



## Awareness of COVID-19 in healthcare professionals–Assessment done by various questionnaires

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### Abstract

**Aim:** To identify whether the health care professional are aware of Corona virus infection with the help of questionnaires and its implication on the health of individuals.

**Material and Methods:** Questionnaires were formulated and it was send to the medical health care professional. After obtaining the consent, the parameters were assessed using a questionnaire format.

- 1) Are you worried about Corona Virus?
- 2) Are you aware of how corona virus affects human beings?
- 3) Are you aware of ICMR Guidelines?
- 4) Have you read about articles in relation to COVID -19 ?
- 5) What are the symptoms of disease as per your information?
- 6) How the spread of Disease does occur?
- 7) Are you avoiding social / public Gathering?
- 8) Who should wear a face mask?
- 9) How frequency you wash your hands?
- 10) Do you believe there is a treatment for this disease?

Both positive and negative response against each question was recorded in a excel sheet. In addition to the above age, gender type was also recorded. The data obtained was analyzed using spss 20.0 software.

**Results:** Total 195 numbers of subjects had responded to the questioners. It was found that majority of the healthcare professional were well versed with COVID-19 and its impact on the health. All preventive methods and various do's and don't were well known by all the Healthcare profession. It was also observed from the results that there were many treatment and prevention protocols which were provided by various infection control boards to all healthcare professional.

**Conclusion:** This COVID -19 is seen as a major pandemic, it has caused higher mortality in high risk individual. The COVID-19 virus spreads primarily through droplets of saliva or discharge from the nose when an infected person coughs or sneezes, so it's important that you also practice respiratory etiquette. The best way to prevent and slow down transmission is be well informed about the COVID-19 virus, the disease it causes and how it spreads. Protect yourself and others from infection by washing your hands or using an alcohol based rub frequently and not touching your face. At this time, there are no specific vaccines or treatments for COVID-19. However, there are many ongoing clinical trials evaluating potential treatments.

**Keywords:** Assessment, COVID-19, various, individual

### Introduction

Corona disease is an infectious disease, it is caused by a newly detected type of coronavirus i.e. COVID-19. The COVID-19 virus is spreading via droplets, salivary droplets or nasal discharge. It has been seen by various infection reports of Corona virus spreading via cough or sneezes from the infected person<sup>[1]</sup>.

Coronavirus are basically single-stranded positive-strand type of RNA viruses and they are unsegmented. They belong to the order Nidovirales, the family Coronaviridae, and the subfamily is Orthocoronavirinae, which is further divided into  $\alpha$ ,  $\beta$ ,  $\gamma$ , and  $\delta$  genera according to their serotypic and genomic characteristics. Coronaviruses belong to the genus Coronavirus of the family Coronaviridae. It is named after the wreath-shaped protrusions on the envelope of the virus.

The novel coronavirus is nearly 60 to 140 nm in diameter, on the surface of the virus there is a spike protein and it helps in formation of rod-like structure. It is being

postulated that the spike protein is the main structure used for typing. The nucleocapsid protein encapsulates the viral genome and hence it can be used as a diagnostic antigen.

It is well known by everyone that most coronaviruses infect animals. Currently, three types of coronaviruses have been isolated from humans: Human Coronaviruses 229E, OC43, and SARS coronavirus (SARS-CoV). Recently, a newer coronavirus was isolated from the lower respiratory tract of patients in Wuhan, who were suffering from pneumonia due to unknown causes (The World Health Organization (WHO) called it 2019-nCoV while the International Committee on the Taxonomy of Viruses (ICTV) named it SARS-CoV-2. It was subsequently confirmed that the virus is capable of human-to-human transmission<sup>[1-2]</sup>.

### Material and Methods

Questioners were formulated and it was send to the medical health care professional. After obtaining the consent, the parameters were assessed using a questionnaire format.

1) Are you worried about Corona Virus?

Yes	No	Maybe
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2) Are you aware of how corona virus affects human beings?

