

AWARENESS IN PEOPLE ABOUT DENTISTRY IN THE CURRENT COVID-19 PANDEMIC.

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Abstract: Dentistry is facing its darkest hour yet, with the growth and spread of the Coronavirus pandemic. The safety and prevention of the general population is of utmost importance. All patients visiting a dental clinic must be treated with due precautions. It has posed changes in the medical field including the dental practice to prevent patients as well as doctors from getting infected. The aim of the study is to analyse the 'Awareness in people about safe Dentistry in the current COVID-19 Pandemic'. Online survey was conducted using Google Forms, a 18-item self-designed questionnaire was used for the study. Total 359 responses were received by the stipulated time. The obtained answers were analyzed statistically and compared with the guidelines given by different organizations and other studies.

Index Terms: COVID-19, Pandemic, Dental Practice, General Population.

I. INTRODUCTION

The corona virus pandemic or COVID-19 outbreak has been the greatest dental and medical challenges to mankind in the current scenario. On 31 December 2019, a cluster of cases of pneumonia of unidentified cause, in the city of Wuhan, Hubei province in China, was reported to the World Health Organization.^[1] This novel coronavirus was named Coronavirus Disease 2019(COVID-19) by WHO in February 2020.^[2] It is referred to as SARS-CoV-2 and the associated disease is COVID-19. The World health Organization (WHO) declared COVID-19 to be pandemic on March 11,2020.^[3]

The first case of COVID-19 in India was reported on 30th January 2020.^[4] Cases of COVID-19 in India started rising by the 2nd week of March 2020. As of October 28th, 2020(8:26PM IST), according to the statistics India has reported more than 8M cases, out of them 7.2M cases have recovered, 1,20,171 people lost their lives.^[5] The COVID-19 pandemic has become a public health challenge including oral health all over the world. Patients undergoing dental procedures as well as Dentists are at high risk of cross-infection due to current COVID-19 Pandemic. Most dental procedures require close contact with the patient's oral cavity, saliva, blood, and respiratory tract secretions. Many patients who are asymptomatic may be carriers.^[6] For this reason, all patients visiting a dental clinic must be treated with due precautions. It has posed changes in the medical field including the dental practice to prevent patients as well as doctors from getting infected. Thus, a greater understanding of prevention measures before visiting dental clinics and prevent further spread of infection to the patients and dental health care personnel.

II. AIMS OF THE STUDY

The aim of this survey study was to assess the level of awareness in people regarding safe Dentistry in the current COVID-19 Pandemic.

III. MATERIALS AND METHOD

A survey was conducted on an online platform using Google Forms and the link was sent using WhatsApp amongst 359 individuals to analyse level of awareness regarding COVID-19 and steps to be taken for its while visiting Dental clinic. The survey contained

18 questions. All the people who participated in the survey were informed about the anonymity and confidentiality of their response and were also informed about the purpose of conducting the survey.

Inclusion Criteria

1. Any gender.
2. People above 18 years of age.
3. Able to read and interpret the survey.
4. Internet connection and access to WhatsApp.

Exclusion Criteria

Unwilling participants hesitant to provide informed consent for the survey.

IV. INSTRUMENTS USED

SELF-DESIGNED QUESTIONNAIRE: A questionnaire was formed consisting of 18 questions. The questionnaire was designed in a way to know about the awareness of the general population about Dentistry amid the COVID-19 Pandemic.

V. ETHICAL CONSIDERATIONS

1. The personal information, views and opinions provided by the participants were kept anonymous.
2. The participation was voluntary, and participants were free to decline participation in the study.
3. If any Dental Professional required further guidance or help regarding more precautionary measures, support would be extended.

VI. STATISTICAL ANALYSIS

Descriptive analysis was computed in terms of mean and standard deviation with range for continuous variables and frequency with percentage for ordinal and nominal variables. All analysis was done with the help of web-based Google Sheets. [\[Table 1\]](#)

