

Covid-19 Conspiracy Theories As Barriers To Controlling The Spread Of Covid-19 In The Arabic Communities

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Abstract

Background: COVID-19 pandemic has hit several life aspects around the world and in our regionin specific, which is related to several unique factors. Which is considered a genetic mutation of the viral group of SARS (severe acute respiratory syndrome), that is highly transmittable. The study aimed to investigate the level of hesitancy among Palestinian parents in the Arabic community regarding taking COVID-19 vaccination and most common socio-demographic factors that are related to vaccine hesitancy. Method: A cross-sectional quantitative design, Sampling was taken in a convenient method,as it is difficult to conduct a randomization sampling, the questionnaire contains three main parts. Closed-ended questions about the demographic data, questions about common beliefs about COVID-19 and its vaccine and questions about the associated factors with hesitancy to take the vaccine. Result: 60 participants, who were adult Palestinian parents, with a mean age of 38.13 years old,(61.7%) of the participants are willing to take the COVID-19 vaccine when available, while were asked about taking it if approved by the Ministry of Health (MoH), the percentage of participants who were not sure (16.7%). (48.3%) stated that they think they will not be infected with COVID-19 in the next months. participants showed more disagreement that the vaccine may be harmful or refused due to non-scientific factors. shows that the factors associated with hesitancy about COVID-19 vaccination are significantly associated with their residency, participants who already have been infected with COVID-19 didn't show a significant difference in their disagreement with scale items, shows that people who were not infected by COVID-19 in the past have more opinion they will not be infected in the future with a significant difference from those who were infected, showed that people who work in the first-line or medical job are willing to take the vaccine when available significantly more than people who don't work in first-line, with significantly more people who are not sure about taking the vaccine Conclusion: COVID-19 has affected many aspects of our lives, and despite the great fear duringthe first waves of the pandemic and waiting of the people that the vaccine be developed as soon as possible. It is recommended to conduct more studies to investigate more corresponding factors about why people ay hesitate to take the vaccine and establish health campaigns that encourage people to be vaccinated.

Introduction

The COVID-19 pandemic, also called the corona virus pandemic, is acurrent pandemic of corona virus disease 2019 (COVID-19). It is caused by severe acuterespiratory syndrome corona virus 2 (SARS-CoV-2).The outbreak started in Wuhan, Hubei, China, in December 2019. The World Health Organization (WHO) called it a pandemic on 11 March 2020. The International Committee on Taxonomy of Viruses gave the virus its name. As of February 19, 2021, more than 110 million cases of COVID-19 have been reported in more than 188 countries and territories.(Guo, Y. R., et al 2020).

Because this pandemic had such a large impact and burden on individuals and communities, efforts to find the best solution to combat this virus have increased, and the most promising solution is related to vaccination. The development of an effective and efficiently available vaccine for COVID-19 has been at its peak in recent months, but before speaking clearly about the vaccine's development, this decision was not taken lightly, because the debate during the initial stages and global waves of the pandemic was about the concept of community. Where acquired immunity against the virus may take several years and multiple waves for the population to acquire immunity, and where approximately 60% - 70% of the total population must be infected by the virus. From the beginning of vaccination development, hesitancy toward COVID-19 vaccination has been extensively researched in the literature, and it has several factors, and it differs between countries, and it

is also influenced by socioeconomic and demographic factors, as well as other factors related to the disease itself, such as level of knowledge and awareness about how to prevent the disease. (Sherman, S. M., et al, 2020).

1. Aim

To Investigate the level of hesitancy, most common socio-demographic factors that are related to COVID 19 vaccine hesitancy and correlation between socio- demographic and COVID-19-related factors and the hesitancy to take vaccine among Palestinian parents in the Arabic community.

2. Method

3.1 Design, sampling and setting:

A cross-sectional quantitative design. The study was conducted in the Arabic communities, with no specific setting, as it will be conducted on Palestinian parents from different cities and areas. Population includes all parents in the targeted regions, regardless to their gender, age, educational level, etc.

