

Assessment of Knowledge, Attitude and Practices of Health Care Professionals Working in Jumbo COVID Care Center Towards Mental Health Care Needs: A Cross Sectional Survey

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Abstract

Background: The present COVID-19 pandemic is a major threat worldwide. Health professionals being within the front line of the COVID-19 outbreak response are at the highest risk of getting infected. Such pandemics are always associated with ill effects on mental health also.

Materials and Methods: A cross-sectional study included all the health care professionals working in the Jumbo COVID Care Center, Mumbai. Details of health care professionals were obtained from the authority of Jumbo COVID Care Center, Mumbai. Amongst 350 health care professionals, 285 responded (Response rate: 81.42%). A questionnaire, consisting of 19 structured, self-administered, and closed-ended questions, was employed online, and information regarding age, gender, profession, etc., was collected. It was then tabulated and subjected further to an analysis.

Results: Most health care professionals (96.1%) were aware that COVID-19 is not only affecting physical but mental health too, also posts on social media (86.3%) are affecting mental health more than the actual disease. A total of 95.8% agreed that health care/frontline workers are at the highest risk and felt the need for psychiatrists in the present pandemic. (81.4%) They were also worried thinking about elderly people with comorbidities in their homes. (82.1%).

Conclusion: From the present study, it can be concluded that the present pandemic is affecting not only physical but mental health also, and there is an increased need for psychiatrists and mental health care professionals to overcome the same.

Keywords: Attitude, knowledge, mental health, pandemic, psychology

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Submitted: 11-Dec-2020; **Revised:** 24-Feb-2021; **Accepted:** 19-Feb-2022; **Published:** 31-Jan-2023

INTRODUCTION

In December 2019, there was an outbreak of pneumonia cases of unknown origin in the Wuhan city of China. The pathogen responsible was later declared severe acute respiratory syndrome coronavirus-2. On 11th March 2020, by the World Health Organization (WHO), the coronavirus disease 2019 (COVID-19) was declared a global pandemic.^[1,2]

The disease is claimed to infect people through droplets of saliva or discharges from the nose of an infected person, especially sneezing or coughing.^[3] This outbreak in China has caused panic and psychological disturbances amongst people getting infected worldwide. Pandemics are not just a medical phenomenon. They restrict people from attending

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How to cite this article: Andrade NN, Kshirsagar MM, Andrade T, Bandgar VV, Pimpale S, Chavan A. Assessment of knowledge, attitude and practices of health care professionals working in jumbo COVID care center towards mental health care needs: A cross sectional survey. *Adv Biomed Res* 2023;12:22.

Access this article online

Quick Response Code:



Website:
www.advbiores.net

DOI:
10.4103/abr.abr_295_20

workplaces, cause financial ups and downs, and the long-term unwanted impact on the economy will exhibit its effect on new and existing usual mental illnesses.^[4,5] It has totally disturbed the usual lifestyle, education and finances, businesses, etc., especially after a complete lockdown was declared in most countries.

Health care professionals and groups have devoted literally themselves to providing healthcare to patients during the present pandemic. During a pandemic, psychiatric reactions play a vital role in the outbreak of the disease, the occurrence of emotional distress before, during, and after the same. As health care professionals are continuously getting exposed to infected people, they are not only suffering from occupational hazards, but it has a psychic health impact also.^[6,7] It is quite possible that health care professionals will be at high risk of mental illness, particularly if they are working in public health, or emergency services. The disease load among all health care professionals may have increased by overcrowding, lack of awareness regarding isolation, personal hygiene facilities, contaminated surrounding, etc.

A knowledge, attitude, and practice (KAP) survey is a feasible way to assess current programs and to recognize the efficacious plan of action for behavioral changes in the community.^[1] Currently, there is no/limited literature available regarding the awareness of health care professionals towards mental health care needs. Hence, the present study was aimed to identify the current status of knowledge, attitude, and practices of health care professionals working in Jumbo COVID Care Center, Mumbai regarding mental health care needs in India.

