

Awareness on COVID-19 Preventive Measures among Non-teaching Staff Members in Adhiparasakthi Dental College

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Abstract

Introduction: The coronavirus disease 2019 (COVID-19) pandemic has enforced a huge burden on the primary health-care systems around the world to deal with this global health challenge. The recent global threat of this pandemic is rapidly progressing and has placed a high priority on the investigation of medicaments. The rapid rise in COVID-19 occurred during the 1st week of March 2020, wherein, cases of COVID-19 reached over 100 countries with more than 100,000 cases reported. The aim of this study is to assess the knowledge and perception regarding COVID-19 among non-teaching professionals in Adhiparasakthi dental college and hospital, Melmaruvathur. **Materials and Methods:** This study was conducted over a period of 2 months from the start of May 2020 to the end of June 2020. The total number of participants enrolled was 100. Each questionnaire had a total of 15 questions in their vernacular language, regarding COVID-19 assessed. Questionnaires filled out by the participants were collected for statistical analysis and the results were expressed as a percentage. **Results:** A total of 100 participants were included in the present study. Regarding questions related to knowledge of coronavirus, 82% of participants had heard about the recent coronavirus. However, 11% were not aware about coronavirus spread from person to person through small drops from the nose or mouth, which can be dispersed widely through an infected person when they cough or breath. Almost 93% of the participants knew about masks and the importance of wearing masks for their safety and prevention of coronavirus and its spread. About 87% of participants were unaware of using thermometers and also about 67% of participants were unaware of the Aarogya Setu application. **Conclusion:** Although the majority of the participants are aware of the coronavirus, they lack in-depth knowledge as seen in their perception of knowledge through detailed questions. Hence, there is a need for increased awareness regarding the symptoms, and implementation of precautionary measures and guidelines laid down by the authorities from time to time.

Keywords: Awareness, Coronavirus disease 2019, Knowledge, Preventive measures.

INTRODUCTION

Coronavirus disease 2019 (COVID-19) is a highly infectious respiratory disease that evolved into a worldwide pandemic, threatening a prolonged economic recession. The novel Coronavirus (2019-nCoV, officially known as severe acute respiratory syndrome coronavirus 2 or COVID-19) was first reported in December 2019.^[1] It originated initially in Wuhan, Hubei Province, China, from where it spread rapidly to over 198 countries. Hence, the World Health Organization declared it a global pandemic on March 12, 2020.^[2] On March 26, 2020, over half a million cases of COVID have been reported with a death toll of over 23,000 patients. It is vitally important to have knowledge about effective control measures, basic hygiene, and modes of disease transmission.^[3]

This study is an attempt to create awareness among non-teaching professionals. The awareness generation regarding

how to prevent the infection will help, to some extent, to prevent the spread of COVID-19 and in reducing the potential risk of exposure to others.^[4]

The present study was undertaken as there is a poor understanding of COVID-19 among non-teaching staff members in Adhiparasakthi dental college and hospital, Melmaruvathur. This may result in the rapid spread of infection and also in delayed treatment. A structured questionnaire-based

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study was conducted among non-professionals working in Adhiparasakthi dental college and hospital, Melmaruvathur to assess their awareness and preventive measures regarding COVID-19.

The main goal of the present study is to measure the level of knowledge, awareness, and preventive measures concerning COVID-19, to detect sociodemographic variables associated with a satisfactory level of them, and to explore awareness and health behaviors related to the prevention of Coronavirus.

MATERIALS AND METHODS

The present questionnaire-based study was a cross-sectional study that was conducted among non-teaching staff members at Adhiparasakthi dental college and hospital, Melmaruvathur. The study was conducted after receiving permission from Adhiparasakthi Institutional Ethics Committee with IRB no-2020-MDS-BrV-/APDCH and was carried out over a period of 2 months from the start of May 2020 to the end of June 2020. There were, in total, 100 non-teaching professionals including the cleaning personnel, clerks, attendants, and peons of the institution. None of the participants dropped out before the study. Hence, total of 100 participants was enrolled in the present research.

Inclusion criteria

Any non-teaching working professionals such as clerks, attendants, cleaning personnel, a supervisor from the institution who were willing to participate, and those who have able to fill up the questionnaire completely were included in this study.