3.2 instrument and data collection:

Based on previous literature from Freeman et al. (2020), Fisher et al. (2020), and Salali and Uysal, a questionnaire was developed (2020). The questionnaire is divided into three sections. The first section includes closed-ended questions about the participants' demographic information, such as age, gender, educational level, residency, and so on. while the second part includes questions about common beliefs about COVID-19 and its vaccine (measured on a Likert scale), and the overall decision to take the vaccine when available (“yes”, “no”, or “not sure”), and the third part includes questions about the associated factors with hesitancy to take the vaccine, which includes factors related to health, opinions, governmental factors, and trust in the vaccine. Inclusion criteria include parents in Arabic community who are adults, regardless of residency, occupation, or educational level. Inclusion criteria include parents in Arabic community who are adults, regardless of residency, occupation, or educational level. Participants from outside the Arabic communities, as well as those with impaired psychological status or who refuse to participate in our study, were excluded.

3.3 Statistical analysis:

To describe and analyze data, the SPSS software on the Windows operating system was used. Descriptive results are divided into questionnaire parts and will include the frequency, mean, and standard deviation of all variables in the questionnaire.

Furthermore, inferential tests were used to investigate the relationship between independent and dependent variables in order to answer study questions and to test of hypothesis.

3.4 Ethical considerations:

After receiving ethical approval from the faculty of nursing at Arab American University / Palestine, a consent form was attached to the questionnaire, which included the purpose of the study, as well as statements ensuring anonymity and confidentiality of the collected data, that data will be used for research purposes only, and that the participant can withdraw from the study at any time without explaining why.

3. Results

Table 4.1 describes participants' attitudes toward COVID-19, as well as their knowledge of the disease and vaccination. The table shows that approximately two-thirds (61.7 percent) of the participants are willing to take the COVID-19 vaccine when it becomes available, but when asked if they would take it if approved by the Ministry of Health (MOH), the percentage of participants who were unsure (16.7 percent) increased to 18.3 percent who may or may not take the vaccine, with an additional 1.7 percent (one participant) who does not know. Finally, nearly half of the participants (48.3 percent) believe they will not become infected with COVID-19 in the coming months.

Table 4.1: Frequencies and percentages of participants' information regarding COVID-19 and its vaccine

Question	Answers	Freq.	%
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Will you take COVID-19 vaccine when available?	Yes	37	61.7%
	No	13	21.7%
	Not sure	10	16.7%
Will you take the vaccine if it was approved by Ministry of Health (MOH)?	Definitely yes	34	56.7%
	Mostly yes	5	8.3%
	May or may not	11	18.3%
	Mostly not	8	13.3%
	Definitely not	1	1.7%
	I don't know	1	1.7%

Do you think you will be infected with COVID-19 during the next months?	Not at all	29	48.3%
	May be infected with mild symptoms	17	28.3%
	May be infected with severe symptoms	6	10.0%
	I have already been infected	8	13.3%

Table 4.2: Distribution of participants' responses to factors of vaccine hesitancy

(1 = strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = strongly disagree)

Statement	1	2	3	4	5
1. I follow COVID-19 precautions and don't need vaccination	30	3	7	14	6
2. COVID-19 vaccination may cause severe harm for people	31	7	10	12	0
3. Information about the vaccine is fake to force us to take it	30	15	9	5	1
4. Governments receive money for forcing people to vaccinate	24	20	10	6	0
5. My worry is caused by vaccine's side effects	19	8	8	14	11
6. My worry is due to need for more information about vaccine	16	6	5	24	9
7. My worry is due to religious factor	46	7	3	4	0
8. My worry is that vaccine won't protect me from COVID-19	6	13	20	17	4

9. My worry is due to mistrust of medical and health sector	9	10	20	19	2
10. My worry is due to my fear from needles	18	14	4	22	2
11. My worry is due to my belief vaccines are not effective	12	15	7	23	3

Table 4.2 summarizes participants' responses to COVID-19 vaccination hesitancy factors. In general, participants were more likely to disagree that the vaccine could be harmful or to refuse it due to non-scientific reasons. More specifically, more than half of the participants disagree that they take COVID-19 preventive measures and thus do not require the vaccination. Moreover, similar percentage of participants disagree that it may cause harm to people or that information provided about the vaccine is fake to force people to take it. Less percentage strongly disagree that governments receive incentives for forcing people to take the vaccine.

