

# **COVID-19 Vaccine Acceptance and Correlated Variables among Social Workers in Egypt: Implication for Social Work**

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## Abstract

With the increasing number of victims and people infected with the emerging coronavirus across the world, and with the increasing health, social and economic repercussions left by the emerging coronavirus for all countries, it was important to find a way to stop or mitigate those repercussions left by the virus. Therefore, many companies around the world have developed vaccines for the virus as a mechanism to reduce the damage associated with the spread of the epidemic; however, visions have varied towards accepting or rejecting the Covid-19 vaccine as a result of the lack of prediction of the effectiveness of these vaccines in dealing with this epidemic.

This study attempts to investigate the acceptance of COVID-19 vaccination among social workers in Egypt, and it also identifies the relationship between some study variables and the acceptance of doses of the emerging coronavirus vaccine. An online survey was conducted using a scale of a non-probability snowball sampling technique. A total of 93 responses were received.

Findings indicated that (83.9%) of the study sample agreed to accept doses of the emerging coronavirus vaccine. The results of the study also proved the validity of the three hypotheses of the study.

The study suggested a set of strategies that could enhance the roles of social workers towards encouraging Egyptian citizens to take the Covid-19 vaccine

**Keywords:** SARS-CoV-2- COVID-19 Vaccination- Egyptian Social Workers.

## INTRODUCTION

In mid-November 2019, it was reported that one of the viral strains, which at that time was called the emerging coronavirus (COVID-19), appeared for the first time in a seafood market in Wuhan, Hubei Province, in the center-east of China. Because of this epidemic, the suffering spread across the world. Billions of lives have been disrupted. The global economy was threatened. Many social problems and issues related to this epidemic have emerged (Mundau & Nyoni, 2020).

The COVID-19 pandemic has been considered the largest global health and social crisis of the twenty-first century. It caused grave and unfortunate repercussions on the lives of many individuals across the world. The spread of the epidemic has led to unintended and devastating social and economic repercussions for individuals, families, and societies. Weak population groups including children,

women, people with disabilities, and the elderly suffered from the impacts of this virulent epidemic (Khalaf & Helal, 2022).

This epidemic has changed all the procedures related to people's lives dramatically. Many people have suffered from enrolling their families to hospitals in order to receive treatment, or because of the death of a family member as a result of infection. Many people have lost their income due to the closure procedures and the economic recession associated with it, in addition to the repercussions associated with it. They suffered from feelings of fear of this disease, of the social isolation, and the psychological, mental, and social problems caused by the pandemic (Helal, 2022).

With the increasing number of victims and people infected with this virus, which reached at the beginning of April 2022, according to the WHO Coronavirus (COVID-19) Dashboard statistics, to about (486,761,597 confirmed cases) and (6,142,735 deaths) at the time of writing this research., It was crucial to raise the awareness of all citizens around the world with respect to the importance of taking the COVID-19 vaccine (WHO, 2022a).

Despite global efforts to contain the disease such as physical distancing measures, wearing face masks, washing hands constantly, placing travel restrictions, and quarantine measures, the spread of the disease is still increasing. This made countries move forward in discovering effective vaccines to deal with the disease. Those vaccines have been proven to prevent disease and save lives over time (Elkhayat et al., 2021).

The real beginnings of the emergence of coronavirus vaccines go back to the end of 2020. In this time, many companies appeared and developed a vaccine to deal with Covid-19. Several types of vaccines were distributed across the world. Those vaccines had effectiveness that varied from 70.4% to 95% (Ferbeyre, et al., 2020).

As the world confronts the COVID-19 pandemic, WHO and its partners have worked together to respond to the pandemic – by tracking it. They were advising on critical responses and distributing vital medical supplies to those who need them. They were racing against time to develop and deploy safe and effective vaccines. Vaccines save millions of lives annually and prevent the prevail of the disease. On January 12, 2022, evaluations by the World Health Organization indicated that a group of vaccines against COVID-19 met the necessary standards for safety and efficacy. These vaccines are: AstraZeneca/Oxford vaccine, Johnson and Johnson, Moderna,

Pfizer/BionTech, Sinopharm, Sinovac, COVAXIN, Covovax, and Nuvaxovid) (WHO, 2022b).

