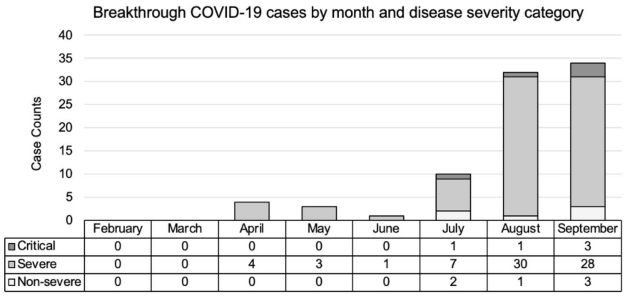

Fig. 1.

Conclusions: Breakthrough infections among hospitalized patients were uncommon, but incidence increased with time after vaccine receipt in all vaccines. Further study is needed to examine differences and severity in breakthrough infections by vaccine type and in individuals who completed booster vaccines.

Funding: None
Disclosures: None

Antimicrobial Stewardship & Healthcare Epidemiology 2022;2(Suppl. S1):s40–s41
doi:10.1017/ash.2022.133

Presentation Type:
Poster Presentation - Poster Presentation
Subject Category: COVID-19

COVID-19 postvaccination adverse events and vaccine hesitancy among hospital employees: Is there a link?

Anastasiia Weiland; Rangit Vallapureddy; Sarah Boaitey and Keyvan Ravakhah

Background: Vaccination against COVID-19 has demonstrated high efficacy in preventing illness severe enough to result in hospitalization. Despite these data, universal vaccine adoption by different population groups, including hospital employees, has been a challenging public health task. Vaccine-associated adverse events, the novelty of the vaccines, and the absence of long-term follow-up data have been reported as major contributors to COVID-19 vaccines mistrust. We sought to quantify postvaccination adverse events, to assess their correlation with unvaccinated status, and to evaluate other factors contributing to COVID-19 vaccination hesitancy. **Methods:** In a 240-bed community hospital located in a metropolitan area in the United States, we conducted a voluntary and anonymous online survey among contracted employees between September and November 2021. The study protocol was approved by the institutional review board at our facility. **Results:** Of all 185 responders, 143 (77%) were female, 95 (51%) were aged <51 years, and 146 were White (79%). Most (n = 100, 54%) reported no past medical history. Most common comorbidities included heart disease (n = 45, 24%), diabetes (n = 20, 11%), and chronic lung disease (n = 17, 9%). Among those surveyed, 178 were vaccinated either fully (n = 172, 93%) or partially (n = 6, 3%), and 7 (4%) were unvaccinated. Moderna was the most common vaccine received (n = 152, 85%). Those who received a 2-dose series reported experiencing more adverse events after the second dose than after the first dose (710 vs 451) of either Moderna or Pfizer vaccine. Adverse events included pain at the injection site (n = 257, 22%), fatigue (n = 178, 15%), chills (n = 133, 11%), muscle pain (n = 120, 10%), and headache (n = 117, 10%). Also, 2 responders reported omitting the second dose due to the severity of symptoms after the first dose of both Moderna and Pfizer vaccines. Concern for safety (n = 5, 71%) was the leading reason for vaccine refusal among unvaccinated followed by concern for efficacy (n = 3, 43%), lack of trust in government promoting vaccination (n = 3, 43%), religious reasons (n = 2, 28%), and immunity due to prior COVID-19 (n = 2, 28%). In addition, 3 responders reported intent to be vaccinated in the future. **Conclusions:** Most of the responders reported at least 1 adverse event related to COVID-19 vaccination. No severe adverse events were reported; however, a high prevalence of self-limited postvaccination adverse events might be misinterpreted as a concern for vaccine safety, as seen among surveyed unvaccinated individuals in our cohort. Targeted education is needed to limit knowledge gaps and address existing cognitive biases in COVID-19 vaccination among hospital employees.