Yes	No	Maybe
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3) Are you aware of ICMR Guidelines?

Yes	No	Maybe
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4) Have you read about articles in relation to COVID -19?

Yes	No	Maybe
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5) What are the symptoms of disease as per your information?

- a) Fever
- b) Tiredness
- c) Sore Throat
- d) Cough
- e) Diarrhoea
- f) Others

6) How the spread of Disease does occur?

- a) Airborne
- b) Close contact
- c) Droplet Transmission
- d) Other:

Yes	No	Maybe
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7) Are you avoiding social / public Gathering?

Yes	No	Maybe
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8) Who should wear a face mask?

- a) Health care professional
- b) Person coughing
- c) Sick patients with respiratory manifestation?
- d) Patient with nasal congestion?
- e) Patient with history of sneezing?
- f) Others:

9) How frequency you wash your hands?

- a) 1-2 times
- b) 2-5 times
- c) 5 – 10 times
- d) More than 10 times

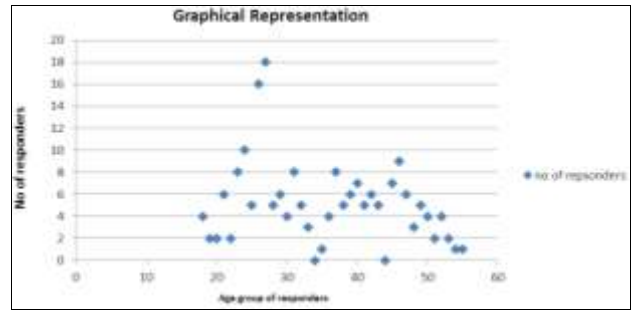
10) Do you believe there is a treatment for this disease?

Yes	No	Maybe
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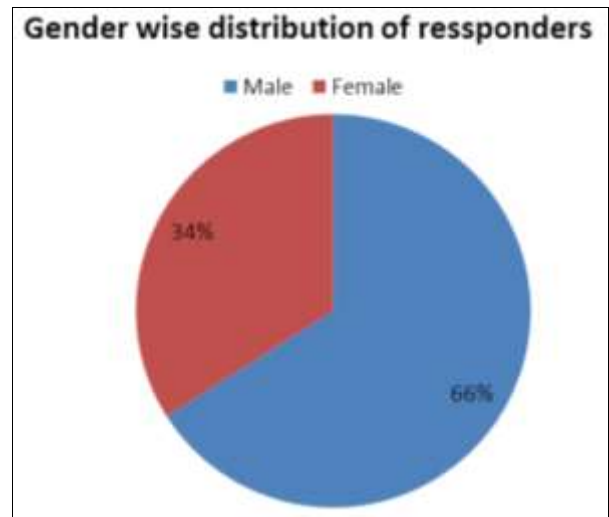
Both positive and negative response against each question was recorded in a excel sheet. In addition to the above age, gender type was also recorded. The data obtained was analyzed using spss 20.0 software.

**Results**

Total 195 numbers of subjects had responders to the questioners and it is graphic represented below.

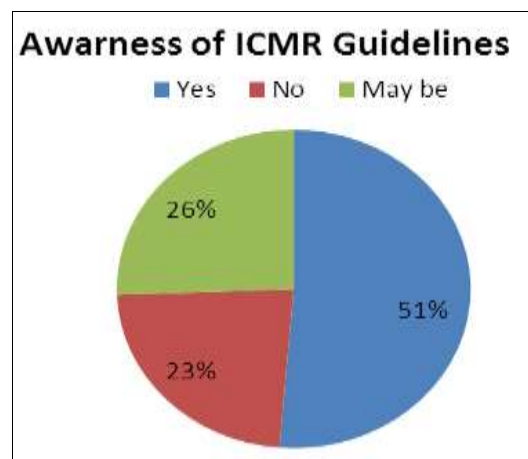


**Fig 1**



**Fig 2**

Question was: Are you aware of ICMR Guidelines? It was observed that 51% we well versed with ICMR guidelines and 23% of patients were not aware of Clear ICMR Guidelines, and 26% were confused with multiple guidelines issued by various infection control authorities.