With the increasing spread of viral mutants of the emerging Covid-19, (i.e., Alpha, Beta, Gamma, and Delta mutants, and then Omicrons), voices have called for an increase in the total rate of vaccination of citizens as an effective strategy in dealing with the repercussions and effects of epidemics and with the confirmed importance of taking vaccines for people's lives. Yet, there is still a discrepancy among citizens regarding whether to take the vaccine or not (Zivot & Jabaly, 2022).

Several studies have been conducted related to individuals' attitudes towards taking the COVID-19 vaccine. The Rogers 2022 study, which attempted to determine the trends of workers in homeless care institutions in Washington toward accepting and rejecting the emerging coronavirus vaccine, indicated that there was no significant trend toward acceptance. Strong disparities were noted in vaccine intent based on race, education, and previous vaccine history. (Rogers et al., 2022)

The results of Myers et al. (2022) study indicated that concern about COVID-19 vaccines was the most important indicator of reluctance to take it. The study recommended that public health messages should clarify the importance of vaccines and the dangers of not taking the vaccine as one of the strategies used to reduce reluctance and increase vaccine intake (Myers et al., 2022). Zhou et al. explained the reluctance of the study sample to accept COVID-19 vaccines. The presence of the elderly as well as children at home affected participants' willingness to receive the vaccine (Zhou et al., 2021). While Zahid & Alsayb (2021) attempted to assess the knowledge and attitude towards vaccination against COVID-19 in the Kingdom of Saudi Arabia, the results showed that the overall acceptance rate of the vaccine was 79%. The participants who have been vaccinated or intended to receive the vaccine stated that COVID-19 infection is dangerous, and that the vaccine is safe. They also had confidence in the government's decisions. They had a sense of responsibility to stop the pandemic (Zahid & Alsayb, 2021).

The results of Si et al.'s study showed that gender, age, education level, occupational risk, awareness of individual health risks, awareness of public health risks, social responsibility, peer influence, and government oversight are the main drivers for accepting the new COVID-19 vaccine (Si et al., 2021). Wiysonge et

al. (2021) argued that unwillingness or reluctance to receive vaccines, when immunization services are available and accessible, is one of the greatest threats to global health. Reluctance to take the COVID-19 vaccine will pose significant risks to those who delay or refuse vaccination as this affects the wider community. The epidemic will continue and result in indescribable sufferings and deaths. The results of this study recommended the need for researchers and decision makers to investigate the size, determinants and factors associated with hesitation in taking the vaccine everywhere. Tailored and targeted strategies can be developed to deal with it (Wiysonge et al., 2021).

In December 2020, Egypt began receiving shipments of vaccines against the emerging coronavirus. The Egyptian Ministry of Health gave priority to taking the COVID-19 vaccine for three categories, namely: (A) medical staff working in quarantine, chest and fever hospitals, (B) patients with chronic diseases, patients with cancer, kidney and immune problems, and the elderly, and finally (C) all citizens over the age of 18 years. The Egyptian state has adopted a strategy to vaccinate 40% of its citizens by the end of 2021 AD (Saied et al., 2021).

Like all other countries, Egypt faced resistance to the COVID-19 vaccine, represented by the reluctance of some citizens to receive the COVID-19 vaccine. This required the attention of all professions in society in dealing with the reasons leading to this reluctance -. One of those professions is that of social work. whose role is pivotal in educating people about the importance of taking the COVID-19 vaccine and increasing awareness of the inherent risk of hesitating to vaccinate, which represents a major threat to public health in society. According to NASW ethical principles, social workers are obligated, during this time of the pandemic, to take all the possible steps to protect clients, colleagues, and the larger community. By determining the trends of Egyptian social workers in accepting or rejecting the novel coronavirus vaccine, understanding the reasons behind this reluctance may help in developing strategies to encourage COVID-19 vaccination (NASW, 2021).