TABLE 1: Statistical Analysis

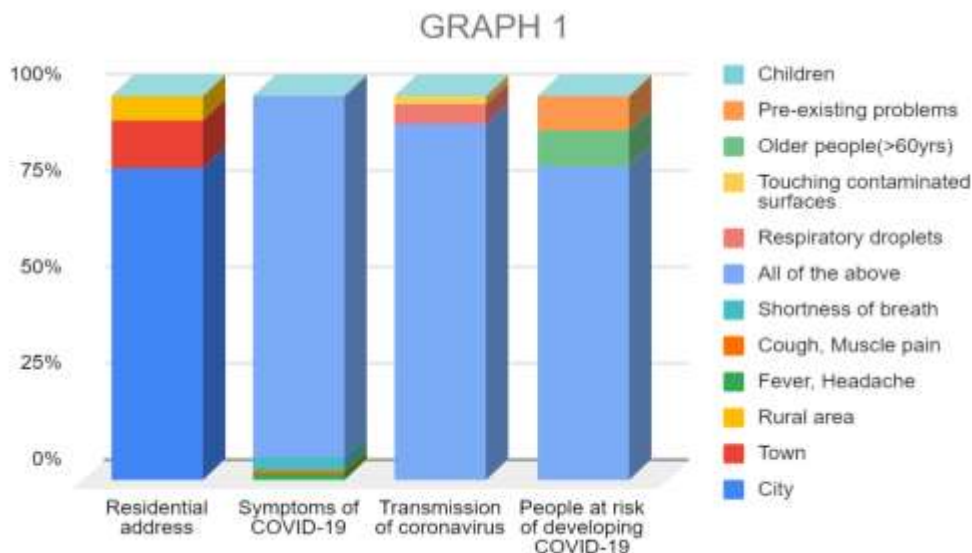
| VARIABLES | n(%)/ Mean+_SD |
|--|----------------|
| Residential address | |
| City | 284(81.1) |
| Town | 43(12.3) |
| Rural area | 23(6.6) |
| Symptoms of COVID-19 | |
| Fever, Headache | 6(1.7) |
| Cough, Muscle pain | 3(0.9) |
| Shortness of breath | 13(3.7) |
| All of the above | 326(93.7) |
| Transmission of coronavirus | |
| Respiratory Droplets | 18(5.1) |
| Touching contaminated surface | 7(2) |
| Both | 325(92.9) |
| People at risk of developing COVID-19 | |
| Older people(>60yrs) | 33(9.4) |

| | |
|---|-----------|
| People with pre-existing medical problems | 31(8.8) |
| Children | 0 |
| All of the above | 287(81.8) |
| Distance to be maintained in waiting room between chairs | |
| 6 Feet | 234(66.9) |
| 2 Feet | 63(18) |
| 4 Feet | 53(15.1) |
| Awareness about guidelines by MoHFW | |
| Yes | 183(52) |
| No | 169(48) |
| Application developed by Government for COVID-19 | |
| Jan Dhan Yojana | 3(0.8) |
| Aarogya Setu | 346(98) |
| AYUSH | 4(1.1) |
| Mask Preferred for visiting public places | |
| Cloth mask | 119(33.8) |
| Surgical mask | 24(6.8) |
| N-95 mask | 209(59.4) |
| Visiting a Dental clinic is safe? | |
| Yes | 124(35.2) |
| No | 228(64.8) |
| Avoidance of non-emergency Dental treatment | |
| Yes | 301(85.3) |
| No | 52(14.7) |
| Functional zones for Dental Clinics | |
| Red Zone | 12(3.5) |
| Purple and Blue zone | 20(5.8) |
| Green and Orange zone | 315(90.8) |
| Preference for visiting Clinics in Red Zone | |
| Yes | 21(6) |
| No | 329(94) |
| Safe way to visit a Dental Clinic | |
| By visiting Dental clinic without dental appointment | 4(1.1) |
| Taking dental appointment using Telephone or Web-based system | 306(87.7) |
| No need | 39(11.2) |
| For appointments, preference for reaching | |

| | |
|---|-----------|
| Before the scheduled appointment time | 55(15.7) |
| At the scheduled appointment time | 291(83.1) |
| No need to follow scheduled appointment time | 4(1.1) |
| Requirement of company to visit a clinic | |
| Yes | 30(8.6) |
| No | 219(62.8) |
| Maybe | 100(28.7) |
| Procedure to be followed while entering the clinic | |
| Wearing a mask | 3(0.8) |
| Use a hand sanitiser at the entrance | 5(1.4) |
| Both | 346(97.7) |
| Non-aerosol generating procedure | |
| Teeth Cleaning | 155(43.2) |
| Tooth filling | 89(24.8) |
| Tooth removal | 115(32) |
| Preference of digital transaction over cash | |
| Yes | 328(92.4) |
| No | 5(1.4) |
| Maybe | 22(6.2) |