**Fig 3**

Question was: Have you read about articles in relation to COVID -19?

It was clear that almost majority of healthcare professional had read articles in relation to COVID-19, in the pie diagram it is shown that 82.05% of responders were well

aware and had read about the COVID -19, whereas only 10.25% responders had not read about the articles on COVID-19, and 7.69% were not sure about this.

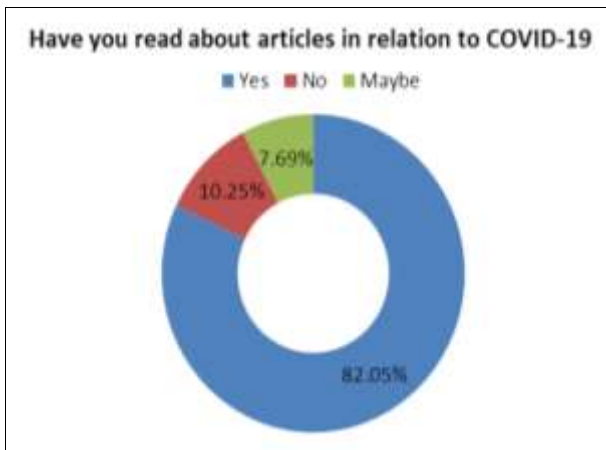


Fig 4

Question was: What are the symptoms of the disease as per your information?

It is clearly evident that almost all the responder’s knew clearly about the symptoms of the disease. In the bar diagram we can see that 92.30% to 97.30% responders were aware of COVID symptoms.

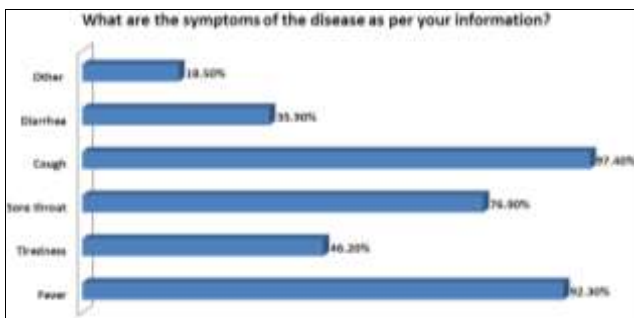


Fig 5

Question was: How does the spread of Disease occurs?  
The following graph shows that majority of responder’s were aware about the various modes of spread of the disease.

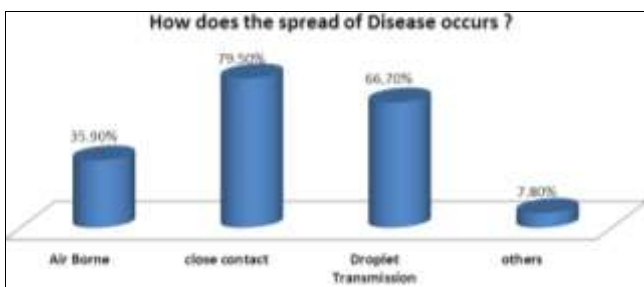


Fig 6

Question was: Are you avoiding Social / public gathering?

It was almost everyone’s view that social avoidance is the best method and it would help in preventing the spread of disease.

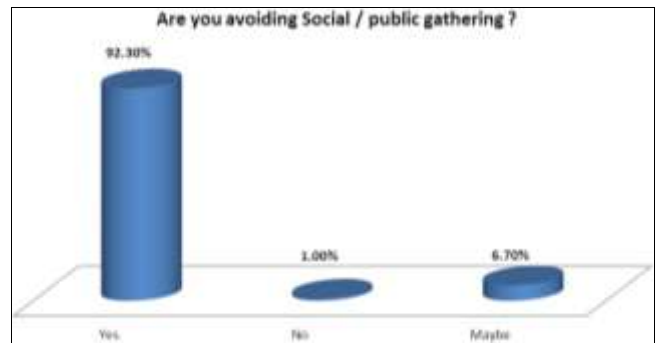


Fig 7

Question was: who should wear a face mask?