## **THEORETICAL FRAMEWORK**

Social workers, like many health and behavioral professionals, are concerned about the impact of COVID-19 on their well-being, the people they serve, their families, and others in the community. Social work professional organizations have worked on multiple fronts to

prevent the spread of COVID- 19 and ensure access to services, such as telemedicine. They strengthen disease prevention efforts (including publishing accurate information from reliable sources) and help address anxiety and other concerns that arise as a result of this pandemic, in addition to their key roles in raising awareness of the importance of taking the COVID-19 vaccine. On February 8, 2021, NASW held a workshop entitled Do We Have Lines in this Play? They wondered about the role of social work in the deployment of the COVID-19 vaccine. We must ask if social workers can have a few lines in the story of the COVID-19 vaccine. We should define the roles of social workers in the vaccination issue. Social workers must become aware of COVID-19 vaccine realities and myths and must consider and reconcile their internal concerns about receiving a COVID-19 vaccine (NASW, 2021). The role of social workers in the issue of vaccination can be mentioned in the following points (NSCSW, 2022; Lipschutz, 2022):

- (1) Debunking Vaccine Misinformation: Given the commitment of social work to the public good, it is expected that social workers will not be involved in the dissemination of misinformation, and that they make full use of evidence-based information developed by public health experts and researchers from around the world. In addition, they help indicate that vaccines are safe and effective by demonstrating that the risk of not being vaccinated is much greater than the very small risk of any potentially dangerous side effects associated with the vaccine.
- (2) Sharing their vaccination status with clients: Social workers are strongly encouraged to work with their clients to understand existing safety protocols. Therefore, social workers are encouraged to share their vaccination status with clients as a kind of encouragement to take the COVID-19 vaccine.
- (3) Advocacy: Advocacy is fundamental to the practice of social work and is essential during an epidemic. Every social worker is expected to be an advocate for their clients, especially those who do not have access to a vaccine.
- (4) Education: Social workers should be aware of the current research findings, recommendations and guidelines related to vaccine safety, and encourage clients to take the vaccine, bearing in mind the right of clients to be fully informed of all benefits and risks associated with taking the COVID-19 vaccine. This aims to provide informed consent when they take the vaccine.

(5) Providing clients with the right sources of information: Social workers should provide clients with access to clear information about potential risks and how to overcome or manage them, as well as information about the value and benefits of vaccination from the right sources.

### **The Importance of Getting the COVID-19 Vaccine**

Many reports from health organizations around the world have indicated that vaccines save millions of lives annually. The development of safe and effective vaccines against Covid-19 was a major step forward towards ending the pandemic and resuming life activities that were interrupted by the pandemic.

The World Health Organization has indicated that the importance of getting a vaccine in saving people's lives for vaccines provide strong protection against serious illness, hospitalization, and death. There is also some evidence that getting vaccinated reduces the possibility of transmitting the virus to others (WHO, 2021).

The Egyptian Ministry of Health and Population has indicated that vaccination is a simple, safe and effective way to prevent diseases because it stimulates the body to resist certain infections and strengthen the immune system by training the immune system to form antibodies. Considering the speed and ease of the spread of the coronavirus "Covid-19" and its infection of the majority of the world's population, the importance of this vaccine lies in protecting the body by preventing or controlling infection. The vaccine will also allow lifting travel bans in some countries, easing social distancing and thus, gradually returning to normal life (The Ministry of Health and Population, 2022)

Thunstrom et al. (2021) explained that decreasing the spread of the Covid-19 virus depends on the distribution of the vaccine among the population. This is because getting the vaccine to a sufficient extent leads to the generation of herd immunity (a scenario in which most people are immune to the virus), which prevents the virus from spreading among the population (Thunstrom et al., 2021).