The study shows that the factors associated with COVID-19 vaccination hesitancy are significantly related to their residency (urban participants disagreed more about the scale, p -value = 0.016), working in first-line (p -value = 0.009), and willingness to take the vaccine when available (p -value 0.001). and whether they believe they will be infected in the coming months (participants who believe they may be infected or have already been infected disagreed more with the scale items, p -value = 0.046). Surprisingly, participants who had previously been infected with COVID-19 did not differ significantly in their disagreement with scale items (p -value = 0.086)

Table 4.3 Correlation between working in first-line and the willing to take vaccine

Working in first-line	Willing to take the vaccine			p-value
	Yes	No	Not sure	
Yes	26	6	1	0.002
No	11	7	9	

The table was used to look into additional correlations between variables related to participants. The table revealed that people working in first-line or medical jobs are significantly more willing to take the vaccine when it is available than people who do not work in first-line, with significantly more people who are unsure about taking the vaccine among non-medical or first-line workers (p -value = 0.002).

4. Discussion

The American study by Fischer et al. (2020) concluded that 57.6 percent of participants are willing to take the vaccine when it becomes available, compared to a slightly higher percentage in our sample (61.7 percent), with a higher percentage of participants who are unsure in the previous study (31.6 percent) compared to our findings (16.7 percent). Our findings show that 48.3 percent of participants believe they will not catch the virus in the coming months (compared to 64.1 percent in the previous study), 28.3 percent will experience mild symptoms and 10 percent will experience severe symptoms if infected (compared to 27.1 percent and 6 percent in the previous study, respectively), and 13.3 percent have already been virus compare the previous study.

The previous study also found no significant difference in willingness to take the vaccine based on their prediction of being infected in the coming months (p -value = 0.076), which contradicts our findings, which show that people who predict they will not be infected are less willing to be vaccinated (p -value = 0.046). The British study of Sherman et al. (2020) discovered that the mean score for fear of contracting the virus is 6.24 out of 10 (62.4 percent), compared to 48.3 percent of our participants who believed they would not contract the virus in the coming months. Also, the previous study stated that the mean score of their belief that they will get mild symptoms is 4.35 out of 10 (43.5 percent), compared to 28.3 percent in our study, and the difference in this category could be related to the difference in time point between July, 2020 in the previous study and

December, 2020 to January, 2021 in our study, where people's belief that they will catch the virus decreases by 4%.

There was a difference in questioning about perceived risk of COVID-19 between our study and the French study of Detoc et al. (2020), by which our study included a multiple-choice question about the participant's guess to be infected during the next months, while previous study asked about fearing from the current situation of the pandemic and fear from being infected. In comparison, perceived risk of being infected is higher among the French sample, where 19.8% are afraid a lot and 45.4% are a little afraid, while in our study, 10% are afraid from getting severe symptoms and 28.3% are afraid from getting severe symptoms of the disease.

5. Conclusion

COVID-19 has had an impact on many aspects of our lives, and despite the widespread fear during the first waves of the pandemic and the people's desire for a vaccine to be developed as soon as possible, literature has revealed several findings about people's reluctance to take the future vaccine when it becomes available. Several studies have found various risk factors associated with hesitation, so we set out to investigate the willingness/hesitation of Palestinian adults to receive the COVID-19 vaccine, as well as the most common risk factors associated with hesitation.

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