Sources of Support: The University of Michigan Medical School Summer Impact Accelerator.

148.

EXPLORING THE IMPACT OF COLLEGE STUDENTS' COVID-19- AND CAPITOL INSURRECTION-RELATED HORIZONTAL AND VERTICAL COLLECTIVISM/INDIVIDUALISM ON EMOTIONAL REACTION TO THOSE EVENTS

Brandon H. Sorge, MS, PhD [1], Grant Fore [1], Francesca Williamson [1], Julia Angstmann [2], Devon J. Hensel, MS, PhD, FSAHM [3]

[1]Indiana University Purdue University Indianapolis; [2]Butler University; [3]Indiana University School of Medicine.

Purpose: While many studies have explored individuals' feelings related to recent national events, none have explored the relationship of individualism and collectivist leanings caused by these events on the individuals emotions related to those events. For this research we specifically focus on the COVID-19 Pandemic and the January 6 Capitol Insurrection.

Methods: Data were collected from college students at a small, private midwestern private university over a 10-day period at the end of January and the beginning of February 2021. A Qualtrics survey was sent to 1,041 students who had completed a similar survey 5 months earlier related to their feelings about the COVID-19 pandemic. We used a subsample (N=314 students; 74.2% female; 83.4% White; 0.6% freshman, 24.5% sophomores, 34.7% juniors and 29.3% seniors) who provided complete data. Measures included horizontal ("We are the same, high freedom, equality") and vertical ("I am different, Authority ranking, high freedom") individualism as well as horizontal ("We are the same, share, less freedom") and vertical ("I am different, sharing, authority ranking") collectivism. Participants also provided data on the positive and negative affective responses to COVID-19 and to the January 6 Capitol Insurrection. Structural equation modeling was used to investigate the direct effects between individual and collectivism and the affective responses to each event (all standardized; Stata v. 17.0). Global fit was evaluated using the chi-square test and the root mean square error of approximation (RMSEA). Local fit was addressed using the Comparative Fit Index (CFI) and the Tucker Louis Index (TLI). We also investigated group differences by gender (male/female) and race (minority/white) where significant overall direct effects were observed.

Results: Fit indices (Chi-sq[df]: 60.99[31], p<.001; RMSEA[90% CI]: 0.046[0.035-0.076); CFI: 0.972; TLI: 0.905) suggested the specified model provided a good fit to the data. Higher COVID VI was associated with higher positive (B=0.12) and negative (B=0.15) affective reactions to COVID (B=0.12). Higher Capitol HI and HC were both associated with higher positive (both: B=0.21) and higher negative (B=0.12-0.23) affective reaction to the capitol riots. Higher COVID VI was associated with lower negative affective response (B=-0.16) to COVID. We observed no gender or race/ethnicity differences in these significant effects.

Conclusions: Students who felt more strongly that people were the same (horizontal individualism and horizontal collectivism) were more likely to have both strong positive and negative emotions to the Janury 6th insurrection. For COVID-19 negative feelings, students whose feelings towards COVID were more individualistic had mixed results. Those who believed people are different (vertical individualism) were more likely to have lower negative feelings towards COVID-19 while those who believed people are the same (horizontal individualism) had greater negative feelings. These data have implications for scaffolding young adult support in advance of future socio-political emergencies.

Sources of Support: None.

RESEARCH POSTER PRESENTATION II: COVID/ VACCINES/HEALTH PROMOTION

149.

TURNING THE HOSPITAL INSIDE OUT: EXPANDING ACCESS TO COVID-19 VACCINATIONS FOR UNDERSERVED ADOLESCENTS USING MOBILE OUTREACH

Priya Sarin Gupta, MD MPH [1]

[1]Massachusetts General Hospital / Harvard Medical School.

Purpose: There exist clear disparities in COVID-19 vaccination rates for adolescents and young adults in Massachusetts and across the United States. Massachusetts Department of Public Health data demonstrates that where social vulnerability is high in our communities, COVID vaccination rates for adolescents and young adults staggers. With community engagement as the backbone, we implemented a low-barrier, mobile walk-in COVID-19 vaccination unit using a community health van in the greater Boston area from May 2021 to present to help address disparities in vaccination for this vulnerable population.

