

Awareness of COVID-19 Infection among Population of Salah Al-Din: A Cross-Sectional Study

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Abstract: Communicable diseases remain a public health concern around the world, especially after the recent Covid-19 emergency. Therefore, this study was conducted in order to assess people's awareness of the infection with the emerging corona virus. In this cross-sectional study, 350 adults from different regions of Salah al-Din Governorate were included through a written questionnaire. They answered the eight questions asked in the survey paper, which were about some important facts about the coronavirus. The results proved that (68%) of the participants in the study had infected with covid-19, and that most of them had died in their relatives. Thus, most of them (92%) were aware of the risk of this emerging virus. About 86% of them had received vaccination against this infection, and (72%) of them were aware of the benefit of the vaccine in preventing infection. A reasonable percentage (65%) of them was following the disease update. Nevertheless, the majority of individuals (90%) were knowledge of procedures to avoid infection. Thus, this study concluded that the majority of participants are aware of the important facts of Covid-19 and there is little need for them to be more aware of them.

Keywords: public health, covid-19, vaccination, infection.

Introduction

Corona virus disease 2019 (Covid-19) is caused by infection with a virus belonging to the RNA family, which is basically a zoonotic virus that it infects animals and is transmitted to humans as well as can spread between people through direct or indirect contact [1-3]. Although this infection begins as mild illness, it can cause death in critical cases [4]. Symptoms of corona appear within 14 days, ranging from mild to severe fever, dry cough, nosebleeds, shortness of breath, and sometimes death [5,6]. The mortality rate from this pandemic is very low, however, deaths are due to a weak immune system, so elderly, children and pregnant women are more susceptible to infection. On the other hand, people who have a strong immune system are protected from this infection [7,8]. This infection affects people from all over the world, and it started with people in China as a result of contact with undercooked meat in an animal market and then spread quickly among people [9,10]. At the beginning of the outbreak of this pandemic many people in the world were dying, so governments in every country were taking steps to prevent its spread [11]. In Iraq, several measures have been taken to stop its spread, including avoiding public gatherings and marriages, or even social gatherings. In addition to intensifying infection awareness campaigns in the media and even social media, so that every individual can protect himself from infection. Therefore, the purpose of this study was to assess awareness of Covid-19 infection among the general public in Salah al-Din Governorate in Iraq.

Methodology

In this cross-sectional study, 350 adults from different regions of Salah al-Din Governorate in Iraq, during the period between February 2021 and June 2022, were participated. The approval of the local health director was obtained to conduct the study, and written consent was obtained from each participant. The study included both genders, as the males reached 200 (57%) compared to 150 (43%) females. As for the ages, the lowest age was 19 years and the largest age was 64 years old. All individuals answered and filled out the questionnaire sheets. The questionnaire included the following questions:

- 1- Have you been infected with Covid-19 infection?
- 2- Have any of your relatives died from the Covid-19?
- 3- Do you think Covid-19 is fatal?
- 4- Did you get Covid-19 vaccine?

- 5- Do you think the vaccine is useful?
- 6- Do you follow the daily situation of infection and Covid-19 updates?
- 7- Do you know the preventive methods to avoid infection with Covid-19 ?
- 8- Do you think that government measures to prevent infection were effective in preventing this infection?

Data were collected and processed statistically using SPSS version 26. Descriptively, the results were presented in the form of frequencies and percentages.

Results

Of the total 350 participants in this study, 238 of them had (68%) infected with Covid-19, compared to 112 (32%) were not infected with Covid-19 (figure 1).

