

Identifying Factors Associated with the Decision to Get Vaccinated against COVID-19 among Staff in a Large Opioid Use Disorder Program

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Background

As global vaccination efforts are being accelerated to combat the COVID-19 pandemic, the World Health Organization has identified vaccine hesitancy as a leading global public health threat (WHO, 2019). Healthcare workers play a key role in vaccine promotion, and vaccinated healthcare workers are more likely to recommend vaccination to others and to promote vaccine acceptance (Paterson et al., 2016). Vaccine hesitancy among this population will have a major impact on the success of public health campaigns to improve immunization.

Estimates indicated that:

- Vaccination rates across healthcare systems varied between 40%- 75% with some estimates indicating that nearly half of all frontline healthcare workers remain unvaccinated (Kirzinger et al., 2021; Lee, 2021),
- Vaccine hesitancy was highest among healthcare workers among health-care workers who are Black, working in lower-paying jobs, and with less education (Kirzinger et al., 2021), and
- 35% of healthcare workers reported little confidence in the testing process, which is similar to vaccine skepticism among the general population (Wan et al., 2021).
- Moreover, our review of current literature has revealed a paucity of data on vaccine attitudes among healthcare workers in opioid treatment programs (OTPs).

Purpose of the study: To examine the likelihood of COVID vaccination among healthcare workers in OTPs.

Methodology & Data Analysis

Methodology

A brief online survey was administered anonymously to employees at START's 7 medication assistance treatment programs in Brooklyn and Manhattan from January 4-19, 2021. Of the 265 START employees at that time, 170 (64%) completed the survey.

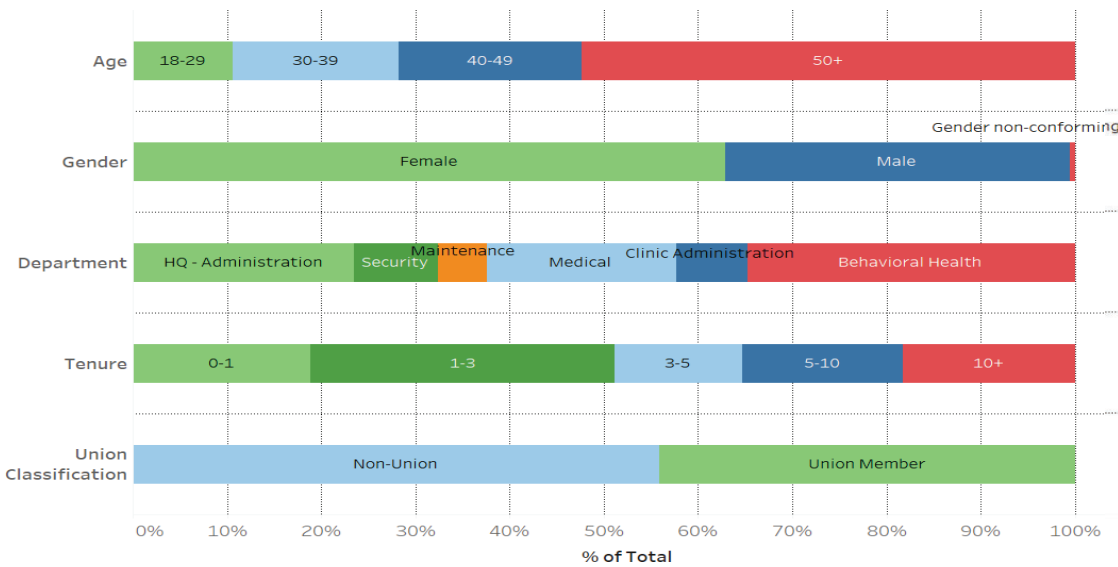
The survey included questions on sociodemographic characteristics, and statements about the likelihood of getting vaccinated and perceived importance of various factors for decision-making (e.g.: vaccine safety, effectiveness, recommendations from experts).

Data Analysis

We conducted descriptive and bivariate analysis. The 5-point scale for the item assessing likelihood of getting vaccinated from (1) "extremely unlikely" to (5) "extremely likely" was dichotomized so that scores 1-3 were recoded as (0) unlikely or unsure about getting a vaccine and scores 4-5 were recoded into (1) likely to get a vaccine. We examined decision-related factors to describe the importance of various factors in the decision to get vaccinated. Chi-square tests examined the associations between vaccination likelihood and sociodemographic characteristics and vaccination decision-related factors.

Results

Demographic Characteristics (n = 170)



