

Original Research

Assessment of knowledge of long COVID 19 among health care workers in a Hospital

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ABSTRACT:

Background: To assess the knowledge of COVID-19 among health care workers in a hospital. **Materials & methods:** A total of 50 participants were recruited for the present study. A questionnaire was framed distributed simultaneously all the health care workers enrolled in the current study. They were encouraged to answer the questionnaire distributed electronically and those with poor access or ability to use technology were recruited through printed version of the questionnaire. The questionnaire was synthesized, scaled, and scrutinized by the study team in cognizance with field experts. The knowledge items covered aspects about the virus, epidemiology, disease pathology, clinical features, and management. All the results were recorded and analysed using SPSS software. **Results:** 96 percent of the subjects correctly answered the question "COVID-19 is caused by?". 98 percent of the subjects correctly answered the question "COVID-19 most commonly manifests as?". 94 percent of the subjects correctly answered the question "Mode of transmission of COVID-19?". 98 percent of the subjects correctly answered the question "Longest incubation period for COVID-19 before experiencing any symptoms?". 84 percent of the subjects correctly answered the question "Are COVID-19 cases mild mostly and does not require any treatment?". 96 percent of the subjects correctly answered the question "Washing hands with soap and water is effective in eliminating the causative microbe?". **Conclusion:** The knowledge of health care workers was appropriate having positive attitude.

Key words: COVID-19, hospital

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INTRODUCTION

Coronavirus-disease-19 (COVID-19), the disease caused by severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) has evolved into a pandemic with tremendous effects on public health, world economy, and quality of life of every individual. The disease spreads from human to human primarily through droplet and direct contact and has an incubation period of 2 to 14 days. Health care workers (HCWs) are in the front line of COVID-19 patients' management; thus, they are facing constantly higher risk of infection than the wider community.¹⁻³

On the other hand, COVID-19 has affected quality of life, psychological condition, and training of HCWs, as shown in recent studies. Several recommendations have been published from national and international societies, such as the World Health Organization

(WHO) regarding the prevention and control of COVID-19 for HCWs. However, misunderstandings among HCWs may negatively impact the delivery of appropriate care to COVID-19 patients and increase the risk of transmission of the virus. Additionally, knowledge gaps may affect the perceptions of HCWs, certainly depending on their beliefs and past experiences.⁴⁻⁶ Hence; the present study was conducted for assessing of knowledge of COVID-19 among health care workers in a hospital.

MATERIALS & METHODS

The present study was conducted for assessing of knowledge of COVID-19 among health care workers in a hospital. A total of 50 participants were recruited for the present study. A questionnaire was framed distributed simultaneously all the health care workers enrolled in the current study. They were encouraged

to answer the questionnaire distributed electronically and those with poor access or ability to use technology were recruited through printed version of the questionnaire. Their responses were recorded strictly on the basis of anonymity to avoid social desirability bias. A questionnaire was specifically designed for the study using the fixed response questions, both multiple choice and yes/no types. The questionnaire was synthesized, scaled, and scrutinized by the study team in cognizance with field experts. The knowledge items covered aspects about the virus, epidemiology, disease pathology, clinical features, and management. All the results were recorded and analysed using SPSS software.

RESULTS

Mean age of the health care workers was 41.5 years. Out of 50 subjects, majority of the subjects were males. 96 percent of the subjects correctly answered the question "COVID-19 is caused by?". 98 percent of the subjects correctly answered the question "COVID-19 most commonly manifests as?". 94 percent of the subjects correctly answered the question "Mode of transmission of COVID-19?". 98 percent of the subjects correctly answered the question "Longest incubation period for COVID-19 before experiencing any symptoms?". 84 percent of the subjects correctly answered the question "Are COVID-19 cases mild mostly and does not require any treatment?". 96 percent of the subjects correctly answered the question "Washing hands with soap and water is effective in eliminating the causative microbe?".