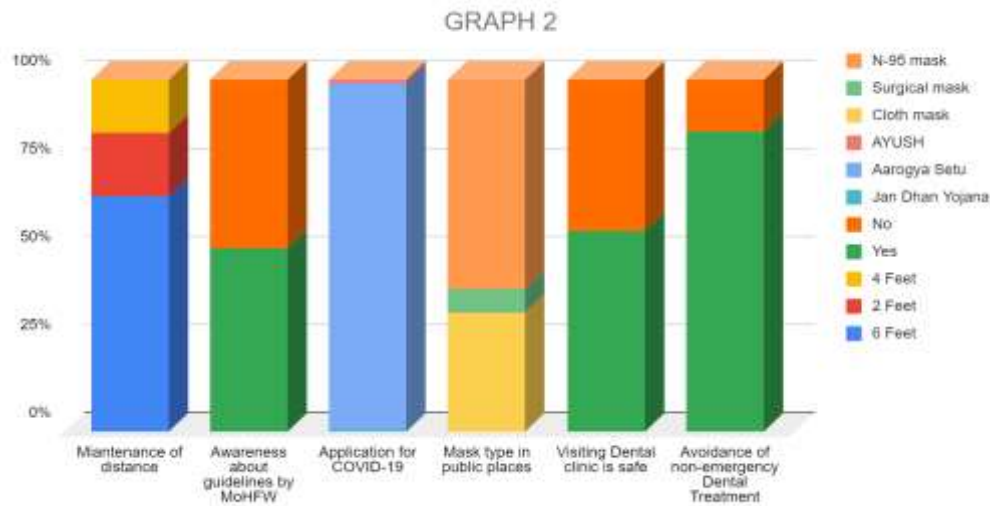
VII. RESULT

There were 359 respondents out of which majority(81.1%) lived in the city while 12.3% lived in Town. Percentage of Respondents aware of the symptoms and mode of transmission of COVID-19 were 93.7% and 92.9%. 81.8% of the respondents thought older people above 60 years of age, children and people with pre-existing medical problems are at higher risk of developing COVID-19(Graph 1).



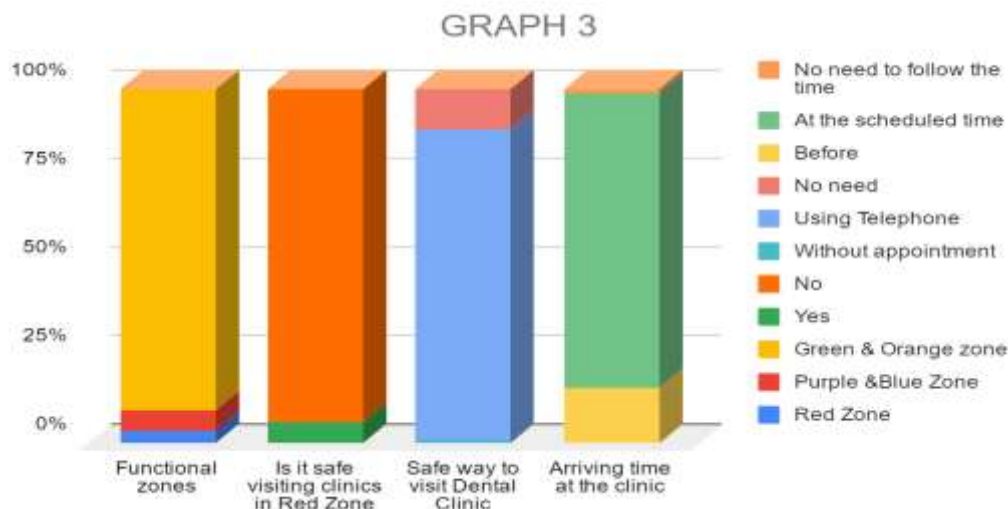
Graph 1

Also, 66.9% of people knew the minimum distance to be maintained between the chairs for the patients in the waiting room is 6 feet, while approximately 18% considered 2 feet is the distance to be maintained. Almost half of the population (52%) was aware of the guidelines for Dentists issued by the Ministry of Health and Family Welfare (MoHFW). Majority(98%) of the respondents were aware about the mobile application ‘Aarogya Setu’ developed by the Government of India. 59.4% respondents preferred wearing N-95 masks while 33.8% preferred wearing cloth masks in public places. Approximately 64.8% respondents felt safe to visit a Dental clinic. However, 35.2% did not feel safe to visit the Dental clinic. Majority (85.3%) of the respondents would avoid Dental treatment if it is not an emergency(Graph 2).