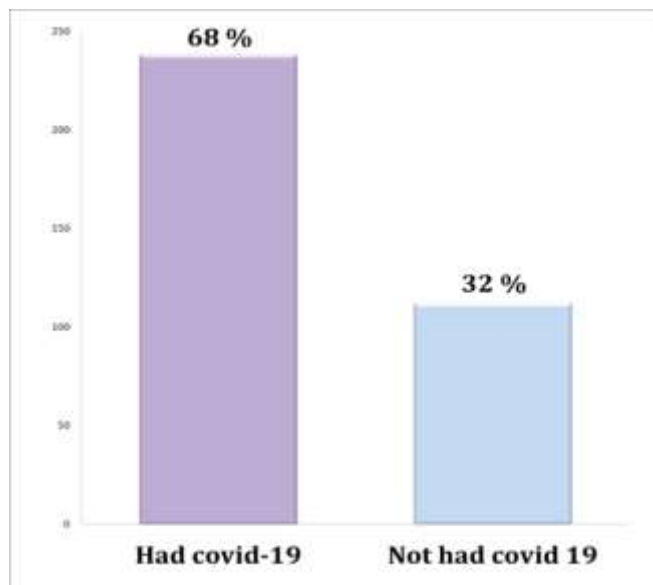


Figure 1: Proportions of participants infected (previously) with Covid 19.

It was noted in the results that 320 (91%) of the people included in the study had a death related to Covid 19 infection in their relatives (first and second degree relatives) as shown in Figure 2.

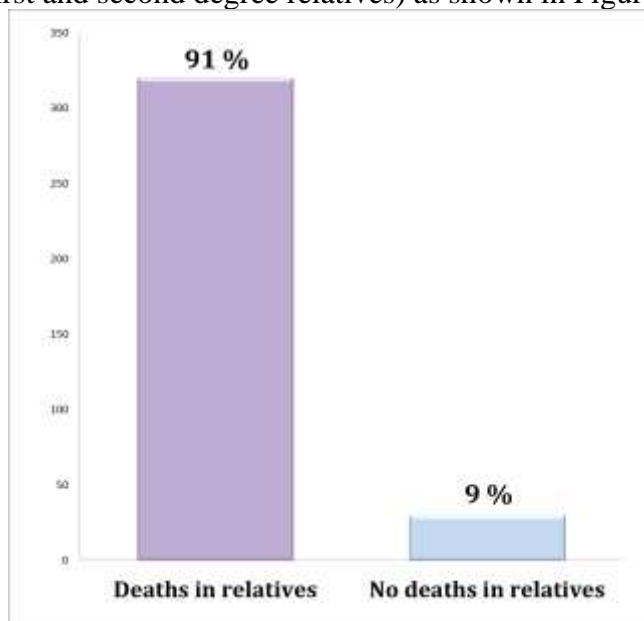


Figure 2: Mortality rates of Covid-19 in the relatives of the participants.

As for the participants' awareness and belief in the deadly risk of this infection, 323 (92%) of them believed that Covid-19 infection may be fatal (figure 3).

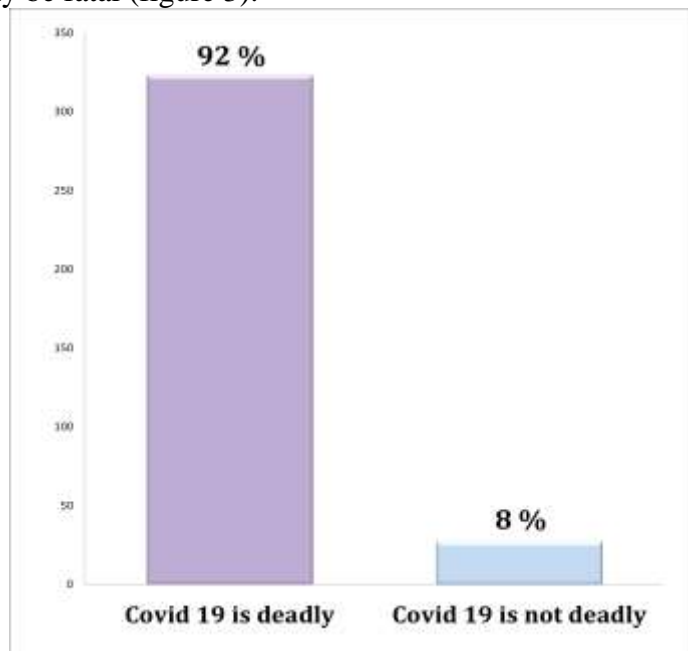


Figure 3: Participants' belief in the fatality risk of the Covid-19 infection.

