



QUESTIONNAIRE STUDY ON KNOWLEDGE AND AWARENESS OF COVID -19 AMONG GENERAL POPULATION

| | |
|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Manju.J* | Reader, Department Of Oral Medicine And Radiology, Thai Moogambigai Dental College And Hospital, Dr. MGR Educational And Research Institute, Chennai, Tamilnadu. *Corresponding Author |
| Mutum Sangeeta Devi | Senior Lecturer, Department of Oral Medicine and Radiology, Madha Dental College and Hospital, Chennai, Tamilnadu |
| Preeti. R | Senior Lecturer, Department of Orthodontics, Madha Dental College and Hospital, Chennai, Tamilnadu |
| Preety Loushambam | Private Practitioner, Imphal |
| Sivakumar.S | Private practitioner, Tamilnadu. |

ABSTRACT

COVID 19 is a respiratory communicable disease which has created worldwide crisis. The aim of this study is to assess the knowledge and awareness of this disease among the general population for which online based circulation of a multiple choice type questionnaire which consisted of 10 questions was used. About 100 participants were included in the study. The data thus received was transferred to excel sheet and assessed as percentages. Most of them have responded positively and there was deficiency for few questions only. The limitation of the study is the sample size and the participants are those who had the facility of internet connection.

KEYWORDS : COVID19, Awareness, General population, Communicable

INTRODUCTION

The current corona virus pandemic is an unexpected emergency that have caused worldwide health care sector in crisis, even in the developed countries. The disease caused by the SARS-CoV-2 virus which is called as COVID-19 by the World Health Organization¹. The common symptoms which are stated are sore throat, fever, dry cough, myalgia, nasal congestion, rhinitis, dyspnea, and in some patients diarrhea is also reported. Nearly about 80% of the patients have mild symptoms and 15% of the cases require hospitalization. In about 5% of patients, the onset of severe dyspnea leads to direct access to an intensive care unit². The main routes of transmission of SARS-CoV-2 are respiratory droplets and direct contact. Those who are in contact with an infected person are at a higher level of risk of being exposed to this infection through the infective respiratory droplets^{3,4}. Droplets may stay on the surfaces where the virus could remain viable. Hence it can serve as a source of transmission. Experimental evidence indicates that SARS-CoV-2 survival on surfaces is similar to that of SARS-CoV-1⁵, the virus that causes severe acute respiratory syndrome (SARS). The median half-life of infectious SARS-CoV-2 on surfaces is 1-7 hours depending on the surface (copper being the shortest and plastic the greatest)⁶. However, infectious virus can be detected as long as 7 days^{6,7}. Hence this questionnaire study is done to assess the knowledge and awareness of COVID 19 among the general population.

MATERIALS AND METHOD:

A total of 100 participants were included in this study from different parts of Tamilnadu. A multiple choice type questionnaire (Table -1) was prepared through Google forms to obtain information from the subjects and circulated through online based platform. The questionnaire included 10 questions on knowledge and awareness regarding COVID-19. Along with this demographic data was collected which included age and qualification. The obtained data was transferred to excel sheet and assessment was done as percentages.

RESULT:

The targeted population in this study was the general

population from Tamilnadu. The sample size was 100 participants. Gender and qualification was mainly included in which 34% were female and 66% were male. With regard to qualification 10% were 10th standard, 8% were 12th standard, 38% were undergraduate degree holders and 44% were postgraduate degree holders. The results are presented in the table-1 as percentages along with the questions.

