



Assessment of Awareness of Covid-19 Pandemic among Nursing Staff - Questionnaire Based Study

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Abstract

Introduction: To combat an outbreak, health care worker should be aware of recent developments, especially those related to public health, and by following appropriate guidelines make efforts to prevent the transmission of such diseases.

Material & Method: This is a questionnaire based study, in which 83 nurses participated and answered 15 different question related with COVID-19 pandemic.

Result: 95.2% nurses were aware of source of infection of COVID-19 infection, 86.7% nurses said at present vaccine is not available, 81.9% nurses received formal training for hand hygiene, 95.2% nurses opted for the correct option for prevention of infection, 98.8% nurses have the knowledge of PPE kit, correct method for hand hygiene was opted by 45.8%, high risk people were correctly identified by 81.9% nurses, 91.6% nurses correctly identified the symptoms of COVID-19 infection, 60.3% nurses experienced anxiety, 50% nursing staff experienced psychological disturbance, 26.5% nurses were satisfactory with the government

arrangement, according to 32.5% nurses 50-60% asymptomatic cases are present in the surrounding, news channel is the main source of information for 34.9% nurses, 42% nurses said autopsy of COVID-19 cases don't takes place in their institute, 65.1% nurses were aware of correct sequence of PPE kit.

Conclusion: In the present study knowledge and awareness of COVID-19 among nurses was present in good amount, but still there are some lacunae, where improvement can be done.

Keywords: Covid -19, PPE Kit, KAP.

Introduction

With the rapid progression of the novel corona virus disease 2019 (COVID-19) into a pandemic infecting over millions of patients worldwide, the need to gather and synthesize health-related information to make timely behaviour changes among people has become quite essential.(1, 2) This comes in the wake of an “infodemic” with evolving scientific knowledge about infections being generated daily, which has led to reversals in

infection prevention recommendations made within a short span of time.(2,3,4)

Health literacy is broadly defined as the “level of capacity one has to obtain, process and understand basic health information and services needed to make appropriate health decisions.”(5) Inadequate levels of health literacy have remained a pervasive problem worldwide, despite medical advances in the past decades. In the event of an outbreak, the health care worker, like nursing staff can be the first person to come in contact with an infected person; they can either unknowingly become a carrier and infect others or by following proper guidelines can prevent the possible spread of the disease and save the entire community from its disastrous consequences.

To combat an outbreak, health care worker should be aware of recent developments, especially those related to public health, and by following appropriate guidelines make efforts to prevent the transmission of such diseases. Hence, the present study was undertaken with the aim to assess the Knowledge, Attitudes and Practices (KAP) of health care worker regarding the COVID-2019 pandemic. The goal of this research was to assess, the current level of awareness towards the pandemic among nursing staff through a well-designed multistage questionnaire.

Material and Methods

Prior to the implementation of this KAP study, the questionnaire design, validation, pilot study, and strategies to enrol nursing staff for maximal global participation were discussed. The only instrument to collect data was an online questionnaire using Google forms and it is available at: <https://forms.gle/TCNuLn8HxpAPBb9J6>

Upon clicking on the link, the 1st page assured the confidentiality of data and stated that the study participation was purely voluntary. The nursing staff

consent to participate in the study (inclusion criteria) was implied when they clicked on the ‘next’ button to answer the questionnaire, and they had complete freedom either to decline or answer the questionnaire. Only the principal investigator had access to the data and no personal details (e-mail address, phone number, name, etc.) were required. Submission was considered only when the ‘submit’ button was clicked at the end of the questionnaire.

The study duration was from 1/ 06/2020 to 30/06/2020.

The questionnaire was distributed personally via a quick response (QR) code as well as posted on various social media platforms like Facebook and Whats App. The questionnaire has a total 15 question.

Only the complete 15 answers given by the candidate are included, I.e. incomplete responses are excluded.

Results

A total 83 nursing staff participated in the study. We observed Knowledge regarding Covid-19, in nursing staff is as follows:

1. Covid-19 infection is 95.2% of nursing staff opted for the option virus.
2. Is vaccine available for Covid-19? 86.7% said no, but 11.1% opted for may be and 8.1% said yes, vaccine is available.
3. Did you receive any formal training regarding hand hygiene in last three months 81.9% nursing staff said yes but 25.8% nursing staff denied.
4. Most effective method for prevention of covid-19 infection 95.2% nursing staff opted for all of the option, and the options were hand washing, use of mask, social distancing, whereas 4% opted for only social distancing.
5. Which of the following things are included in PPE kit?

98.8% nursing staff opted for the all of the above option, which includes gown, gloves, eye protector goggle, mask.