Exclusion criteria

Those who were not willing to participate in the study and those who gave incompletely filled questionnaires were excluded from the study.

All participants in the study were informed regarding the details of the study in their vernacular language. Written informed consent was obtained from all the participants enrolled in the study. Totally, 15 questionnaires were included regarding awareness of COVID-19. All questionnaires were in the Tamil language, and simple to understand, and the participants were asked to answer either Yes or No to assess their knowledge, perception, and practices during the COVID-19 pandemic.

Statistical analysis

The data from the questionnaires were entered in a computerized Microsoft Excel worksheet, and the statistical results were expressed as percentages for each question. The statistical calculations were performed using computer-based statistical software Statistical Package for the Social Sciences version 21.0.

RESULTS

A total of 100 participants ($n = 100$) enrolled in this study and answered all the questions, out of which 15 were males and 85

were females, all are working at Adhiparasakthi dental college and hospital, Melmaruvathur.

Almost 82% of people have an awareness on COVID-19 and 18% do not aware on COVID-19. When asked about the preventive measure for transmission of the coronavirus, 11% were not aware of its spread from one person to another person through small droplets from the nose or mouth of an infected person when they cough or breath. Almost 93% of the participants knew about masks and the importance of wearing masks for their safety and prevention of coronavirus and its spread. About 92% of participants were regularly following hand hygiene measures and about 8% were unaware of hand washing [Table 1].

Four questions regarding the preventive measures were asked to all the participants. About 68% of participants responded positively whereas 87% responded negatively. As depicted in [Table 1], most of the participants (93%) were not aware that they should avoid outside food, and only 7% were aware regarding this [Table 2]. About 87% of participants were unaware of using thermometers and also about 67% of participants were unaware of the Aarogya Setu application [Table 3].

Almost 82% of people have an awareness on COVID-19 and 18% do not awareness on COVID-19 [Table 3].

People are unaware of using thermometer and Aarogya Setu application.

DISCUSSION

COVID-19 is a life-threatening infectious disease caused by the coronavirus.^[5] Proper knowledge regarding the transmission and prevention of the COVID-19 virus by creating awareness is crucial. Various COVID-19 guidelines have been published which are being updated from time to time and modified from country to country which suggest ways to protect oneself and others from coronavirus infection.

Table 1: The table shows that responses came from the non-teaching staff

Questions	%	
	Yes	No
Q1	98	2
Q2	100	0
Q3	89	11
Q4	85	15
Q5	92	8
Q6	68	32
Q7	66	34
Q8	47	53
Q9	7	93
Q10	13	87
Q11	35	65
Q12	73	27
Q13	85	15

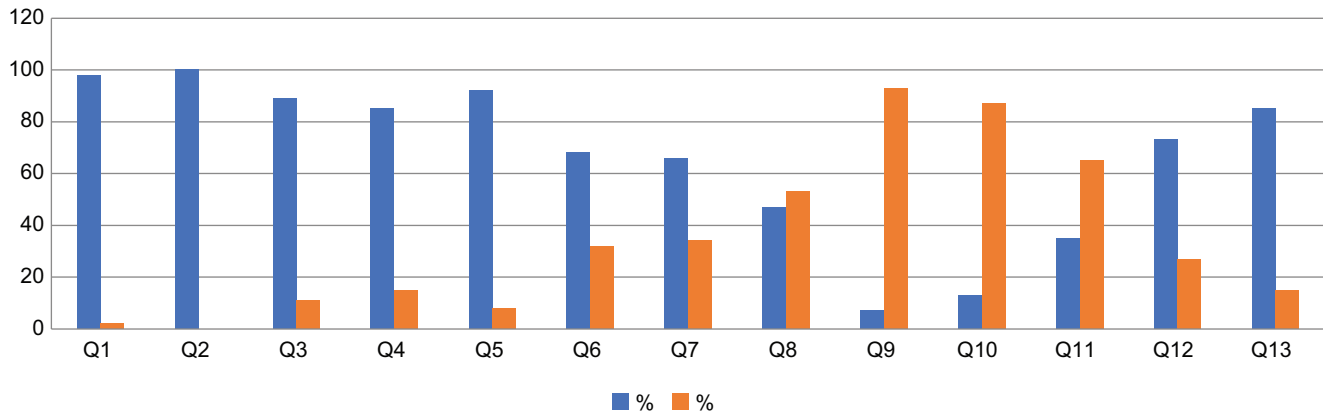


Table 2: The tables and charts show that response came from the non-teaching staff