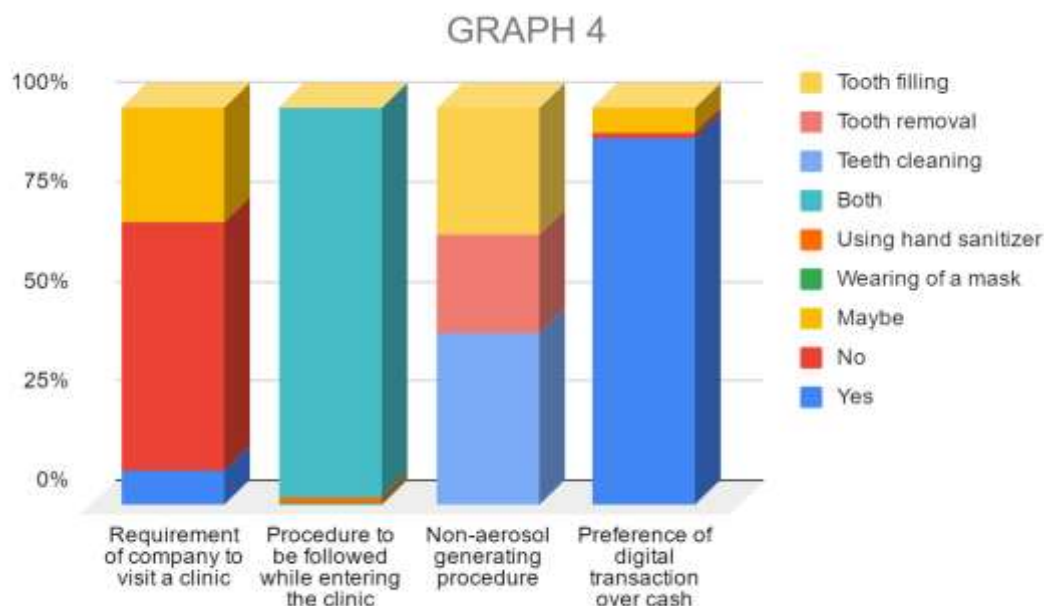
Graph 2

90.8% of the respondents felt safe to visit dental clinics situated in GREEN ZONE and ORANGE ZONE while 6% of the respondents refrained from visiting the Dental clinic situated in the Hotspot area. Majority (87.7%) of the respondents felt safe by taking dental appointments using Telephone or web based systems. Minority (15.7%) of the respondents preferred reaching the Dental clinic before the scheduled appointment time(Graph 3).



Graph 3

More than half(62.8%) of respondents would not accompany someone while visiting Dental Clinic. Approximately 97.7% of the respondents would take the precautionary measures while entering dental clinic like wearing mask and using Hand sanitiser. 32% of the respondents thought Tooth removal is the non-aerosol generating procedure, at the same time 24.8% thought tooth filling and 43.2% thought teeth cleaning is the non-aerosol generating procedure. Majority(92.4%) of the respondents felt digital transactions are more safe over Cash payment.(Graph 4).



Graph 4

VIII. DISCUSSION

The COVID-19 pandemic has greatly impacted the world. Most importantly, the field of dentistry because of the high level of exposure of Dentists and patients while providing dental care have been introduced. Thus, the precautionary measures should be followed by the general population. However, people should be aware of all the changes that took place. The survey was done to make people aware about the ongoing scenario and how to adapt to the changed circumstances. The symptoms of the COVID-19 are Fever, Headache, Cough, Muscle pain and shortness of breath. The transmission occurs through respiratory droplets and touching contaminated surfaces. This virus mainly affects older people above 60yrs of age and people with pre-existing medical problems or with chronic conditions like diabetes, hypertension and children. Interdigitation of teledentistry which includes telescreening, teletriage, and teleconsulting is highly encouraged with telephone screening aimed to be the first point of contact between the patient and the dentist.^[7] Social distancing and maintaining hygiene with alcohol-based sanitizers is the best way to prevent the spread of this virus as the person remains asymptomatic from the exposure till the first symptom is shown that is for around 2-14 days which is the incubation period of the virus.^[8]

IX. CONCLUSION

The COVID-19 Pandemic will leave a lasting impact on mankind. The effects of the pandemic are profound and has forever changed the outlook of the general population as a whole. Thus, by taking proper precautions we would be able to tackle this global challenge. The attempt of this survey was to make people aware about the safety precautions taken while visiting dental clinics. Majority of the people are aware of the zones, symptoms, mode of transmission and the measures taken to prevent the novel coronavirus spread. Keeping in mind a good amount of knowledge amongst individuals about maintaining hygiene and social distancing, this survey would help the general population to know the norms to be followed while visiting the Dental clinic amid the Pandemic

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