



# Public Perception of Current COVID-19 Vaccinations. Results of a Pilot Survey

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# Background

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After its emergence in China, the COVID-19 pandemic has spread rapidly around the world. Over the past few months, a variety of vaccines have been issued to the public following FDA approval. Since their release, cases in the United States have gone down significantly. However, there is a long way to go until the eradication of the virus. There has also been a strong emergence of delta variants across the world, which (for the most part) can still be partially blocked by vaccines. This is why it is so important everyone gets a vaccine for COVID-19.

# Experimental Methods and Purpose

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This study was conducted by sending out a survey containing questions about COVID-19 and COVID-19 vaccinations. After compiling results from 250 individuals, there were tests which were conducted on the data in order to determine any correlations in the demographics of the respondents.

The purpose of this project was to determine the public's opinion of COVID-19 and the COVID-19 vaccines, while also determining correlation between different demographics and these opinions.

- Data divided into groups, although some may be intertwined

# Demographics

Variable	Description: n (%)	Vaccine willingness	Any Vaccination
Age	Median age 22, Range: 12-82 yrs	p: 0,4	p: 0,7
Gender	Male: 95 ( 38%) Female: 155 (62%)	<b>p: 0,014</b>	<b>p: 0,033</b>
Educational Status	Primary/Secondary: 16 (6,4%) Highschool/College: 118 (47,2%) University or higher: 116 (46,4%)	p: 0,37	p: 0,64
Occupation	Healthcare Professional: 27 (10,8) Non-Healthcare Professional: 65 (26%) Student: 127 (50,8) Unemployed: 20 (8%) Retired: 11 (4,4%)	p: 0,45	p: 0,17

# Demographics

Variable	Description: n (%)	Vaccine Willingness	Any Vaccination
Marital Status	Single: 152 (60,8%) Married: 98 (39,2)	p: 0,40	p: 0,64
Having Child/Children	Yes: 159 (63,6%) No: 91 (36,4%)	p: 0,53	p: 0,86
Living with an elderly or an individual with weak immune system	Yes: 52 (20,8%) No: 198 (79,2%)	p: 0,14	p: 0,10
Previous COVID-19 infection	Yes: 22 (8,8%) No: 228 (91,2%)	p: 0,086	<b>p: 0,022</b>

# COVID-19 Perceptions

Variable	Description: n (%)	Vaccine willingness	Any Vaccination
Are you worried about experiencing COVID-19?	Yes: 154 (61,6%) No: 96 (38,4%)	p: 0,35	p: 0,15
How did the COVID-19 pandemic affect your life?	Not: 5 (2%) Mild: 54 (21,6) Moderate: 149 (59,6) Severe: 42 (16,8)	p: 0,29	p: < 0,001
Do you believe that COVID-19 infection can cause blood clots?	Yes: 193 (77,2%) No: 57 (22,8%)	p: 0,59	p: 0,05
How concerned are you about the delta variant?	Not concerned: 13 (5,2%) Mild: 116 (46,4) Moderate: 76 (30,4) Severe: 43 (17,2)	p: 0,62	p: 0,018

# Vaccine Perceptions

Variable	Description: n (%)	Vaccine willingness	Any Vaccination
Do you believe the importance of having the COVID-19 vaccine to protect yourself?	Yes: 243 (97,2%) No: 7 (2,8%)	p: 0,31	p: 0,07
Do you believe the importance of having COVID-19 vaccine to protect others?	Yes: 247 (98,8%) No: 3 (1,2%)	p: <0,001	p: <0,001
Do you believe that you have enough information about the safety and efficacy of COVID-19 vaccines?	Yes: 208 (83,2%) No: 42 (16,8%)	p: 0,007	p: 0,003
Did you hear any news about the side effects after COVID-19 vaccinations?	Yes: 231 (92,4%) No: 19 (7,6%)	p: 0,94	p: 0,30

# Vaccine Willingness and Vaccinations

Variable	Description: n (%)
Are you willing/recommend to vaccinate against COVID-19?	Yes: 236 (94,4%) No: 14 (5,6%)
Have you ever received any vaccination against COVID-19?	Yes: 227 (90,8%) Unvaccinated: 23 (9,2%)
Which vaccine did you receive?	Pfizer : 158 (63,2%) Moderna: 64 (25,6%) Johnson & Johnson: 2 (0,8%) Others: 3 (1,2%) Unvaccinated: 23 (9,2)

# Vaccine Experience

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Variable	Description: n (%)
How many doses of vaccine did you receive?	None: 23 (9,2%) 1 dose: 16 (6,4%) 2 doses: 211 (84,4%)
Did you have any side effects after vaccination?	Allergic Reaction: 1 (0,4%) Local Reactions: 127 (50,8%) Systemic Reaction: 109 (43,6%) No Reaction: 59 (23,6%) Unvaccinated: 23 (9,2%)
How long did your symptoms last?	< 24 hrs: 73 (29,2%) 24-72 hrs: 83 (33,2%) >72 hrs: 12 (4,8%) No Reaction: 59 (23,6%) Unvaccinated: 23 (9,2%)

# Post-vaccine Perceptions

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Variable	Description: n (%)
After vaccination and CDC directives regarding masks, do you still prefer using masks in public places?	Yes: 193 (77,2%) No: 57 (22,8%)
Are you concerned about re-exposure to COVID-19 even after vaccination?	Yes: 172 (68,8%) No: 78 (31,2%)
If there is a third booster dose of the vaccine available will you consider taking it?	Yes: 235 (94%) No: 15 (6%)

# Univariate Analysis

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Factors	Vaccine Willingness	Any Vaccine
Gender	p: 0,014	p: 0,033
Previous COVID-19 infection	p: 0,086	p: 0,022
Do you believe the importance of having COVID-19 vaccine to protect others?	p: <0,001	p: <0,001
Do you believe that you have enough information about the safety and efficacy of COVID-19 vaccines?	p: 0,007	p: 0,003

# Univariate Analysis

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Factors	Vaccine Willingness	Any Vaccine
How did the COVID-19 pandemic affect your life?	p: 0,29	p: < 0,001
Do you believe that COVID-19 infection can cause blood clots?	p: 0,59	p: 0,05
How concerned are you about the delta variant?	p: 0,62	p: 0,018

# Multivariate Analysis

Factors	Vaccine Willingness	Any Vaccine
Do you believe the importance of having COVID-19 vaccine to protect others?	p: < 0,001	p: < 0,001
How did the COVID-19 pandemic affect your life?		p: 0,006
Do you believe that you have enough information about the safety and efficacy of COVID-19 vaccines?		0,004

# Conclusion

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There has been a significant amount of progress in the development of COVID-19 vaccines to prevent the spread of COVID-19. However, COVID-19 is still spreading in other countries at a fast rate. Therefore, we are planning to spread the survey to other areas in the next few months to gather more data on these other countries and their own variants.

# Thank You

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Any Questions?