Abstract Report: Assessing Compliance with Public Health Recommendations and Risk Perception During the Covid-19 Pandemic and Beyond

New York University

Global Health Disaster Preparedness and Response

Professor: Dr. Robyn Gershon

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Authors: Wanda Dikiy, Evanie Evra, and Jamie Epstein

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Objectives

The study aim is to evaluate the prevalence of COVID-19 among study participants, their compliance with public health guidance, including uptake of the COVID vaccine, risk perception, and behaviors around adherence with pre-vaccine measures, such as social distancing, masking, and crowd avoidance. Additionally, the survey seeks to understand participants' confidence in governmental preparedness for future pandemics.

Methods

A cross sectional survey was administered using an anonymous Qualtrics link. There were a total 37 participants in the study. Information regarding gender identity, age, educational attainment, and geography was collected to assess social and gender differences in COVID-19 diagnosis, vaccination status, and adherence to public health recommendations. Data was analyzed by employing descriptive statistics.

Results

Participant characteristics: 52% of survey participants were between ages 18-34 and 29% between 25-34, respondents identifying as women 71% and men 26% **(Figure 1)**. On educational attainment, 45% reported having a bachelor's degree, 23% a master's degree, 13% a doctoral degree, 10% an associate's degree, and 6% a high school diploma. 97% reported residing in the United States. However, geographical location varied and 15% of participants were from New York, 13% from New Jersey, 10% from Pennsylvania, and 10% from Texas.

Public health measures adherence: The prevalence of COVID-19 diagnosis among participants was 69%, with 50% having one known infection, 38% two known infections, and 13% three or more known infections **(Figure 2)**. Adherence to public health recommendations was high among the group, with 80-86% practicing social distancing, mask-wearing, and hand hygiene. Compliance with COVID-19 vaccination was high, with 91% reporting having had at least one dose of the vaccine.

Risk Perception: There were varying levels of concern about acquiring COVID-19 among respondents, with 23-29% reporting not being concerned, 9% extremely concerned, and 17-23% reporting moderate to somewhat concerned. In addition, 31-51% of participants had moderate to high levels of concern about the long-term effects of COVID-19. When asked about most trusted sources for health information, 53% answered their healthcare providers and 65% said it was the CDC. However, confidence in the government's preparedness for another pandemic was low, with 50% reporting no confidence. Moreover, participants were pessimistic about an individual's response to another pandemic, with 53% expressing low confidence. Lastly, respondents were asked to identify communicable diseases they view as the biggest threat to their health this year, 47% identified COVID-19, 6-19% identifying more known viruses, such as seasonal influenza, RSV and measles, and 19% reported not feeling threatened by any disease.

Discussion

The research revealed noteworthy adherence to public health recommendations and a substantial inclination for COVID-19 vaccination within the sampled population, indicating an overall favorable reception of measures to mitigate the pandemic. Conversely, the study also brought to light apprehensions regarding the effectiveness of governmental approaches in managing forthcoming health emergencies. A significant constraint identified was the small sample size, which might not provide an accurate representation of the attitudes and behaviors of the broader population. This could potentially distort the findings and result in prejudiced conclusions.

Conclusions

On the basis of the results, it is possible to infer that the general public adheres well to COVID-19 vaccination and health measures, indicating that public health communication is effective and that the public has faith in medical recommendations. Nevertheless, the skepticism surrounding the readiness of the government to handle forthcoming health crises indicates that public confidence in government actions must be strengthened. Further research, incorporating a larger and more diverse sample, would contribute to a broader understanding of the subject matter. Furthermore, an examination of the origins of doubt regarding the readiness of the government may provide valuable insights for developing approaches that improve public confidence and preparedness in the face of future pandemics.

Table 1. Demographics of Survey Respondents

Age	*n (%)*
18 - 24	9 (29%)
25 - 34	16 (52%)
35 - 44	2 (6%)
45 - 54	1 (3%)
55 - 64	3 (10%)
Race	
Asian	3 (10%)
Black or African American	8 (26%)
White	17 (55%)
Prefer not to answer	5 (16%)
Ethnicity	
Hispanic or Latino	4 (13%)
Not Hispanic or Latino	22 (71%)
Prefer not to answer	5 (16%)
Gender	
Man	8 (26%)
Woman	22 (71%)
Prefer not to answer	1 (3%)
Live in the U.S.?	
Yes	30 (97%)
No	1 (3%)
Education	
High School Diploma or GED	2 (6%)
Associate's Degree	3 (10%)
Bachelor's Degree	14 (45%)
Master's Degree	7 (23%)
Doctoral Degree or Equivalent (e.g., JD, DO, PhD)	4 (13%)
Prefer not to answer	1 (3%)

Table 2. COVID-19 Related Responses

Ever been diagnosed with COVID-19?	*n (%)*
Yes	25 (69%)
No	9 (29%)
Don't remember	16 (52%)

Times did you have a known infection with COVID-19?

One time	12 (50%)
Two times	9 (38%)
Three or more times	3 (13%)

Personally know anyone who was hospitalized due to infection with COVID-19?

Yes	24 (69%)
No	10 (29%)
Prefer not to answer	1 (3%)

Personally know anyone who died from COVID-19?

Yes	11 (31%)
No	22 (63%)
Don't remember	2 (6%)

Public health recommendations followed prior to COVID-19 vaccine?

Distanced from others	28 (80%)
Washed hands/Hand sanitizer after physical contact	30 (86%)
Wore face masks/coverings	29 (83%)
Avoided crowds	28 (80%)
Other	3 (9%)

Vaccinated with at least one dose of the COVID-19 vaccine?

Yes	32 (91%)
No	1 (3%)
Don't remember/Decline to answer	2 (6%)

Current concern about getting infected with COVID-19?

Not at all concerned	10 (29%)
Somewhat concerned	8 (23%)
Concerned	8 (23%)
Moderately concerned	6 (17%)
Extremely concerned	3 (9%)

Overall compliance with public health recommendations to limit the spread of COVID-19?

Excellent	5 (18%)
Above Average	13 (41%)
Average	12 (38%)
Below Average	2 (6%)

Current public health recommendations followed to protect from infection?

Distanced from others	4 (13%)
Washed hands/Hand sanitizer after physical contact	25 (78%)
Wore face masks/coverings	15 (47%)
Avoided crowds	7 (22%)
Received vaccine boosters	21 (66%)
Other	3 (9%)

Which of the following communicable diseases do you currently view as the biggest threat to your health in 2024?

COVID-19	15 (47%)
Ebola	2 (6%)
Measles	1 (3%)
RSV	2 (6%)
Seasonal Influenza (Flu)	6 (19%)
Not threatened	6 (19%)

Most trusted sources for public health information?

Healthcare provider	16 (53%)

Friends & family	6 (20%)
The CDC	19 (63%)
Local Public Health Department	10 (33%)
Personal social media and/or knowledge research	12 (40%)

How confident are you that the U.S. government is currently prepared for another pandemic?

Not at all confident	16 (50%)
Somewhat confident	13 (41%)
Confident	3 (9%)
Very confident & Extremely confident	

0 (0%)

How confident are you that individuals in the U.S. would take another pandemic seriously?

Not at all confident	17 (53%)
Somewhat confident	9 (28%)
Confident	4 (13%)
Very confident	2 (6%)
Extremely confident	0 (0%)