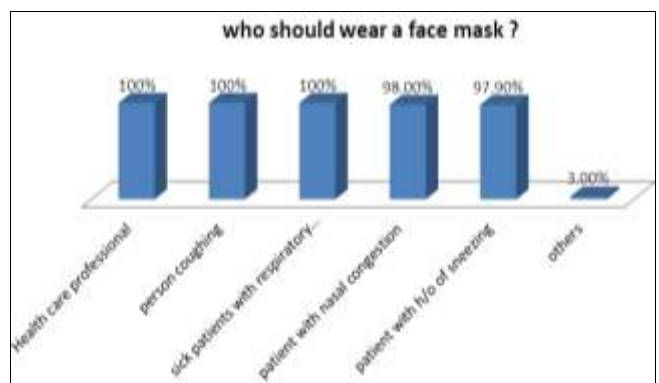


Fig 8

Question was: How frequency you wash your hands?  
Almost everyone believed that washing Hand is to be done. All major infection control societies have laid the importance about hand hygiene and hand washing and with support from various countries and their government had also laid importance in educating people by various awareness programmes, in relation to hand washing and hand hygiene.

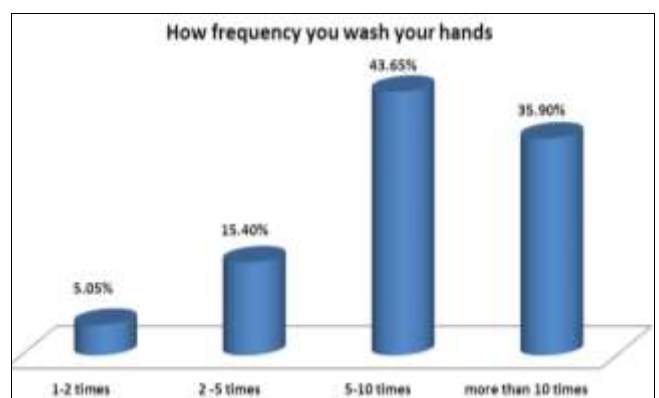


Fig 9

Question was: Do you believe there is treatment for this disease?

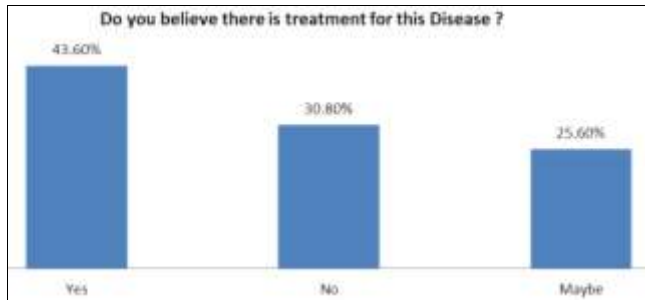


Fig 10

It is very clearly depicted from the above answers that the healthcare professions were well aware about the Covid-19 and its impact on human being.

### Discussion

Commonly coronaviruses mainly infect adults or older children, causing the common cold. Various studies and data have shown that some strains can also cause diarrhea in adults. Now it is well known that these viruses are mainly transmitted by droplets, and sometimes it can also be spread via the fecal-oral route. During winter and spring the incidence of corona virus infection is prevalent. The incubation period for coronaviruses is usually 3 to 7 days. It is being postulated that 2019-nCoV is a coronavirus that underwent antigenic mutations. It is suggested that the incubation period of the virus is as short as 1 day as but not longer than 14 days [3-4].

It is postulated by WHO, CDC, and other that the main mode of transmission is through respiratory droplets and contacts, but there is a risk of fecal oral transmission which cannot be ruled out. Aerosol transmission, mother to child transmission and other routes are not confirmed yet [3-5].