With the increase of the infections and the deaths because of the new coronavirus, the launch of vaccination against the virus was an inevitable priority for public health due to its effectiveness in mitigating the spread of the epidemic. The World Health Organization has ranked vaccine frequency as one of the top ten global health threats in 2020 (Wong et al., 2021).

It is clear from the previous presentation that the decision of social workers to accept getting the vaccine protects the clients they deal with from the spread of the virus, whether from the side of the client's social worker or from the client's side to the social worker.

### **PURPOSE OF THE STUDY**

This cross-sectional study seeks to determine the social workers' attitudes towards accepting the COVID-19 vaccination in Egypt. It also aims to determine the relationship between some of the demographic characteristics of social workers in social work settings and the acceptance of COVID-19 vaccination.

### **STUDY HYPOTHESES**

The current study attempts to test the following hypothesis:

1. There is a statistically significant correlation between the gender variable and receiving the dose of covid-19 vaccination among a sample of Egyptian social workers.
2. There is a statistically significant correlation between the residence variable and receiving the dose of covid-19 vaccination among a sample of Egyptian social workers.
3. There is a statistically significant correlation between the social status variable and receiving the dose of covid-19 vaccination among a sample of Egyptian social workers.

### **METHOD**

#### **Study participants and Design:**

The current study is part of a cross-sectional study designed to assess the relationship between some of the demographic characteristics of Egyptian social workers and the acceptance of COVID-19 vaccination. Sampling: A snowball sampling was utilized. A total of 93 participants responded.

#### **Data Collection Procedure and Ethical Considerations:**

An online measurement has been developed using Google forms with an annex of informed consent form attached. The survey link was sent through emails, WhatsApp, and other social media websites (Facebook and Twitter) to the participants' contacts. Participants were encouraged to publish the survey to as many social workers as possible. When the participants receive the link and click on it, they automatically obtain information about the study and the informed consent. After they accepted the survey, they filled out demographic details, and then a set of questions, which participants had to answer, appeared consecutively. IP address restriction technology was used to ensure that users with the same IP address could only complete the questionnaire once.

## **MEASUREMENT INSTRUMENT:**

The researchers relied on a questionnaire to collect data. This tool was prepared for the assessment of the attitudes of social workers for receiving or refusing to receive the dose of covid-19 vaccination. This questionnaire contains 18 items. The participants indicate their level of agreement with the statements using a five-item-Likert-type-scale. Answers included “strongly disagree, disagree, neither agree nor disagree, agree, and strongly agree”. The minimum score possible for each question is 1, and the maximum is 5. The final instrument was reviewed for content validity by five social work professors with expertise in this area in order to assure that the survey content was appropriate. Cronbach’s alpha was used to calculate the internal consistency of the measurement scale. From the statistical analysis, it can be concluded that the instrument was reliable as a score of 89.1% was obtained for the items. This indicates high internal consistency coefficients, as well as high and sufficient indicators of validity that can be trusted in applying the current study.

## **SAMPLE CHARACTERISTICS:**

Analysis of demographic information revealed that study participants had a mean age of the participants (n = 93) was 38.42 years (SD± 6.886), (Table 1). Most participants (33 respondents) reported 30 to 35 years as their age (35.5 percent); 27 respondents (29.0 percent) reported being 35 to 40 years; 10 respondents (10.8 percent) reported being between ages 40 and 45; 13 respondents (14.6 percent) reported being 45 to 50; 6 respondents (6.5 percent) reported being 50 to 55; and 4 respondents (4.3 percent) reported being 55 years or more. Most of the participants were males (n = 60; 64.5%) and (n = 33; 35.5%) were females. More than half of the participants (n = 67; 72.0.0%) reported an urban area as their residence; (n = 16; 17.2%) reported a rural area, and (n = 10; 10.8.0%) reported a rural/urban area. Most of the participants (n = 65; 69.9%) reported “married” as their social status; (n = 15; 16.1%) reported “single”; (n = 8; 8.6 %) reported “divorced”; and (n = 5; 5.4 %) reported “widowed”. More than half of the participants reported 8 years or more (n = 48; 51.6 %) as their years of experience; (n = 24; 25.8 %) reported 5-8 years of experience; (n = 13; 14.0%) reported 3-5 years of experience, and (n = 8; 8.6 %) reported less than 3 years of experience. Most participants (n = 35; 37.6.0%) reported medical social work as their social work setting; (n= 29; 31.2%) reported school social work setting; (n= 7; 7.5%) reported social work in NGOs