6. Preferred method of hand hygiene for visible soil hands is?

Hand rub with soap and water for at least 20 seconds, is the most preferred option i.e. 45.8%

7. Which of the following category of people are at high risk for Covid-19

81.9% nursing staff opted for all of the above option, which includes pregnant women, above 60 yrs, with previous co morbidity, whereas 5.2% opted for above 60 yrs of age

8. Which of the these is common symptoms of COVID-19

All of the above is the most preferred option by the nursing staff i.e. 91.6%. Options were fever, cough, breathlessness, body ache.

9. Have you experienced one of the following due to COVID-19

60.3% experienced anxiety, 25.6% experienced panic, 20.5% experienced depression and 19.2% experienced anger.

10. How often do you think of Covid-19 infection

50% nursing staff think of few times, 19% nursing staff often think of, 19.5% nursing staff think of very often.

11. Are you satisfied with the government arrangements for the screening people at check points

27.7% nursing staff said it is average, 26.5% said that, they are strongly satisfied, 26.5% said good & 19.3% said they are not satisfied.

12. According to you, is the percentage of asymptomatic COVID 19 in India

32.5% said it is between, 50-60%, 27.7% said it is between 40-50%, 21.7% said it is between 30-40%.

13. What is the main source of information for you regarding COVID 19 updates?

34.9% nursing staff prefer news Chanel, 31.3% nursing staff prefer government website, and 28.9% prefer social media.

14. In your institutional set up, are autopsies of Covid 19 cases conducted?

42% said no, whereas 34.6% said don't know.

15. Correct sequence for putting on PPE kit

65.1% said, gown, mask, goggles, gloves is the correct sequence

Discussion

In this cross-sectional study with 83 study participants, the overall responses to the survey were satisfactory. Infection is viral or bacterial, 95.2% nurses opted correct option, like huynhgiao et al (6) observed 99.1% correct answer in their study. Regarding vaccine availability, 86.7% nurses opted for the correct option i.e. No. like huynhgiao et al (6) 89.3% said the correct answer, i.e. no. 81.95% nursing staff said, they had received formal hand washing training. A similar finding from the Xu et al, (7) 83.54% participants had received formal training about hand hygiene. In present study 95.2% of the study participants opted for the all of the above options to prevent the spread of the disease, which is again observed by the study conducted by the Ferguson et al.⁸

98.8% nursing staff was aware of the all the things which are included in PPE kit. Similar results were observed by the Joshi K P et al (9), where 82.06% nursing staff was aware of PPE kit. One of the important procedures in day to day life is hand washing, plays crucial role prevention of spread of infection. The question in our survey was focused on the recommended hand hygiene technique for visibly soiled hands which is hand washing with soap and water for at least 20 seconds with the whole process lasting for up to 40-60 seconds (10) In this study 63.3%

nurses opted for the correct methods, like study conducted by Pranav Modi et al (11) 42.6% HCW opted correct method.

Regarding the question, which group of people is more susceptible for covid-19 infection, 81.9% nurses opted for the correct option, i.e. patients having previous co morbid factor, ANC female, above 60 years of age. A similar study also showed that majority of participants believed that the disease is more dangerous for the elderly. This has been proven from multiple studies published about the COVID 19 disease in China.(12,13,14). 91.6% nurses opted for the correct option for the symptoms of the covid-19, this is consistent with study conducted by the, arina anis et aal (15) where 86.7% opted the correct answer. studies done in the past reported that HCW especially those working in emergency units, intensive care units, and infectious disease wards are at higher risk of developing adverse psychiatric impact (Naushad et al, 2019)(16). The current review also showed similar results that HCWs are at higher risk of developing adverse psychiatric outcomes. Study conducted by the Ruchira W Khasne et al (17) shows the similar results.

34.9% nurses prefer the use news channels as a primary source of information about COVID- 19. Whereas study conducted by akshaya bhagavathula et al (18) shows 33% HCW use government websites for the information.

42% nursing staff don't know whether autopsy of COVID-19 cases takes place in there institute or not. In initial phase several guideline were given by ICMR and government of India for autopsy of covid-19 cases. Some countries like Italy 'no autopsy' policy was used (19). Whereas in some countries like Germany autopsy as mandatory (20). Sameer a et al,(21), conducted study on post-mortem screening and management of covid-19 related deaths in various institute, where they observed

the majority of institutes perform autopsy of covid-19 cases with precautionary measures.

Besides being aware of the importance PPE kit, it is also important to know the correct sequence of "donning and doffing" of PPE. I the present study 65.1% nurses were aware of correct sequence of PPE kit, whereas Joshi KP et al,(9) observed 57.74% of uses were aware of correct sequence of PPE kit.

Conclusion

In the present study knowledge and awareness of COVID-19 among nurses was present in good amount, but still there are some lacunae, where improvement can be done. Nursing staff are very important pillar in health care system, which plays very crucial role in controlling any disease condition. Adequate training and updated knowledge are the key factors, which will help the system to fight with this highly infectious disease.

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