

bivalent booster uptake in a behavioral health hospital shortly after a COVID-19 outbreak. **Methods:** A survey tool was developed and sent to all HCWs at the Yale New Haven Psychiatric Hospital in December 2022. The survey queried demographic data, job category, history of COVID-19, prior COVID-19 vaccinations, perception of COVID-19 exposure, and updated and/or bivalent booster doses. The survey was administered several weeks after a COVID-19 outbreak on multiple inpatient behavioral health units. Receipt of the COVID-19 primary vaccination series and the first booster dose were mandated for HCWs; however, receipt of the bivalent booster was voluntary. **Results:** The survey was sent to 664 HCWs with primary assignments in behavioral health settings. In total, 182 (27.4%) provided complete responses to the survey and are included in these data. Moreover, 91 HCWs (50.0%) reported previously having COVID-19 at least once. Overall, 100 HCWs (55.0%) received the bivalent booster. The most identified reasons for receiving the bivalent booster were wanting to protect family and friends (n = 113), importance of staying healthy (n = 112), and protecting colleagues and patients (n = 103). The most identified reasons for not wanting to receive the bivalent booster dose were not thinking it provides additional protection (n = 33), “too many” shots already received (n = 31), and concern about side effects (n = 30). **Discussion:** Bivalent booster dose uptake in HCWs on behavioral health units shortly after a COVID-19 outbreak was greater than the general population. HCWs reported varying reasons for and against receipt of the bivalent booster dose, with the most common being protection of family and friends and perceptions of no additional protection, respectively. A limitation of this study was voluntary response bias, in which results are biased toward individuals more likely to receive a bivalent booster vaccine. It is unclear whether reasons for declining the vaccine are representative of HCWs who did not complete the survey. Assessing attitudes for the bivalent booster dose can assist in guiding communication and outreach strategies to increase vaccine uptake by HCWs.

Disclosures: None

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Poster Presentation - Poster Presentation

Subject Category: COVID-19

Factors influencing healthcare personnel decision making to work with respiratory symptoms during the COVID-19 pandemic

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Background: Amid the COVID-19 pandemic, healthcare systems were stretched thin, with staffing shortages posing substantial challenges. Limiting spread of COVID-19 among healthcare professionals (HCP) is paramount to preventing exacerbation of such shortages, but strategies are highly dependent on HCP self-screening for symptoms and isolating when present. We examined HCP perceptions of barriers and factors that facilitate staying home when experiencing respiratory symptoms. **Methods:** At an academic tertiary-care referral center, in inpatient and ambulatory settings, we conducted an anonymous electronic survey between March 11, 2022, and April 12, 2022. Using logistic regression analysis, we analyzed predictors of employees reporting to work with respiratory symptoms using STATA and SAS software. **Results:** In total, 1,185 individuals including 829 clinical staff and 356 nonclinical staff responded to the survey. When excluding participants who reported working “remotely” (N = 381) and those who reported being unsure of whether they had worked with symptoms (N = 14), the prevalence of working with respiratory symptoms was 63%. There was no significant difference between clinical and nonclinical staff (OR, 1.1; 95% CI, 0.8–1.5; P = .60). Increasing number of years of service was protective against working with symptoms, achieving statistical significance in multivariable analysis after 16 years. Compared to those having worked <1 year, the odds ratios of working with symptoms were 0.32 (95% CI, 0.16–0.65; P = .002), 0.33 (95% CI, 0.15–0.74; P = .007), and 0.32 (95% CI, 0.13–0.79; P = .007) for those working 16–20 years, 21–25 years, and ≥26 years, respectively. More than half of HCP who worked with symptoms identified being understaffed (56.9%), having mild symptoms

Figure 1: Risk Factors for Working With Respiratory Symptoms Among Clinical and Non-Clinical Healthcare Workers