and family social work setting; (n= 6: 6.5%) reported social work in social aid setting; (n= 4: 4.3%) reported social work in youth care setting; (n= 2: 2.2%) reported social work in addiction setting and social work in social defense setting; and (n= 1: 1.1%) reported social work with elderly people setting. Most participants (n = 39; 41.9%) reported 3 - 5 as their number of family members; (n = 37; 39.8%) reported 5-7; (n = 11; 11.8%) reported 7 family members or more; and (n = 6; 6.5%) reported less than 3 family members.

**Table (1) Demographic characteristics of the participants (n =93)**

<b>Demographic</b>	<b>Frequency</b>	<b>Percentage</b>	<b>Mean</b>	<b>SD</b>
<b>Age</b>			<b>38.42</b>	<b>6.886</b>
<b>30 - 35</b>	<b>33</b>	<b>35.5</b>		
<b>35 - 40</b>	<b>27</b>	<b>29.0</b>		
<b>40 - 45</b>	<b>10</b>	<b>10.8</b>		
<b>45 - 50</b>	<b>13</b>	<b>14.0</b>		
<b>50 - 55</b>	<b>6</b>	<b>6.5</b>		
<b>55 +</b>	<b>4</b>	<b>4.3</b>		
<b>Gender</b>				
<b>Male</b>	<b>60</b>	<b>64.5</b>		
<b>Female</b>	<b>33</b>	<b>35.5</b>		
<b>Residence</b>				
<b>Rural</b>	<b>16</b>	<b>17.2</b>		
<b>Urban</b>	<b>67</b>	<b>72.0</b>		
<b>Rural/Urban</b>	<b>10</b>	<b>10.8</b>		
<b>Social Status</b>				
<b>Single</b>	<b>15</b>	<b>16.1</b>		
<b>Married</b>	<b>65</b>	<b>69.9</b>		
<b>divorced</b>	<b>8</b>	<b>8.6</b>		
<b>widowed</b>	<b>5</b>	<b>5.4</b>		
<b>Years of experience</b>				
<b>Less than 3 years</b>	<b>8</b>	<b>8.6</b>		
<b>3 - 5</b>	<b>13</b>	<b>14.0</b>		
<b>5 - 8</b>	<b>24</b>	<b>25.8</b>		
<b>8 +</b>	<b>48</b>	<b>51.6</b>		
<b>Social work settings</b>				
<b>School Social work setting.</b>	<b>29</b>	<b>31.2</b>		
<b>Medical Social work setting.</b>	<b>35</b>	<b>37.6</b>		
<b>Social work in addiction setting.</b>	<b>2</b>	<b>2.2</b>		

Social work in youth care setting.	4	4.3		
Social work in NGOs setting.	7	7.5		
Social work with elderly people setting.	1	1.1		
Social work in social defense setting.	2	2.2		
Social work in social aid setting.	6	6.5		
Family Social work setting.	7	7.5		
Number of family members			5.12	1.955
Less than 3	6	6.5		
3 - 5	39	41.9		
5 - 7	37	39.8		
7 +	11	11.8		

### Results of the First Hypothesis of the Study

Table (2) the relationship between gender (male and female) and taking the COVID-19 vaccine (n =93)