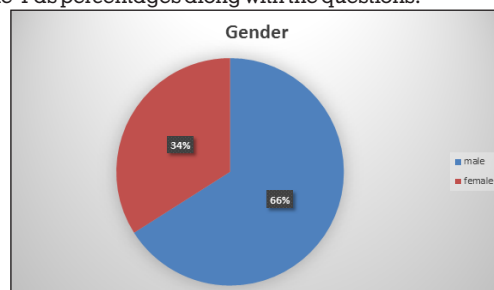


FIGURE-1 GENDER DISTRIBUTION

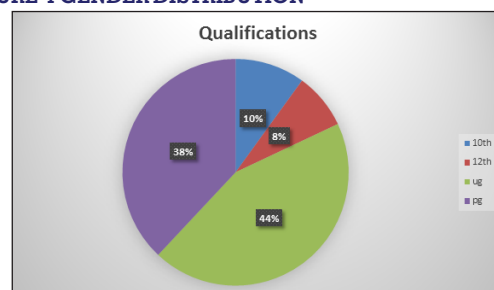


FIGURE 2- QUALIFICATION DISTRIBUTION

| Questionnaire | Response (in frequency) |
|---------------------------------------------------------------------|-------------------------|
| 1.Covid 19 infection is a pandemic disease. The term pandemic means | |
| a) Large number of people affected with disease globally | 100% |
| b) few numbers of people affected with disease globally | 0% |
| c) continuously few cases found | 0% |

| | |
|----------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| in particular area d) few numbers of people affected with disease in local area | 0% |
| 2.what is the minimum distance maintained for social distancing for protection from covid 19 a) 1 feet b) 2feet c) 3feet d) 4 feet | 2% 60% 30% 8% |
| 3.The most susceptible forms for covid 19 are a) Children below 10 years b) All age groups c) Age group between 20-40 d) None of above | 55% 40% 5% 0% |
| 4.Diagnostic test used for covid 19 is a) Microscopy b) Rt-pcr c) Culturing d) Xray | 10% 77% 13% 0% |
| 5.wash your hand with proper sanitizer for a) 2sec b) 10sec c) 20sec d) 20min | 0% 60% 40% 0% |
| 6.Which sample is taken primarily for testing covid 19 detections? a) Urine b) Blood c) Nasal swab d) Skin swab | 1% 10% 88% 1% |
| 7.What is the incubation period for covid 19 a) 1-5 days b) 2-4 days c) 5-14 days d) 1-28 days | 20% 10% 60% 10% |
| 8.Mild symptoms of novel coronavirus are a) Cough b) Shortness of breath c) Fever d) All of above | 20% 10% 10% 60% |
| 9.Bestway to prevent covid 19 a) Social distancing b) Washing hand with soap water/sanitizer c) Wearing face mask d) All of above | 30% 5% 10% 55% |
| 10.Investigation done in post covid follow ups are a) Crp b) D—dimer c) X ray / ECG d) All of above | 3% 7% 40% 50% |

TABLE-1

DISCUSSION:

The study revealed that most of the participants had adequate knowledge regarding COVID19, yet there was deficiencies in some of the important aspects like vulnerable population and duration of hand sanitization. We are in need to update ourselves with the constantly changing situations to combat new infections. COVID19 is a novel viral pandemic disease of global concern. This pandemic outbreak remains the biggest threat to human beings due to high mortality rate associated with it.^{8,9}

Centre for Disease Control (CDC) American Dental Association (ADA), has issued several interim guidelines and protocols to prevent the spread of COVID19.^{10,11} Local governing authorities have issued guidelines, only to provide emergency treatment and all aerosol generating procedures to be avoided.¹² The study revealed that majority of the subjects had high and moderate level of knowledge, yet there were notable lacunae in some of the important aspects. All the participants (100%) were aware about the term pandemic. The respondents (60%) gave the correct answer for social distancing which shows that the general public have well understood the concept of social distancing. A good number of participants about 77% knew that RT-PCR is the important diagnostic test for COVID 19. All the symptoms of this infection was identified by 60 % of the respondents. About 55% of the participants considered children to be the vulnerable population. This shows that they take measures to protect the children and are not aware that all age group can get affected with COVID19. For the incubation period about 60% of them gave the correct answer this shows their high level of awareness about the quarantine period if suppose they have been in contact with an infected person. Likewise 88% of the participants answered that nasal swab as the main sample collection method. According to studies conducted by Warren Gash et al¹³ hand sanitizing is recommended for controlling respiratory diseases. In the present study about 55% of the respondents had the knowledge of all the preventive measures against COVID19 but for the duration of sanitizing hands only 40% of them were aware of it. About 50% of the respondents were aware about post COVID19 investigatory method which shows their knowledge about post COVID19 follow ups. The area of weakness in knowledge was regarding the vulnerable population and the awareness of duration for hand sanitization. The limitation of the study is the smaller sample size and the participants are those who had the internet facility since this is an online survey questionnaire.