Funding: None
Disclosures: None

Antimicrobial Stewardship & Healthcare Epidemiology 2022;2(Suppl. S1):s41
doi:10.1017/ash.2022.134

Presentation Type:
Poster Presentation - Poster Presentation
Subject Category: COVID-19

Postacute sequelae of SARS-CoV-2 (PASC) in nursing home residents: A case–control study

Sophie Clark; Liza Marie Bautista; Karen Neeb; Ana Montoya; Kristen Gibson; Julia Mantey; Lillian Min and Lona Mody

Background: Postacute sequelae of SARS-CoV-2 (PASC) include fatigue, dyspnea, anxiety, and cognitive impairment. Few studies have explored the prevalence or presentation of PASC among nursing home (NH) residents. **Method:** A case–control study was conducted at 1 NH in Michigan in December 2021. Cases were defined as residents with SARS-CoV-2 infection between November 2, 2020, and October 8, 2021. Controls lived at the same NH during this interval and never tested positive for SARS CoV-2. Patient characteristics were compared between cases and controls using the Fisher exact test and Wilcoxon rank-sum test. Primary outcomes were functional decline, cognition, and adverse health outcomes. Outcomes were assessed by comparing measures on last observation to observations before COVID-19 diagnosis (cases) or to earliest observation (controls). Multivariable logistic regression assessed correlation between COVID-19 diagnosis and outcomes. **Results:** In total, 152 residents were identified for inclusion (147 included in final analyses, 76 cases, 71 controls); 5 were excluded due to insufficient data. We collected the following resident characteristics: 66% were aged ≥80 years; 73% were female; 95% were non-Hispanic white; 82% were long-stay residents; median of 3 comorbidities (IQR, 2–4). The mean number of follow-up observations was 2.60 (SD, 1.25). No significant differences in population characteristics were detected between cases and controls. Moreover, 106 patients (46 cases and 60 controls) had at least 1 follow-up visit and were thus included in the analyses to evaluate long-term outcomes. Among them, cases experienced significant declines in completing transfers (OR 5.65, p **Conclusions:** Nursing home residents with COVID-19 are more likely to enter hospice and have a higher mortality rate in the year following infection. Survivors experience significant functional decline in basic activities of daily living,

Table 1. Patient Demographic Characteristics

Characteristic	Total Population (N=147)	Cases (N=76)	Controls (N=71)	p-value
Number of visits (median, IQR)	3 (2-6)	3 (2-5)	4 (2-6)	0.563[a]
Number of post-baseline visits (median, IQR)	2 (0-4)	2 (0-3)	2 (1-4)	0.251[a]
Age				
35-69	14 (9.5%)	4 (5.3%)	10 (14.1%)	0.072[b]
70-79	36 (24.5%)	18 (23.7%)	18 (25.4%)	
80-89	53 (36.1%)	34 (44.7%)	19 (26.8%)	
Age >89	44 (29.9%)	20 (26.3%)	24 (33.8%)	
Sex				
Male	40 (27.2%)	22 (29.0%)	18 (25.4%)	0.712[b]
Female	107 (72.8%)	54 (71.1%)	53 (74.7%)	
Race				
Non-Hispanic white	139 (94.6%)	70 (92.1%)	69 (97.2%)	0.278[b]
Non-white or Unknown	8 (5.4%)	6 (7.9%)	2 (2.8%)	
Length of stay				
Short-stay	27 (18.4%)	14 (18.4%)	13 (18.3%)	1.00[b]
Long-stay	120 (81.6%)	62 (81.6%)	58 (81.7%)	
Comorbidities				
Dementia	80 (54.4%)	46 (60.5%)	34 (47.9%)	0.138[b]
Diabetes	44 (29.9%)	24 (31.6%)	20 (28.2%)	0.720[b]
CHF	49 (33.3%)	28 (36.8%)	21 (29.6%)	0.385[b]
COPD	38 (25.9%)	20 (26.3%)	18 (25.4%)	1.000[b]
Number of comorbidities (median, IQR)	3 (2-4)	3 (2-4)	3 (1-4)	0.068[a]

[a] Significance evaluated using Wilcoxon rank-sum test
[b] Significance evaluated using Fisher's exact test