Likelihood of Vaccination



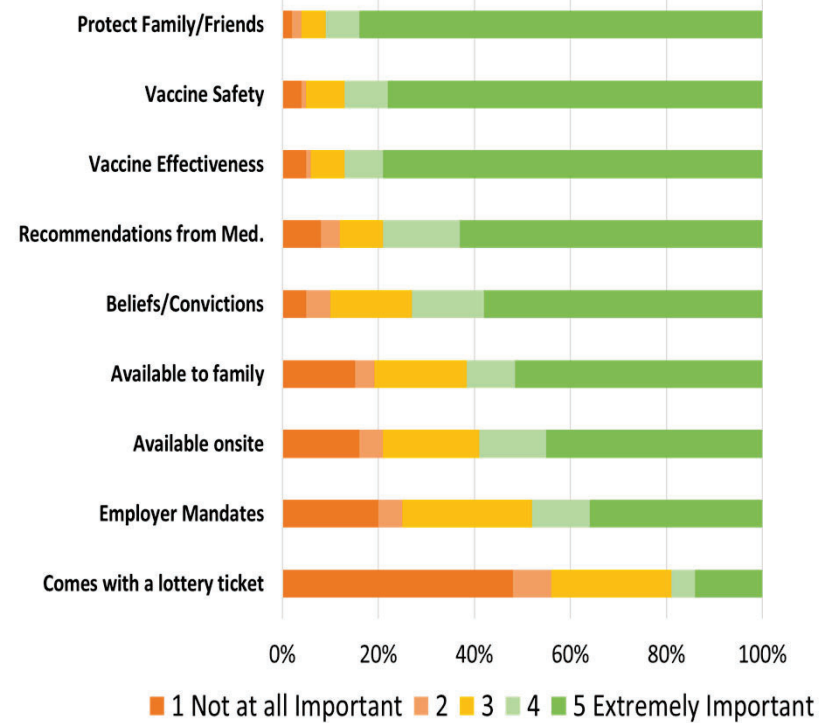
The likelihood of getting a COVID vaccine, if a vaccine were available, was not universal

40% **likely** to get vaccinated

22% **unsure** about getting vaccinated

38% **unlikely** to get vaccinated

Important Factors in Vaccination Decision



Results

Likelihood of COVID-19 Vaccination by Demographic Characteristics (n = 170)

No statistically significant differences were found, except that a greater percentage of staff ages 50+ years indicated being likely to get a COVID vaccine compared to staff <50 years (47% vs. 32%, respectively, $p < .05$).

	COVID-19 Vaccination						χ^2
	Total (n=170)		Likely (n=68, 40%)		Unsure/ Unlikely (n=102, 60%)		
	n	(%)	n	(%)	n	(%)	
Age (M, SD, min-max)	(49.1,12.5,22-77)		(51.5,12.7,25-72)		(47.5,12.2,22-77)		4.62*
18-29	18	10.6	6	33.3	12	66.7	
30-39	30	17.6	11	36.7	19	63.3	
40-49	33	19.4	9	27.3	24	72.7	
50+	89	52.4	42	47.2	47	52.8	
Gender							3.58
Male	62	36.5	29	46.8	33	53.2	
Female	107	62.9	38	35.5	69	64.5	
Other	1	0.01	1	100.0	0	0.0	
Years in position							1.46
0-1	32	18.8	12	37.5	20	62.5	
1-3	55	32.4	21	38.2	34	61.8	
3-5	23	13.5	11	47.8	12	52.2	
5-10	29	17.1	10	34.5	19	65.5	
10+	31	18.2	14	45.2	17	54.8	
Department							3.90
Medical	34	20.0	15	44.1	19	55.9	
Behavioral Health	59	34.7	27	45.8	32	54.2	
Administration	40	23.5	15	37.5	25	62.5	
Clinic Administration	13	7.6	3	23.1	10	76.9	
Security	15	8.8	4	26.7	11	73.3	
Maintenance	9	5.3	4	44.4	5	55.6	
Union Classification							0.22
Non-Union	95	55.9	40	42.1	55	57.9	
Union Member	75	44.1	28	37.3	47	62.7	

* $p < .05$; ** $p < .01$; *** $p < .001$

Results

Factors that may impact vaccination decisions:

Vaccination receptivity was associated with perceived importance of vaccine safety & effectiveness, vaccine availability (on-site or at other agencies), vaccine availability to family, recommendations from medical professionals, and employer mandates to vaccinate (all $p < .05$).

COVID-19 Vaccination							
	Total (n=170)		Likely (n=68, 40%)		Unsure/ Unlikely (n=102, 60%)		
	n	(%)	n	(%)	n	(%)	χ^2
Protect Friends and Family	164	97	68	100	96	94	4.14*
Vaccine Safety	162	95	67	98	95	93	2.64
Vaccine Effectiveness	160	94	67	98	93	91	3.98*
Recommendations from Medical Professional	150	88	68	100.0	82	80	15.11***
Beliefs/Convictions	153	90	63	92	90	88	0.88
Available to Friends & Family	137	80	62	91	75	73	8.12**
Available Onsite	135	79	67	98	68	67	25.33***
Available at Other Agencies	124	73	63	93	61	60	22.30***
Employer Mandates	128	75	63	93	65	64	18.34***
With Lottery Ticket	74	44	39	57	35	34	8.81**

* $p < .05$; ** $p < .01$; *** $p < .001$

Conclusions

We sought to understand attitudes toward COVID vaccination among healthcare staff providing treatment for opioid use disorders.

Results of our survey found that:

- Overall, only 40% of staff indicated being likely to get vaccinated,
- Of the 68 staff members who indicated being likely to get vaccinated, 42 (62%) were medical and behavioral health staff.
- Among the factors we assessed, the majority reported that protecting one's family and friends and vaccine safety and effectiveness were extremely important in decisions to get vaccinated
- A greater percentage of staff 50 years of age or older indicated being likely to get vaccinated compared to younger staff, and
- Likelihood to get vaccinated was associated with perceived importance of vaccine safety, vaccine availability (on-site or at other agencies), vaccine availability to family, recommendations from medical professionals, and employer mandates to vaccinate (all $p < .05$)

Given that national public health efforts prioritize the OTP healthcare workforce and patients, it is critical to examine factors that are likely to impact decisions to get vaccinated among the OTP healthcare workforce.

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