The results of this study proved that 302 (86%) of the participants were vaccinated against Covid-19 infection versus 48 (14%) were not vaccinated (figure 4).

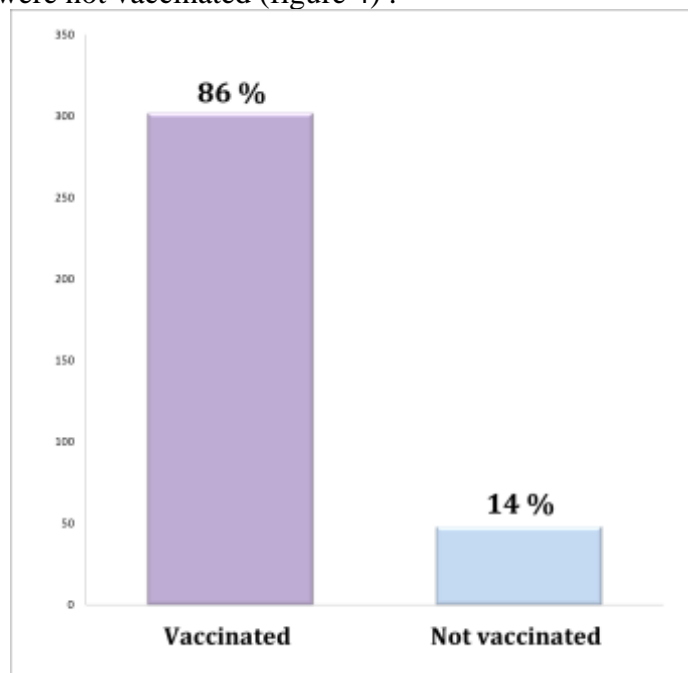


Figure 4: The proportions of those vaccinated with Covid-19 among the participants.

Approximately 253 (72%) of the study population believed that Covid-19 vaccine is useful versus 97 (28%) people think it useless (figure 5).

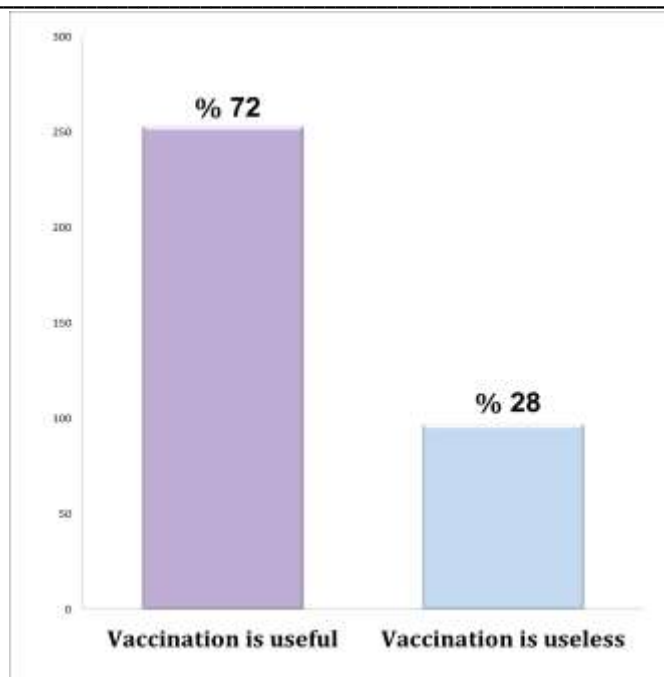


Figure 5: Proportions of belief in the benefit of the vaccine among the participants. In addition, the results confirmed that 227(65%) of the study population were following the daily situation of infection and developments around Covid-19 pandemic (figure 6).