MATERIALS AND METHODS

The present study was performed in keeping the Declaration of Helsinki in mind. On account of lockdown, as universities/colleges were closed; the study protocol was approved by the Hospital Board/Jumbo COVID Care Center, Mumbai.

Informed consent

The questionnaire included a consent section that stated the aim and objectives, nature of the present study, voluntary informed consent, and declaration of confidentiality.

The present study was a cross-sectional descriptive study in nature. The renowned Jumbo COVID Care Center located in Mumbai (Nesco Jumbo COVID Care Center, Goregaon) was selected where particularly patients suffering from COVID-19 were admitted. Permission was obtained from the Dean of the center after explaining the purpose, protocol of the study, and assured confidentiality regarding the collected data. The present study was conducted at NESCO Jumbo COVID Care Center (DCH), Goregaon, Mumbai in India. The present center was divided into three sections – Intensive Care Unit (ICU), General ward, and Control/Monitor room (Not in direct contact with patients). On the basis of convenience sampling, all the health care professionals working in Jumbo COVID Care Center, Goregaon, Mumbai were considered

for the present study. The present study was conducted for a period of 15 days. After sending the questionnaire to all the health care professionals, ample time was given to them to respond.

The present study was directed at health care professionals working in Jumbo COVID Care Center, Mumbai city (Maharashtra, India). A questionnaire, consisting of 19 structured, self-administered, and closed-ended questions, was employed online and tested on 20 subjects. (Pilot Survey). The validity of the questionnaire was pretested by giving it to the subject matter experts (content validity). The reliability of the questionnaire was tested by Cronbach's alpha analysis, which was found to be 0.8. The questionnaire was finalized after making the required changes. In view of the present pandemic, for the safety of the investigating team, the questionnaire was administered online through Google survey forms. The collected data were kept confidential and tabulated in Microsoft Excel and analyzed.

Subjects working in Jumbo COVID Care Center, Mumbai, age group 18–74 years (WHO survey age groups), willing to give informed consent for the present study, who were capable to comply with the study protocol, who had internet access, and filled the questionnaire completely were included in the present study. Subjects with intellectual disabilities, who had filled the questionnaire incompletely, and who participated in the pilot survey were excluded from the present study.

RESULTS

Amongst 350 health care professionals, 285 responded (Response rate: 81.42%).

The majority of the health care professionals were female ($n = 198$, 69.4%) in the 25–34 year age group ($n = 133$, 46.6%). A total of 81.7% of the participants had less than 5 years of working experience and were unmarried (82.4%). Amongst all, 71.9% were directly working on patients [Table 1].

Most of the health care professionals (96.1%) were aware that COVID-19 is affecting physical and mental health as well, and posts on social media (86.3%) were affecting mental health more than the actual disease [Table 2].

A total of 95.8% agreed that health care/frontline workers were at the highest risk and felt the need for psychiatrists and mental health professionals in the present pandemic. (81.4%) They also had worrisome thoughts about elderly people with comorbidities in their homes. (82.1%) [Table 3].

Almost all the health care professionals were practicing safety measures to avoid getting infected with COVID-19 [Table 4].

DISCUSSION

KAP surveys are usually used to recognize knowledge gaps and behavioral approaches in order to execute effective actions. It was seen that there is a need for a deeper understanding and

association of factors that may alter attitudes and practices towards COVID-19.^[8] From the present study, it was seen that the maximum participants were from 25 to 34 old age group (n = 133, 46.6%) and were female. (n = 198, 69.4%). Previous literature suggests that some outcomes suggest younger populations with higher degrees of education had higher knowledge.^[9,10] Most health care professionals (81.7%) were having 0–5 years of working experience still they had

good knowledge. This might be due to the fact that the younger population is highly educated and tend to use the internet more than the older or less educated population.^[2] In the present study, 82.4% (n = 235) participants were unmarried. Marriage is also an important factor that affects mental health. Depending upon the support from a new family, spouse, and the extent of adjustment required, many people get do adapt over a period of time but for some others, the stress, sadness and helplessness, difficulty in adjustment also lead to anxiety and depression. It was seen that most of the participants (71.9%) who were directly working on the patients (ICU/Ward) were eventually at higher risk than health care professionals working in the control/monitor room.