Table 1: Assessment of knowledge of health care workers

Questionnaire	Number of subjects correctly answering	Percentage of subjects correctly answering
COVID-19 is caused by?	48	96
COVID-19 most commonly manifests as?	49	98
Mode of transmission of COVID-19?	47	94
Longest incubation period for COVID-19 before experiencing any symptoms?	49	98
Are COVID-19 cases mild mostly and does not require any treatment?	42	84
Washing hands with soap and water is effective in eliminating the causative microbe?	48	96

DISCUSSION

The coronavirus disease 2019 (COVID-19) rapidly turned into a pandemic with catastrophic aftermath, resulting in 359 M confirmed cases and 5.62 M deaths worldwide. To contain the community-level spread of SARS-CoV-2 and alleviate the overburdening of health care systems, physical distancing measures along with school closures and lockdown have been implemented in many countries. Since the beginning of the crisis, healthcare workers (HCWs) have been the front-line defense in treating patients with COVID-19 to help mitigate and control the infection. The battle against COVID-19 has resulted in an increased risk of infection, along with fear of SARS-CoV-2 transmission to family members of HCWs. The risk of a positive test for COVID-19 was increased among front-line HCWs; thus, all the necessary measures must be taken to minimize infection spread among HCWs.⁶⁻¹⁰ Hence; the present study was conducted for assessing of knowledge of COVID-19 among health care workers in a hospital.

In the present study, mean age of the health care workers was 41.5 years. Out of 50 subjects, majority of the subjects were males. 96 percent of the subjects correctly answered the question "COVID-19 is caused by?". 98 percent of the subjects correctly answered the question "COVID-19 most commonly manifests as?". 94 percent of the subjects correctly

answered the question "Mode of transmission of COVID-19?". Bhagavathula AS et al investigated the knowledge and perceptions of HCWs about COVID-19. A cross-sectional, web-based study was conducted among HCWs about COVID-19 during the first week of March 2020. A 23-item survey instrument was developed and distributed randomly to HCWs using social media; it required 5 minutes to complete. Of 529 participants, a total of 453 HCWs completed the survey (response rate: 85.6%); 51.6% (n=234) were male, 32.1% (n=147) were aged 25-34 years, and most were doctors (n=137, 30.2%) and medical students (n=134, 29.6%). Most participants (n=276, 61.0%) used social media to obtain information on COVID-19. A significant proportion of HCWs had poor knowledge of its transmission (n=276, 61.0%) and symptom onset (n=288, 63.6%) and showed positive perceptions of COVID-19. Factors such as age and profession were associated with inadequate knowledge and a poor perception of COVID-19. As the global threat of COVID-19 continues to emerge, it is critical to improve the knowledge and perceptions of HCWs.¹¹

In the present study, 98 percent of the subjects correctly answered the question "Longest incubation period for COVID-19 before experiencing any symptoms?". 84 percent of the subjects correctly answered the question "Are COVID-19 cases mild mostly and does not require any treatment?". 96

percent of the subjects correctly answered the question “Washing hands with soap and water is effective in eliminating the causative microbe?”. Hatami H et al investigate the knowledge, attitudes, and practices about COVID-19 among healthcare workers during the first wave of the pandemic. The current descriptive-correlational study was conducted during the 1st days of the COVID-19 epidemic from March 24th to April 3rd, 2020. Participants included all healthcare workers at hospitals, including physicians, dentists, pharmacists, nurses, midwives, laboratory and radiology assistants, and other hospital professionals during the study period. Data were collected through an online self-administrative questionnaire. The responses of 1,310 participants were analyzed, of which 900 (68.7%) were female. The mean (SD) knowledge score was 25.4 (3.3), 84.7% out of 30. More than 90% of participants correctly recognized the main symptoms, transmission route, and preventive measures for COVID-19. The mean (SD) attitude score was 16.9 (1.1), 93.9% out of 18. Most participants agreed with keeping safe physical distancing, self-isolation upon symptom onset, and city lockdowns. The mean (SD) score for general practices about COVID-19 was 20.8 (2.0), 86.7% of 24.¹²

CONCLUSION

The knowledge of health care workers was appropriate having positive attitude.

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