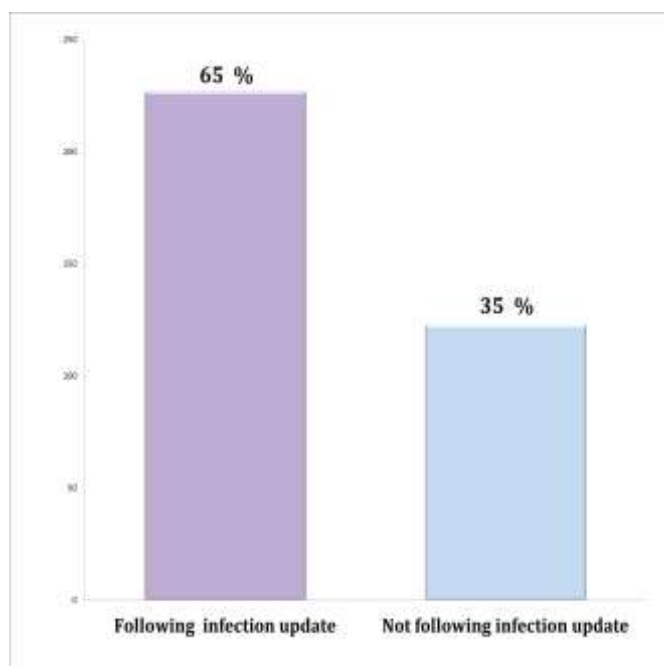


Figure 6: Follow-up ratios for daily status of infection and update of the disease. As in Table 1, the knowledge of the participants in this study about preventive methods to avoid infection with the Covid-19 was about 315 (90%).

Table 1: Knowledge of participants about the prevention of Covid-19 infection

Knowledge status of participants	Frequency	Percentage
Had knowledge	315	90 %
Comparatively	24	7 %
Had no knowledge	11	3 %
Total	350	100 %

More than half of the participants 199 (55%) believed that government measures are effective in preventing infection as shown in table (2).

Table 2: The belief that government measures were effective in preventing infection

Opinion on the effectiveness of the measures	Frequency	Percentage
Were effective	192	55%
Comparatively	105	30%
Not effective	53	15%
Total	350	100 %

Discussion

The importance of this study lies in achieving the goal of linking knowledge and awareness of some facts related to the COVID-19 pandemic. Through the results, this study can provide a general view into the strategies desired to beneficially handling with this public health problem, especially in the Salah al-Din community in Iraq. Overall, the study enrolled individuals had a good awareness regarding COVID-19 infection. About (68%) of the participants were reported to have infected with COVID-19 disease, this is supported by previous studies that found a high rate of infection with this epidemic among the population with a low mortality [14-17]. It is extremely contagious and spreads quickly among humans and forces global public health institutions to be on high warning [18]. It is worth noting that the death rate among COVID-19 victims was higher among the aged and those with many comorbidities [19,20]. Because a large percentage of participants had relatives who died from this infection, so a high percentage of them (92%) were aware of the riskiness of this virus. Besides, it is quite reported in the media that COVID-19 is exceedingly contagious but not fatal [21]. This is supported by the results of this study, as it was proven that a good proportion of the participants were following the latest update of the infection and the progress of the disease. The study also showed that most of the participants (86%) had been vaccinated against Covid 19 infection, and this explains the high frequency of believers and aware of the importance of the vaccine in eliminating this pandemic. On the other hand, the majority of participants (90%) were aware of sufficient methods of prevention to avoid infection with this infection, and this may be due to their experience of infection, as well as their observation of the infection of their relatives. Despite this, a reasonable percentage (55%) of them believed that the measures followed by the local health directorate were insufficient to prevent infection. Thus, this study showed that there is a need (relatively little) to improve knowledge about this infection and this is clearly confirmed by the results of this study.

Conclusions

Through the results of this study, it was concluded that most individuals in Salah al-Din Governorate in Iraq have at least a good knowledge and awareness related to COVID-19 and methods of infection prevention, and there were few proportion need a little awareness about the COVID-19 pandemic. Thus we can use population awareness about infectious diseases and their modes of transmission to confront any epidemics in the future.

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