From the present study, it was seen that most of the health care professionals were well familiar with that COVID-19 has an impact on not only physical but mental health also, and social media posts are affecting it more than the actual disease. Undoubtedly, the media has started reporting the impact of the present pandemic on mental health and its response. These findings are contradictory to the Ugandan study in which health care workers (HCWs) who gained information from the traditional news media like television, radio, and newspapers were having more knowledge.^[11] Previous literature suggests that most health care workers are using the internet/social media to seek information which has its own pros and cons on mental health.^[2,12,13] Around 40% of the participants found difficulty in getting sleep due to stress as they were working in a COVID center; at the same time, they worried also about their family members getting infected because of them. It was seen that surprisingly few of the participants were not much stressed when people around them talk about COVID-19, and some of them were not so worried about getting infected.

Most of the participants thought that health care professionals being frontline workers have the highest risk of getting infected also they were worried about the elderly people in their homes who have comorbidities; this might be because the risk of the raised severity was observed in the elderly people with underlying chronic diseases.^[14] So the best prevention is to avoid being exposed to COVID-19. They also thought that during the pandemic, there is more need for a psychiatrist to overcome this mental health illness as this might trigger the existing mental health issues. Psychiatrists

Table 1: Demographic details of study participants (n=285)

| Variables | Subgroups | Frequency (%) |
|--------------------------------|-------------|---------------|
| Age | >18 Years | 00 (00) |
| | 18-24 Years | 126 (44.2) |
| | 25-34 Years | 133 (46.6) |
| | 35-44 Years | 21 (7.3) |
| | 45-54 Years | 03 (1) |
| | 55-64 Years | 02 (0.7) |
| | 65-74 Years | 00 (00) |
| | >74 Years | 00 (00) |
| Gender | Male | 87 (30.5) |
| | Female | 198 (69.4) |
| Work experience | <5 Years | 233 (81.7) |
| | 5-10 Years | 31 (10.87) |
| | >10 Years | 21 (7.3) |
| Marital status | Unmarried | 235 (82.4) |
| | Married | 47 (16.4) |
| | Other | 03 (1.05) |
| Qualification | MD | 21 (7.3) |
| | MS | 08 (2.8) |
| | DNB | 02 (0.7) |
| | MDS | 17 (5.9) |
| | MBBS | 19 (6.6) |
| | BDS | 61 (21.4) |
| | BAMS | 24 (8.4) |
| | BHMS | 31 (10.8) |
| | BUMS | 04 (1.4) |
| | BPTH | 06 (2.1) |
| | Dietician | 01 (0.3) |
| | Staff nurse | 46 (16.1) |
| | Pharmacist | 03 (1) |
| | Technicians | 02 (0.7) |
| Other | 40 (14) | |
| Working directly with patients | Yes | 205 (71.9) |
| | No | 80 (28) |

Table 2: Knowledge of health care professionals working in jumbo COVID care center towards mental health care needs (n=285)

| Knowledge questions | Yes (%) | No (%) | Sometimes (%) | Very often (%) |
|---|---------|--------|---------------|----------------|
| Do you know covid-19 not only affecting physical health but mental health also? | 96.1 | 3.9 | - | - |
| Are you worried that your family members may get infected because of you? | 71.6 | 28.4 | -- | -- |
| Do you find difficulty in getting sleep due to stress as you are working in covid care center? | 16.1 | 39.3 | 39.3 | 5.3 |
| Do you know posts about covid-19 on social media are affecting mental health more than actual covid-19? | 86.3 | 13.7 | - | - |
| Do you feel restless/anxious when people around you talk about Covid-19? | 13 | 56.8 | 26.3 | 3.9 |
| Does the thought of you becoming positive for covid-19 haunt you? | 5.6 | 37.9 | 35.8 | 5.6 |