CONCLUSION

It could be seen clearly from the above discussion that promotion of environment health and sanitation is very essential to promote the health and wellbeing of the human population. Many strategies are needed to promote health and hygiene. In this content, there is a need of health planning to identify the gaps in health and sanitation knowledge. The study revealed that most of the participants had adequate knowledge regarding COVID19, yet there was some deficiencies in some of the important aspects. Educational programs of COVID19 should be initiated and encouraged to fill these lacunae and reinforce the knowledge among general population.

REFERENCES :

- Gorbatenya, A.E.; Baker, S.C.; Baric, R.S.; De Groot, R.J.; Drosten, C.; Gulyaeva, A.A.; Haagmans, B.L.; Lauber, C.; Leontovich, A.M.; Neuman, B.W.; et al. The species Severe acute respiratory syndrome-related coronavirus: Classifying 2019-nCoV and naming it SARS-CoV-2. *Nat. Microbiol.* 2020, 5, 536–544.
- Gostic, K.; Gomez, A.C.; Mummah, R.O.; Kucharski, A.J.; Lloyd-Smith, J.O. Estimated effectiveness of symptom and risk screening to prevent the spread of COVID-19. *eLife* 2020, 9, e55570.
- World Health Organization. Coronavirus disease (COVID-19) advice for the public Geneva: World Health Organization; 2020.
- World Health Organization. Transmission of SARS- CoV-2: implications for infection prevention precautions. 2020.
- Kampf G, Todt D, Pfaender S, Steinmann E. Persistence of coronaviruses on inanimate surfaces and their inactivation with biocidal agents. *J Hosp Infect.* 2020;104(3):246–51.
- van Doremalen N, Bushmaker T, Morris DH, Holbrook MG, Gamble A, Williamson BN, et al. Aerosol and Surface Stability of SARS-CoV-2 as Compared with SARS-CoV-1. *N Engl J Med.* 2020.
- Chin A CJ, Perera MRA, Hui KPY, Yen HL, Chan MCW. Stability of SARS-CoV-2 in different environmental conditions. *Lancet Microbe.* 2020;1(1).
- Zhu N., Zhang D., Wang W. A novel coronavirus from patients with pneumonia in China, 2019. *N Engl J Med.* 2020 Feb 20;382(8):727–733.
- Chan J.F., Yuan S., Kok K.H. A familial cluster of pneumonia associated with the 2019 novel coronavirus indicating person-to-person transmission: a study of a family cluster. *Lancet.* 2020;395(10223):514–523.

10. Cdc.gov [internet].Georgia: centers for disease control and prevention. Recommendation: postpone non-urgent dental procedures, surgeries, and visits c2020 [cited 2020 May 10].
11. ADA.org [internet].Chicago: ADA interim guidance as dentist considers reopening practices; c2020 [cited 2020 May 6].
12. IDA.org.in [internet].Mumbai: Indian dental association's preventive guidelines for dental professionals on the coronavirus Threat;c2020 [cited 2020 Mar11].
13. Warren-Gash C, Fragaszy E. Hand hygiene to reduce community transmission of influenza and acute respiratory tract infection: a systematic review. *Influenza Other Respi Viruses* [Internet]. 2013; Available from: <https://onlinelibrary.wiley.com/doi/abs/10.1111/irv.12015>