Already take the vaccine	Sex		Total	Chi-Square		
	Male	Female		Value	df	Sig
Yes	54 (58.1%)	24 (25.8%)	78 (83.9%)	4.696	1	0.030
No	6 (6.5%)	9 (9.7%)	15 (16.1%)			
Total	60 (64.5%)	33 (35.5%)	93 (100.0%)			

It is clear from the previous table the extent to which there is a correlation between the type and the intake of the Corona vaccine. It was found that the percentage of social workers who had already taken the vaccine increased to (83.9%), the percentage of males increased to (58.1%), the value of (Ka2) reached (4.696) and the significance value is less than (0.05). This reflects the existence of a relationship correlation between sex and vaccination. It shows that male social workers had a greater tendency to take the vaccine than females, and accordingly the validity of the first hypothesis is confirmed, which is: "There is a correlation between gender and vaccination".

### Results of the Second Hypothesis of the Study

Already take the vaccine	Residence			Total	Chi-Square		
	Rural	Urban	Rural/Urban		Value	df	Sig
Yes	8 (8.6%)	65 (69.9%)	5 (5.4%)	78 (83.9%)	39.426	2	0.000
No	8 (8.6%)	2 (2.2%)	5 (5.4%)	15 (16.1%)			
Total	16 (17.2%)	67 (72.0%)	10 (10.8%)	93 (100.0%)			

The previous table demonstrates the extent of correlation between residence and taking the Corona vaccine. There is an increase in the proportion of social workers who have already taken the vaccine, according to the variable of residence, to (83.9%). The percentage of social workers living in urban areas who have already received the vaccine increased to reach (69.9%), and the (Ka2) value has reached (39.426). The significance value is smaller than (0.05), which reflects that urban social workers' have sufficient awareness to receive the vaccine as an attempt to confront the virus and take precautions not to be infected with the virus in the light of awareness, preservation of health and not contracting the disease, whether this is a personal orientation or a trend in the context of the state's direction not to spread the virus. Accordingly, the validity of the second hypothesis is confirmed, which states: "There is a correlation between the place of residence and the intake of the vaccine"

### Results of the Third Hypothesis of the Study

Already take the vaccine	Social Status				Total	Chi-Square		
	Single	Married	Single	Married		Value	df	Sig
Yes	12 (12.9%)	57 (61.3%)	7 (7.5%)	2 (2.2%)	78 (83.9%)	8.060	3	0.045
No	3 (3.2%)	8 (8.6%)	1 (1.1%)	3 (3.2%)	15 (16.1%)			
Total	15 (16.1%)	65 (69.9%)	8 (8.6%)	5 (5.4%)	93 (100.0%)			

It is clear from the previous table regarding the extent of a correlation between social status and the actual taking of the Corona vaccine that the percentage of social workers who have already taken

the vaccine, according to the variable of marital status, increased to (83.9%). It was found that the percentage of married social workers who have already received the vaccine increased to (61.3%), the value of (Ka2) reached (8.060), and the significance value is smaller from (0.05), which reflects that married social workers were the most eager to take the vaccine. This may be due to their fear for themselves and their children getting infected with the virus. Hence, the validity of the third hypothesis is confirmed, which states: "There is a correlation between social status and vaccination".

### **Discussion**

Many epidemiological literatures indicated that one of the most prominent efforts that help people avoid the risks caused by epidemics is to take vaccines. However, there is an increase in anti-vaccine opinions against the emerging coronavirus, which affects the global epidemiological situation. Not taking the vaccine means an increase in infection with the virus. This in turn may lead to deaths among those infected, and perhaps this was indicated by Dyda et al. (2020). He explained that, according to the historical development in response to epidemics, there is reluctance to take the vaccine.