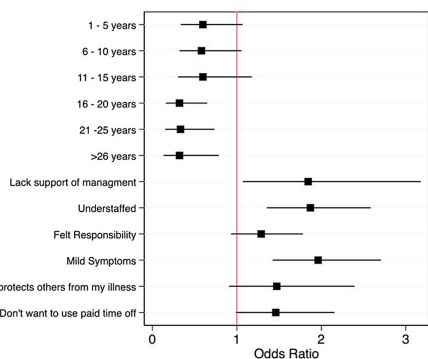


Table 1: Clinical and non-clinical roles of those who responded to the survey

Role	N (%)	Non-clinical (N = 356)	N(%)
Clinical (N=829)			
Medical assistant	66 (5.6)	Administration	191 (16.1)
Nursing assistant	16 (1.4)	Environmental services	4 (0.3)
Physicians	156 (13.2)	Facilities Management	20 (1.7)
Advanced Practice Nurse or Advanced Practice Provider (CNS, NP, Midwife, CRNA, PA.)	104 (8.8)	Food service	11 (0.9)
Registered Nurse/ Nurse Clinician	266 (22.4)	Laboratorian	35 (3.0)
Pharmacist	14 (1.2)	Other	100 (28.1)
Technician	95 (8.0)		
Other	127 (15.3)		

Table 2: Risk Factors for Working With Respiratory Symptoms Among Clinical and Non-Clinical Healthcare Workers

Factors	Univariable			Multivariable		
	OR	95% CI	P	aOR	95% CI	P
Role						
Non-Clinical	Ref	Ref	Ref			
Clinical	1.1	0.79 - 1.5	0.60			
Years of service						
<1	Ref	Ref	Ref	Ref	Ref	Ref
1 - 5	0.67	0.38 - 1.18	0.16	0.60	0.33 - 1.07	0.08
6 - 10	0.64	0.36 - 1.13	0.13	0.58	0.32 - 1.05	0.07
11 - 15	0.61	0.32 - 1.16	0.13	0.60	0.30 - 1.18	0.14
16 - 20	0.31	0.16 - 0.61	0.001*	0.32	0.16 - 0.65	0.002*
21 - 25	0.29	0.13 - 0.62	0.001*	0.33	0.15 - 0.74	0.007*
>26	0.30	0.13 - 0.71	0.006*	0.32	0.13 - 0.79	0.01*
Primary Financial Provider	1.26	0.91 - 1.73	0.16			
Received flu vaccine	0.87	0.53 - 1.45	0.60			
Received 2 or more covid doses	1.05	0.70 - 1.56	0.82			
# of symptoms	0.99	0.94 - 1.1	0.84			
Employer						
UWMF	1.19	0.85 - 1.68	0.30			
UWHC	0.86	0.62 - 1.20	0.37			
UWSPMH	1.19	0.62 - 2.30	0.61			
Lacked support of management	1.82	1.05 - 3.02	0.02*	1.84	1.07 - 3.18	0.03*
Understaffed	2.4	1.78 - 3.24	<0.001*	1.87	1.35 - 2.58	<0.001*
Felt Responsibility	1.90	1.42 - 2.55	<0.001*	1.29	0.93 - 1.78	0.13
Mild symptoms	2.29	1.69 - 3.08	<0.001*	1.96	1.42 - 2.71	<0.001*
Symptoms were due to another illness, e.g. allergies	1.33	0.99 - 1.78	0.06			
Masking protects others from my illness	1.84	1.17 - 2.91	<0.001*	1.47	0.91 - 2.39	0.12
Don't want to use paid time-off	1.75	1.21 - 2.53	0.003*	1.46	0.99 - 2.16	0.06
I have no more sick days left	1.25	0.79 - 1.98	0.34			
Can't afford to take unpaid leave	1.11	0.71 - 1.72	0.66			
I don't get paid sick days	1.19	0.68 - 2.09	0.53			
I tested negative for COVID	1.28	0.96 - 1.71	0.10			