Table 2. Risk Factors for Adverse Outcomes

	Adjusted Odds Ratios (95% Confidence Interval)						
	Functional Decline From pre-covid/baseline to last follow-up observation (N patients with sufficient records)						Other adverse outcome
Risk Factor	Transferring (N=96)	Dressing (N=100)	Eating (N=106)	Toileting (N=106)	Bathing (N=103)	Continence (N=99)	New hospice status (N=99)
Case (COVID positive)	**5.65 (1.20-26.53)****	**3.51 (0.87-14.23)***	0.80 (0.32-1.98)	1.24 (0.37-4.21)	1.03 (0.37-2.87)	2.21 (0.86-5.71)	**7.12 (1.26-40.24)****
Number of follow-up visits	0.94 (0.51-1.72)	**2.41 (1.14-5.14)****	1.34 (0.93-1.94)	1.22 (0.74-2.01)	0.84 (0.56-1.27)	1.06 (0.72-1.58)	1.31 (0.67-2.58)
Age ≥ 80	**5.91 (0.92-37.91)***	**4.60 (0.83-25.39)***	1.50 (0.60-3.76)	**14.66 (1.73-124.03)****	**3.52 (1.07-11.59)****	1.56 (0.58-4.15)	1.89 (0.35-10.16)
Sex (male)	2.24 (0.52-9.75)	0.17 (0.02-1.63)	0.48 (0.16-1.45)	0.36 (0.07-1.88)	1.30 (0.43-3.95)	1.03 (0.34-3.12)	0.92 (0.16-5.42)
Race (White)	0.86 (0.07-10.09)	1.00 (omitted)	0.46 (0.08-2.51)	1.51 (0.13-17.75)	0.52 (0.08-3.37)	1.14 (0.18-7.33)	1.23 (0.10-14.88)
Short NF stay	11.37 (1.17-110.35)	10.93 (0.61-197.29)	2.41 (0.41-14.10)	3.48 (0.24-49.87)	0.53 (0.05-5.42)	2.68 (0.36-19.82)	1.00 (omitted)
Comorbidities (count)	0.90 (0.62-1.31)	0.74 (0.47-1.15)	1.10 (0.85-1.43)	**0.65 (0.42-0.99)****	1.09 (0.82-1.44)	0.79 (0.59-1.05)	0.65 (0.38-1.10)

* indicates p-value < 0.10
** indicates p-value < 0.05

specifically in the ability to transfer and dress. Larger studies are needed to further characterize our findings and to design interventions that can help overcome these long-term sequelae from COVID-19.

Funding: None
Disclosures: None

Antimicrobial Stewardship & Healthcare Epidemiology 2022;2(Suppl. S1):s41–s42
doi:10.1017/ash.2022.135

Presentation Type:
Poster Presentation - Poster Presentation
Subject Category: COVID-19

assessment of Vaccine Interest in Unvaccinated COVID-19–positive inpatients

Lisa Stancill; Lauren DiBiase and Emily Sickbert-Bennett Vavalle

Background: Although vaccine hesitancy has been an issue for many years, it has become a major point of contention in the effort to mitigate the COVID-19 pandemic. In August 2021, a large academic medical facility began capturing the vaccination status of admitted COVID-19–positive patients, as well as their interest in the COVID-19 vaccine. We performed a descriptive analysis on the characteristics of unvaccinated patients who contracted COVID-19 and their interest in receiving the COVID-19 vaccine. **Methods:** Patient history and physical (H&P) notes and demographic data were collected using the internal data warehouse sourced from the electronic medical record for all SARS-COV-2–positive inpatient admissions to UNC Medical Center and UNC Chatham from August 1, 2021, to January 11, 2022. Manual chart reviews of progress notes were completed for patients whose history was not recorded in the initial H&P. Demographic data were summarized by vaccine status overall and by interest in COVID-19 vaccine among unvaccinated patients. We performed χ^2 to determine demographic differences between the interested and uninterested unvaccinated groups. **Results:** In total, 536 patients were admitted with COVID-19 from August 1, 2021, to January 11, 2022. Of these, 15% were fully vaccinated (2 doses mRNA plus 1 dose J&J); 5.4% were partially vaccinated; 75.7% were unvaccinated; and 2.9% had an unknown vaccination status. Demographic characteristics are presented in Table 1. The most common demographics were consistent among the fully vaccinated and unvaccinated groups, with the exception of sex and age group (Table 1). For those whose interest data were available (n = 164), 34% were uninterested in receiving the COVID-19 vaccine. Importantly, race and age were statistically significantly different ($P <$ .05) between the unvaccinated interested and unvaccinated uninterested groups. **Conclusions:** Even after experiencing COVID-19 firsthand and being hospitalized, some people who remain uninterested in receiving the COVID-19 vaccine. This population had a statistically higher proportion of white and older individuals than the unvaccinated interested group. Recommendations from healthcare providers might not be effective in persuading this population to be vaccinated. Instead, grassroots alternatives might be more successful. Additional analysis should be considered on whether patients who expressed interest in COVID-19 vaccine received immunization.