Questions	Option-A	Option-B	Option-C
Q14	89	9	2
Q15	93	4	3

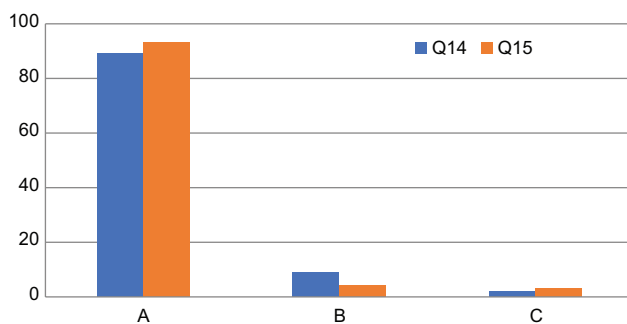
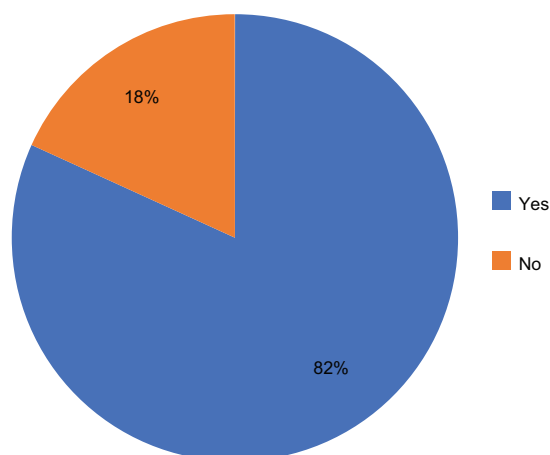


Table 3: Percentage of awareness on COVID-19

Awareness	Percentage
Yes	81.8
No	18.2



The most important of these are preventive measures such as hand washing, social distancing, and also other interventions such as home-self isolation, and mask protection. These preventive measures are necessary in order to prevent viral transmission. Health-care authorities have initiated awareness and preparedness activities beyond borders.^[4,6-10] Having poor knowledge among people results in the rapid spread of infection and serious illnesses that even lead to death. Therefore, it is often necessary to create awareness about COVID-19 diseases and steps to prevent the spread of this infection among non-teaching staff members.

COVID patients experience mild-to-moderate respiratory illness and recover with baseline treatment. On the other hand, elderly people and those with underlying medical conditions are more likely to develop serious illnesses. This study includes a questionnaire on the prevention of the spread of infection along with pictorial graphics so that to make it easy for grasping. Overall 89% of participants responded positively to the spread of coronavirus while others were unaware of its mode of transmission. It is very important to create awareness regarding the spread of coronavirus and to practice respiratory etiquette (for example, by coughing into a flexed elbow).^[11] The questionnaire also asked about the use of thermometers in the home and the Aarogya Setu application.

Limitations

It is the observational study that created awareness regarding COVID-19 among non-teaching staff members such as clerks/peons/attendants/sweepers. The limitations of this study are that the sample size was small and basic demographic details of age and sex is not included in this study. Furthermore, the present study will create baseline data for comparison with a similar type of study in the future.^[12-15] It helped health-care providers to focus more on conducting awareness programs. Another limitation of this study is that it was conducted only in a dental college in melmaruvathur for non-professionals.

CONCLUSION

Evaluation of post-COVID precautions and measures can be concluded from the present study that the majority of the

personnel are aware that coronavirus disease does exist, but they have poor in-depth knowledge about COVID preventive measures through detailed questions. Hence, they need to be made aware of its symptoms and should be educated on preventive measures and updated guidelines. From the current trend of the disease spread and threat of COVID-19, conducting regular awareness generation programs will help in minimizing the spread of the disease.

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