Methods: From May 20, 2021 to August 18, 2021, using a double equity model, we situated the mobile COVID-19 vaccination unit in Chelsea, Everett, Revere, all communities with high social vulnerability index and a disproportionately high burden of COVID-19 illness. We chose sites in concert with local partners based on the volume of foot traffic and proximity to public parks, beaches, and community-based services that attract adolescent and young adult populations. Our mobile clinic was run at youth events and community run sports programs. Publicity around the vaccination efforts was youth focused. Community partners who had long standing relationships and partnerships with youth in the area helped guide our efforts. We collected demographic and clinical data for mobile vaccination services, including participant age, sex, race/ethnicity, insurance status, and zip code. We use participant zip code to estimate median salary and social vulnerability index. We used the online Massachusetts Department of Public Health COVID-19 Vaccination Dashboard (link) as the data source on the general vaccinated population in Massachusetts as well as to assess disparities in adolescent vaccination rates. We report continuous variables as median (interquartile ranges) and categorical variables as frequencies (percentages). We use Wilcoxon rank sum testing to compare the sociodemographic characteristics of persons vaccinated through the mobile COVID-19 vaccination unit with the general vaccinated population in the three target cities and in the general vaccinated population in Massachusetts.

Results: From May 20, 2021, to August 18, 2021, the mobile MGH Kraft COVID-19 vaccination unit administered 937 doses of Pfizer vaccine. About ninety percent of participants returned to complete their second dose. The median (IQR) age of participants were 20 (14-40) years, 477 (51%) were males, 768 (82%) were non-white, and 580 (62%) were Hispanic.

Conclusions: A mobile COVID-19 vaccination unit, implemented with community and stakeholder engagement and support, has the potential to improve vaccine access among racial/ethnic adolescent minorities and medically underserved adolescent populations. Compared to the overall population of the target cities, participants in the mobile vaccination unit were younger, more likely to be male, and more likely to have non-commercial insurance. Compared to the remainder of the vaccinated population of Massachusetts, participants in the mobile vaccination unit were younger and more likely to be male, non-white, and covered with non-commercial insurance. This prototypical model shows that when you bring services to the

community, meet adolescents where they are, literally, you decrease so many barriers and increase equity.

Sources of Support: NIH Rapid Acceleration of Diagnostics grant, Mass General Brigham, Mass General Hospital Kraft Center for Community Health.

150.

EVALUATION OF A NOVEL MHEALTH TOOL TO PROMOTE ADOLESCENT VACCINATION: THE VACCINE INFORMATION FOR TEENS APP (VITA)

Windy Grant, M.D.[1], Caitlin Hansen, M.D., MPH[2], Stephanie Perniciaro, PhD[3], Linda Niccolai, PhD, ScM[3]

[1]Yale New Haven Children's Hospital; [2]Pfizer; [3]Yale University School of Public Health.

Purpose: Adolescent vaccination uptake goals are far from being met for several recommended vaccines, and, particularly, for HPV vaccine. Lack of knowledge about the vaccine and poor communication skills among vaccine providers pose a challenge to vaccine discussions, leading to poor uptake. Mobile health (mHealth) interventions have been shown to improve vaccine communication and increase vaccine uptake, but tools have not been explicitly designed to facilitate more effective patient-clinician communication at the point of care in the clinical setting. To address this need, we developed an innovative and interactive mobile app, the Vaccine Information for Teens App (VITA). The goal of this study was to pilot test and refine the VITA prototype and assess its acceptability for use in a primary care setting.

Methods: Semi-structured qualitative interviews were conducted with adolescents aged 11-17 years, parents, and clinicians, from 5 different pediatric primary care practices in New Haven, Connecticut. Participants were given access to VITA via mobile device or on the web through an URL or QR code. Interviews that explored perspectives on VITA were recorded, transcribed, and analyzed by two researchers using an iteratively developed codebook via the software Dedoose. Codes were organized into categories to uncover themes. Usability testing with adolescents and parents involved both qualitative and quantitative assessment by completing the following tasks: 1) Determine needed vaccines for specified age; 2) Access more information about a vaccine. The level of difficulty was scaled from 1 (very difficult) to 7 (very easy). Participants' confidence in adolescent vaccination was also measured via the Vaccine Confidence Scale (VCS).

