, race (Black (92%)>White (80%)), community type (urban (91%)>suburban (79%) and rural (73%)), and positive vaccination status of parents and teens (92%/89%, respectively)>not vaccinated (73%/73%) were significantly associated with respondents' agreement that it is important to follow mitigation guidelines as strictly as possible; household income (>\$100,000 (90%)>\$50,000-99,000 (82%) and <\$50,000 (84%)), race (Black (91%)>White (81%)), community type (urban (89%)>suburban (83%)>rural (71%)), and positive vaccination status of parents and teens (94%/90%, respectively)>not vaccinated (72%/70%) were significantly associated with respondents' agreement that mitigation guidelines effectively prevent the spread of COVID-19. Ethnicity was not associated with either primary outcome variable.

**Conclusions:** Across the time of the pandemic, despite variable experiences with the disease and with vaccination, attitudes and beliefs related to mitigation strategies were consistently positive. There were differences in agreement across demographic variables; Black Americans, who experienced higher risk and rates of COVID-19 diagnosis and death than White Americans, were significantly more likely to have positive attitudes towards mitigation guidelines and their effectiveness. Additionally, urban Americans, who are likely at higher risk due to greater population density, were significantly more likely to have positive attitudes. Not surprisingly, vaccinated parents and teens were significantly more likely to agree to the importance and effectiveness of mitigation guidelines compared to unvaccinated respondents. It will be important to understand these differences in attitudes between subgroups and how to support adherence to mitigation guidelines across all populations.

**Sources of Support:** Unity Consortium members including Pfizer and other vaccine manufacturers.

## RESEARCH POSTER PRESENTATION II: EATING DISORDER/COVID

155.

### THE IMPACT OF THE COVID-19 PANDEMIC ON NUMBER AND SEVERITY OF NEW DIAGNOSES OF RESTRICTIVE EATING DISORDERS DURING PROLONGED LOCKDOWN IN ONTARIO, CANADA

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**Purpose:** The coronavirus disease 2019 (COVID-19) pandemic has had a disproportionate impact on the well-being of adolescents and young adults (AYAs). Worldwide, eating disorder (ED) experts have observed worsening symptoms in youth with pre-existing EDs and an escalation in the number of new cases compared to prior years. Disruption of routine, school closures, loss of extracurricular activities, as well as social isolation are potential contributing factors. The Canadian province of Ontario (specifically the most highly populated cities) experienced one of the most prolonged lock downs worldwide with approximately 20 weeks of in-person school closure and/or restriction to virtual learning. We sought to better understand the impact of COVID-19 on new pediatric ED presentations, patient characteristics and hospital admissions in a pediatric tertiary care ED program during this time.



Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

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