For example, in 2009, although a vaccine against H1N1 was introduced before or at the beginning of the second pandemic wave, vaccination rates were lower than expected, with population coverage ranging from 0.4 to 59% in 22 countries. The weak uptake of available vaccination for high-risk infections is called "pandemic public health paradox". It is a situation in which citizens are reluctant to take a vaccine (i.e., withholding or refusing to vaccinate despite the availability of vaccines) (Dyda et al., 2020). Thus, the reluctance to take the vaccine has become a major problem that requires attention from all scientific disciplines, so this study attempted to bridge the research gap related to the role of social service in the issue of dealing with the emerging coronavirus vaccines.

To the best of our knowledge, our study is the first to focus on the issue of immunization for social workers in Egypt.

The results of the current study showed the validity of the first hypothesis of the study and the existence of a correlation between the variable of sex and the intake of social workers of the coronavirus vaccine doses. The results indicated that male social workers had a greater tendency to take the vaccine than females, perhaps since they are more out of the house and more likely to be exposed to infection than females.

The results of this study agreed with the study of Czajka et al. (2020), which indicated that one of the reasons people took the new coronavirus vaccine is the level of education, with older, better-educated participants and those with children showing more positive attitudes about vaccinations (Czajka et al., 2020).

The results of the study showed that urban social workers have sufficient awareness to receive the vaccine as an attempt to confront the virus and take precautions not to contract the disease, whether it is a personal approach or an orientation in the context of the state's direction not to spread the virus and to try to control it. In addition, the vaccines are available in urban areas more than in rural areas. Accordingly, the validity of the second hypothesis is confirmed. It states that there is a correlation between the place of residence and the intake of the vaccine

The study also indicates that there is a statistically significant relationship between social status and receiving the dose of covid-19 vaccination among a sample of Egyptians social workers.

The percentage of married social workers who were already vaccinated increased. This reflects that married social workers were the most eager to receive the vaccine. This may be due to their fear for themselves and their children from contracting the virus. Accordingly, the validity of the third hypothesis is confirmed. It states that there is a correlation between social status and vaccination.

This finding is consistent with Du et al.'s (2020) study which indicates that one of the factors associated with the acceptance of the vaccine is marital status as well as confidence in the safety of the vaccine (Du et al., 2020).

### **STUDY LIMITATIONS**

There are clear limitations to this study. Our study is limited to the social workers who had smartphones, Facebook, and Twitter accounts. This represents some of the social workers, so it should not be generalized to the whole class of Egyptian social workers. Larger samples may provide different results. Therefore, caution is advised before assuming the generalizability of the results.

### **IMPLICATIONS FOR SOCIAL WORK PRACTIC**

The rates of infection and death caused by the coronavirus have disproportionately affected all groups in the Egyptian society. The understanding of the differences in hesitation regarding the acceptance or rejection of the vaccine is important for developing effective strategies to mitigate the risks of infection with the emerging coronavirus. Because of the important role that social service plays in this issue, this study was conducted. Considering the study results, we recommend the following:

1. Social workers should appeal to community members to reduce viewing and reading the bad news related to COVID-19 vaccine. This information may prevent people from receiving their doses of the vaccine. Instead, they should request information related to COVID-19 from valid sources, especially from the World Health Organization (WHO) and reputable journals.
2. The role of social work should be included in dealing with epidemics in social work educational curriculums at both undergraduate and graduate levels in addition to the continuous education programs.
3. A series of training courses should be created for social work students in all social work education phases with the purpose of responding to COVID-19 effects within a professional social work setting. The content of these training courses should include parts related to the importance of receiving doses of the COVID-19 vaccine.
4. Future studies on COVID-19 vaccine in social work practice settings must be conducted out.

## CONCLUSION

In short, this study found that there is a high percentage of social workers who accepted doses of the emerging coronavirus vaccine. We found that there is a significant relationship with statistical significance between each of the variables (gender, marital status, and place of residence) and the acceptance of taking the dose of the emerging coronavirus vaccine. There is a need to conduct more studies concerned with the role of social service in dealing with the issue of hesitation in taking the vaccine, specifically studying the effectiveness of some therapeutic models in dealing with misconceptions associated with taking the vaccine.

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