*Statistically significant at p<0.05, aOR = Adjusted Odds Ratio

(55.3%), and sense of responsibility (55.1%) as reasons to work with respiratory symptoms. The following barriers, or reasons to work with symptoms, were more commonly identified as significant by those who worked with symptoms compared to those who did not: being understaffed (OR, 1.87; 95% CI, 1.35–2.58; $P \leq .001$), having mild symptoms (OR, 1.96; 95% CI, 1.42–2.71; $P < .001$), and lack of support from management (OR, 1.84; 95% CI, 1.07–3.18; $P = .03$). **Conclusions:** Working with respiratory symptoms is prevalent in clinical and nonclinical HCP. Those with fewer years of work experience appear to be more susceptible to misconceptions and pressures to work despite respiratory symptoms. Messaging should stress support from leadership and the significance of even mild respiratory symptoms and should emphasize responsibility to patients and colleagues

to stay home with respiratory symptoms. Strategies to ensure adequate staffing and sick leave may also be high yield.

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Subject Category: Decolonization Strategies

MRSA PCR improves sensitivity of detection of colonization in neonates

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Background: Neonates colonized with methicillin-resistant *Staphylococcus aureus* (MRSA) are at high risk of developing life-threatening MRSA infection. Due to lack of evidence, national guidelines do not currently recommend a specific methodology for detecting MRSA colonization. We hypothesize that surveillance for MRSA colonization via polymerase chain reaction (PCR) is superior to culture for the detection of colonization. **Methods:** In this retrospective study, we compared results of MRSA surveillance by 2 methodologies, culture and PCR, after implementation of an MRSA surveillance and decolonization protocol in the Texas Children's Hospital Pavilion for Women, a 42-bed neonatal intensive care unit. MRSA colonization of 3 body sites via the 2 methodologies was assessed from June 2017 through December 2020. All neonates were screened for MRSA upon admission to the NICU and weekly thereafter until MRSA-positive or discharged. Swab specimens were initially tested by PCR (Xpert MRSA NxG, Cepheid) and when MRSA-positive reflexed to culture to recover the organism for further characterization. This study was approved through the Baylor College of Medicine Institutional Review Board. **Results:** During the study period, 2,351 neonates were assessed for MRSA colonization by PCR; 81 (3.4%) infants were PCR positive (Fig. 1). Of those 81, 57 (70.4%) had concordant MRSA PCR and culture results, and 24 (29.6%) were MRSA PCR positive but no isolate was recovered in culture. Also, 8 specimens were indeterminate by PCR. However, 1 infant who was negative by culture but was PCR positive developed an MRSA orbital infection. Compared to PCR, the overall sensitivity of MRSA culture was 70.4% (range, 57.7%–80.8%, depending on the year) (Table 1). **Conclusions:** PCR is more sensitive than culture for detecting MRSA colonization in neonates. Utilizing a PCR method enhances the ability to identify MRSA colonized infants more readily and allows for prompt initiation of infection control interventions including isolation precautions and decolonization strategies. Reflex to culture remains important for strain characterization during outbreak investigations and for additional susceptibility testing. Resource utilization and cost-benefit analyses should be done in future studies to influence changes in national

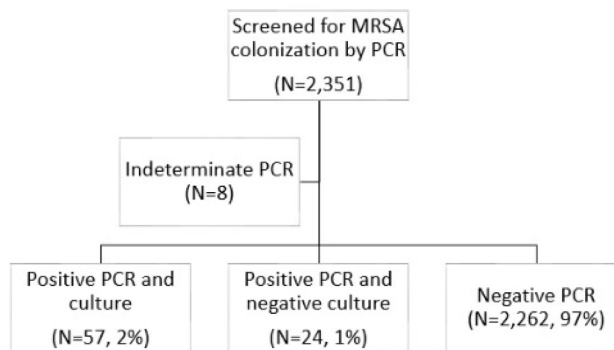


Figure 1- MRSA PCR 2017-2020 Flow Diagram