Table 1.

	Fully Vaccinated (n=73)	Unvaccinated overall (n=349)	Unvaccinated uninterested (n=56)	Unvaccinated Interested (n=108)
White	71.20%	59.30%	80.40%	55.60%
Married	34.30%	55.90%	53.60%	50.90%
Female	58.90%	49.90%	58.90%	46.30%
Age 25-49	17.80%	40.40%	19.60%	42.60%
Age 65+	56.20%	24.60%	53.40%	16.70%
Hispanic/Latino	8.20%	18.60%	3.60%	22.20%

Funding: None
Disclosures: None

Antimicrobial Stewardship & Healthcare Epidemiology 2022;2(Suppl. S1):s42
doi:10.1017/ash.2022.136

Presentation Type:
Poster Presentation - Poster Presentation
Subject Category: COVID-19

Stay home, save lives: Characterizing sickness presenteeism and motives among healthcare personnel in the COVID-19 pandemic

Amanda Brown Marusiak; David Weber; Cynthia Culbreth; Erica Pettigrew; Lisa Stancill and Emily Sickbert-Bennett

Background: Working while ill, or presenteeism, has been documented at substantial levels among healthcare personnel (HCP) along with its consequences for both patient and HCP safety. Limited literature has been published on HCP presenteeism during the COVID-19 pandemic, and specific motivations for this behavior are not well described. Understanding both individual and systemic factors that contribute to presenteeism is key to reducing respiratory illness transmission in the healthcare setting. We characterized the frequency of and motivations for presenteeism in the workforce of a large academic medical center during the COVID-19 pandemic. **Method:** We deployed a voluntary, anonymous electronic survey to HCP at University of North Carolina (UNC) Medical Center in December 2021, which was approved by the UNC Institutional Review Board. We received 591 responses recruited through employee newsletters. Respondents recounted their frequency of presenteeism since March 2020, defined as coming to work feeling feverish plus cough and/or sore throat. In total, 24.6% reported presenteeism at least once, with 8.1% reporting twice and 5.3% 3 or more times. Asking more generally about any symptoms while working, the following were most common: headache (26%), sinus congestion (20%), sore throat (13%), cough (13%), and muscle aches (9.3%). **Results:** Motivations for presenteeism fell broadly into 4 categories: (1) perception of low risk for COVID-19 infection, (2) concerns about workplace culture and operations, (3) issues with sick leave, and (4) concerns about employment record and status. Among HCP reporting at least 1 instance, the most common motivations for presenteeism included feeling low risk for COVID-19 infection due to mild symptoms (59.9%), being vaccinated (50.6%), avoiding increasing colleagues' workload (48.3%), avoiding employment record impact (39.6%), and saving sick days for other purposes (37.9%). Asked to identify a primary motivation, 40.3% reported feeling low risk for COVID-19 infection due to mild symptoms or vaccination, 21.2% reported a workplace culture issue (ie, increasing colleague workload, perception of weakness, responsibility for patients), 20.6% reported sick leave availability and use (including difficulty finding coverage) and 17.8% reported employment record ramifications including termination. **Conclusions:** This survey coincided with the onset of the SARS-CoV-2 o (omicron) variant locally, and as such, risk perceptions and motivations for presenteeism may have changed. Responses were self-reported and generalizability is limited. Still, these results highlight the importance of risk messaging and demonstrate the many factors to be considered as potential presenteeism motivators. Mitigating these drivers is particularly critical during high-risk times such as pandemics or seasonal peaks of respiratory illness.

Funding: None
Disclosures: None

Antimicrobial Stewardship & Healthcare Epidemiology 2022;2(Suppl. S1):s42
doi:10.1017/ash.2022.137