Table 3: Attitude of health care professionals working in jumbo COVID care center towards mental health care needs (n=285)

| Attitude questions | Agree (%) | Disagree (%) | Uncertain (%) |
|---|-----------|--------------|---------------|
| Do you think healthcare/frontline workers are at highest risk? | 95.8 | 2 | 2.2 |
| Do you agree there is more need of psychiatrists in this present pandemic? | 81.4 | 7.4 | 11.2 |
| Do agree that you think about covid-19 more frequently than other things? | 41.8 | 42.8 | 15.4 |
| Do you find it more stressful seeing so many covid-19 positive patients around? | 52.3 | 34.7 | 13 |
| Do you feel overburdened working during the Covid-19 pandemic? | 51.2 | 34.4 | 14.4 |
| Do you believe recovery rate is more than disease rate (cases)? | 63.9 | 20 | 16.1 |
| Will you accept isolation in health care centers rather home if you test positive for covid-19 | 50.2 | 23.9 | 26 |
| Do you feel worried thinking about elderly people with comorbidities at your home? | 82.1 | 7.7 | 10.2 |
| Do you think regulations/steps taken by government are enough for prevention of this pandemic? | 27 | 45.3 | 27.7 |
| Do you think isolation/quarantine period of 14 days is sufficient for prevention/control of Covid-19? | 56.8 | 22.1 | 21.1 |

Table 4: Practice of health care professionals working in jumbo covid care center towards mental health care needs (n=285)

| Practice questions | Yes (%) | No (%) | Sometimes (%) | Very often (%) |
|--|---------|--------|---------------|----------------|
| Have you been practicing social distancing since pandemic started? | 86.3 | 1 | 8.4 | 4.3 |
| Do you use sanitizer/gloves/mask more frequently than before Covid-19 started? | 80 | 7 | 10.9 | 2.1 |
| Do you cover your nose and mouth while sneezing or coughing? | 98.6 | -- | -- | 1.4 |

may help in boosting the self-confidence and willpower of suspected/confirmed cases, their families, and also health care providers to educate people about common mental illnesses, health care practices, problem solving, special care of mental health illness, and the patients in contact with mental health services that are at risk for COVID-19 infection.^[15] It was seen that almost half of the participants agreed that nowadays they were thinking about COVID-19 more than any other thing. They were feeling overburdened working in the COVID-19 pandemic situation and were stressed seeing so many patients around. From the present study, a positive attitude was reported towards recovery rate being more than the disease rate, and isolation of 14 days was more for control/prevention of COVID-19 but at the same time, a negative attitude was reported when asked about the steps taken by the government are sufficient for control of COVID-19. These findings are vital and should be appreciated by the government and policymakers to initiate effective policies highlighting the prevention or control of COVID-19. Wafaa YAW *et al.*^[2] also found that physicians had a less supportive attitude with regards to the COVID-19 pandemic in Egypt and the role of government in its prevention and control.

It was seen from the present study that most health care professionals were practicing safety measures like social distancing, frequent use of sanitizer/gloves/masks, and covering the nose and mouth while sneezing or coughing. This is in accordance with the study conducted by Wafaa YAW *et al.*^[2] who concluded that their study participants had a rational level of knowledge irrespective of their job, particularly the disease preventive measures; although little previous literature suggests contradictory findings of the present study.^[11,16,17]

CONCLUSION

From the present study, we can conclude that most health care workers were well aware that COVID-19 is not only affecting physical health but also mental health, and that social media also has a bigger impact on the same. Most of them also agreed that health care/frontline workers are at the highest risk and felt an increased need for psychiatrists and mental health professionals in the present pandemic. At the same time, they were also practicing safety measures.

Limitations

The present study has its own limitations. Cross-sectional studies are carried out at one-time point, and there is no follow-up. Further studies on larger sample size are recommended.

Acknowledgements

The authors would like to thank all the participants who gave their valuable time and consent for the present study, also we are grateful to the authorities of Nesco Jumbo COVID Care Center, Goregaon, Mumbai (Municipal Corporation of Greater Mumbai) for providing us the opportunity to interact with the currently working health care professionals in the center.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

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