The onset of COVID-19 is mainly manifested as fever, but some early patients may not have fever, with only chills and respiratory symptoms, which can occur together with mild dry cough, fatigue, poor breathing, diarrhea etc. However, runny nose, sputum and other symptoms are rare. Patients may gradually develop dyspnea [5-6].

In severe cases, the disease can progress rapidly, causing ARDS (acute respiratory distress syndrome), septic shock, irreversible metabolic acidosis, and disorders in coagulation in matter of days. Some patients start out with mild symptoms without fever. The majority of patients have a good prognosis, while a few become critically and sometimes fatally ill.

These are High Risk Patients who are prone to be infected by this virus are as follows– Age >60, Chronic Lung Disease, Chronic Kidney Disease, Diabetes, Hypertension, Cardiovascular Disease, On Biologics, Cancer, Post Organ transplants, HIV, On Immunosuppressant's [5-6].

If any patient is suspected the patient should be isolated and following workup to be done

- Covid-19 RT-PCR testing of nasopharyngeal swab [8],
- RT-PCR positive rates BAL 95%, sputum 72%, Nasal swabs 63%, oro-pharyngeal swab 32% [8].
- CBP, RBS, Creatinine, Na+, K+, CRP, LFT, CPK, CXR, troponin, d-dimer, LDH, aPTT, PT INR, CXR, ECG, CT Chest (if required), (HIV, HbsAg, HCV – if any suspicious history).

Based on severity various regimen of treatment has been given by various health care associations.

### Prevention

Control the source of infection: When coughing or sneezing, the patient with acute respiratory diseases should cover their nose and mouth with the arm or other materials (handkerchiefs, paper towels, or masks) to reduce droplet transmission. After exposure to respiratory secretions, perform hand hygiene immediately, and wash hands frequently in daily life.

Wash hands frequently with plain or antimicrobial soap and rinse with running water. Be sure to dry hands with clean towels. Wash hands immediately after contact with respiratory secretions (for example after sneezing). Practice good respiratory hygiene/cough practices. Cover mouth and nose while coughing/sneezing with tissue or towel etc. and avoid touching eyes, nose or mouth afterwards before thoroughly washing hands. Strengthen overall health and immunity. Keep a balanced diet, get enough sleep and regular exercise, and also avoid overworking. Maintain good hygiene and proper ventilation. Open windows regularly throughout the day to let in fresh air. Avoid crowded places or contact with persons with respiratory infections. Seek a medical attention if fever, cough, sneezing, runny nose or other respiratory symptoms appear [9].

### Personal precautions are as follows

1. Maintain a balanced diet, ensuring adequate nutrition, and maintaining oral health can help prevent against infection.
2. Exercise regularly to boost immunity.
3. Quit smoking, limit or avoid alcohol consumption, and stay in good spirits.
4. Ensure indoor ventilation: natural ventilation and/or use of exhaust fans for better airflow.
5. Get vaccinated if available.

### If close contact then follow these things

Please follow the self-monitoring instructions and stay at home. Don't panic. Don't go to work. Don't go out too often. Perform daily checks of health condition and report the records to the authority, and follow up with your community doctors regularly. If fever, cough or other symptoms appear, please go to community health centers for further evaluation and treatment.

### Conclusion

This COVID -19 is seen as a major pandemic, it has caused higher mortality in high risk individual. Prompt empathic updates and regular awareness programmes by various means has helped all human beings apart from health care individual.

The COVID-19 virus spreads primarily through droplets of saliva or discharge from the nose when an infected person coughs or sneezes, so it's important that you also practice respiratory etiquette. The best way to prevent and slow down transmission is be well informed about the COVID-19 virus, the disease it causes and how it spreads. Protect yourself and others from infection by washing your hands or using an alcohol based rub frequently and not touching your face. At this time, there are no specific vaccines or treatments for COVID-19. However, there are many ongoing clinical trials evaluating potential treatments.

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