Results: The sample comprised 4 adolescents, 3 parents, 2 hospital-based clinicians, and 4 private practice clinicians. Adolescents were 75% males with a median age of 14 years; 33% of clinicians identified as females. The mean VCS score was 8.75+1.51 for parents and 7.53 +0.83 for adolescents. The major themes included: 1) usability of the app: participants found the app simple and user-friendly. However, some clinicians were concerned about the level of information and infographics for patients with low literacy. 2) early access to vaccine information: reviewing vaccine information in advance could improve patient-centered communication and agenda-setting. 3) adolescent participation: VITA empowers adolescents to discuss vaccines and overall health. 4) impact on vaccine uptake: it may serve as a time-saving supplemental resource to enhance understanding of vaccines and address specific concerns. Three adolescents and one parent completed the usability testing, which demonstrated a 75% success rate with Task 1 compared to 25% with Task 2, suggestive of potential challenges with app navigation.

Conclusions: The use of VITA may be acceptable and beneficial in the clinical setting allowing both clinicians and families to have more productive and efficient vaccine discussions. While the impact on vaccine-hesitant populations is less clear, it may enhance vaccine supporters' confidence in their decision-making. Future work optimizing the app and assessing its acceptability in routine primary care and telehealth is needed.

Sources of Support: National Institute of Health/National Institute of Child Health and Human Development.

151.

USING MEDICAL CLAIMS DATA TO EXPLORE MISSED OPPORTUNITIES FOR HPV VACCINATION AMONG ADOLESCENTS, AGES 11-13, IN IOWA

Grace Ryan, PhD, MPH[1], Amanda Kahl, MPH[2], Paul Gilbert, PhD, ScM[2], Sato Ashida, PhD[2], Mary Charlton, PhD, MS[2], Aaron Scherer, PhD, MA[2], Natoshia Askelson, PhD, MPH[2]

[1]University of Massachusetts Medical School; [2]University of Iowa.

Purpose: Despite decades of safety and effectiveness data, human papillomavirus (HPV) vaccination rates remain low, and one-third of adolescents fail to initiate the series by age 13, the age at which it should be completed. While there is extensive research on factors related to uptake, there is less known about the times that eligible adolescents do not get vaccinated (missed opportunities [MOs]). This study sought to quantify the extent of MOs among adolescents ages 11 to 13 during both preventive and acute care visits.

Methods: Medical claims data from years 2010 to 2017 from a large midwestern insurance provider were used to calculate total numbers of MOs between ages 11 and 13. Adolescents included had continuous health insurance enrollment born between 2001 and 2004 in Iowa for the three-year period between ages 11 and 13 (n=14,505). The creation of the MO definition was informed by input from primary care and pediatric providers to ensure that all visits that could be potential vaccination opportunities were included. MOs were divided into several categories: total, among non-initiators, occurring prior to initiation, occurring after the first dose, and occurring between the first and last dose. Two subgroup comparisons for all categories (urban vs. rural; male vs. female) were explored using t-tests.

Results: Overall, less than one-third of adolescents in the sample initiated the series by age 13. Females experienced significantly fewer MOs; 5.98 (SD=5.49) for females compared to 6.18 (SD=6.04) for males. For initiators, the majority of MOs occurred prior to initiation of the series, which on average, occurred at age 12; again females experienced significantly fewer MOs compared to males; means for males and females were 3.62 and 4.07, respectively. In sub-group comparisons, rural adolescents tended to have fewer MOs than their urban counterparts and females tended to have fewer MOs than males. For example, urban females had significantly more MOs overall (M=6.08) compared to rural females (M=5.85).

Conclusions: Results from this study highlight not only the extent of MOs, but also the utility of medical claims data in understanding patterns of adolescent health care utilization. Claims data provides a comprehensive view and level of granularity not available in other immunization data source. Future research could focus on better understanding the issue of MOs in other geographic areas or among populations with public insurance. Overall, in this sample of privately insured adolescents, it is clear that a lack of opportunity was not a barrier to HPV vaccination, as there were many opportunities in this critical age range, particularly among males and urban adolescents. Additionally, low rates of HPV vaccination have been compounded by the COVID-19 pandemic with many adolescents missing preventive care visits during the pandemic. Moving forward, it will be critical for