# **Difficulties Faced By Dentists During COVID Pandemic-A Survey**

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### **Abstract**

#### Aim:

To assess the hardships faced by dentists during covid pandemic.

**Introduction: COVID-19** was declared a pandemic by the World Health Organisation (WHO). The primary clinical appearances are respiratory in nature. Dental practitioners are among the most elevated hazard categories for transmission of covid since numerous dental methods have the potential to transmit the disease.

#### **Materials and Methods:**

A cross sectional survey via an online questionnaire of 11 close ended questions was done. It was circulated via Google forms. The questionnaire contains questions on demographic details also. Data was collected and tabulated in excel sheet and statistical analysis was done using SPSS version 23. A total of 133 dentists responded to the study.

#### **Results:**

Most of the dentists reported that they were worried about operational and financial challenges to run their practice during Covid-19 pandemic. 53.4% of the dentists were male while 46.6% of the participants were female. Most of the dentists agreed that they are at higher risk of contracting covid-19 than other medical professionals. Most of the dentists agreed that they may be the major cause of transmitting the infection to their patients.

# **Conclusion:**

During Covid-19, dentists had to face a lot of ethical and moral dilemmas along with facing operational challenges. This led to a negative impact on their lives, the present study draws our attention towards the hardships they faced.

#### **Keywords**

Anxiety, covid-19, dentists, financial, hardships

### Introduction

World Health Organisation declared COVID as pandemic, with significant numbers of infected cases and deaths reported in many countries. One of the coronaviruses can cause serious sickness, such as Severe Acute Respiratory Syndrome (SARS) and Middle East Respiratory Syndrome (MERS), causes the disease (MERS). The spherical shape and surface projections are credited with the name "Corona." (1).

The primary clinical appearances are respiratory in nature, and they show after a normal hatching period of 5 to 7 days. An expanded chance of contamination is found in patients with certain comorbidities primarily diabetes, heart sicknesses and hypertension. Dental practitioners are among the most elevated hazard categories for transmission of COVID-19 since numerous dental methods have the potential to transmit the disease with the assistance of mist concentrates produced by the patient's mouth (2–4). It is important for dental professionals to supply treatment to patients who are in torment or require pressing offer assistance, the essential

rationale ought to be to anticipate their patients from being sullied (5,6). The developing fear among patients and dental practitioners with respect to cross disease led to expanded requests for Personal Protection Equipment which comprises gloves, veil and gown. During airborne creating dental methods, extra assurance like confront assurance goggles, confront shield, head cover and boots ought to be utilized (1).

Dentists now only do emergency dental operations and must adhere to cross infection guidelines. Apart from the difficulty in controlling cross infection, there are several other elements of Covid-19 to consider. This article addresses all those problems. A survey of dentists' current state was conducted with the goal of gaining insight into how dentistry was developing and what the future expectations were in the current practise. (7),(8–15).

Telemedicine is currently being used to reduce the danger of increased COVID-19 infection and cross infection as a result of government policies. Telemedicine is a new concept in health care that uses communication technologies to give care over long distances.. This is a revolutionary change in the dental field (16,17). Telemedicine has modified the traditional medicine approach. Among professionals, this type of digitalisation can create connections between the physicians to help share their database, therapeutic counselling and diagnostic doubts (18,19,20). The COVID-19 pandemic has had an immediate influence on how dental care can be administered safely, and it is likely to prompt long-term changes in how dental care is delivered. Anti-retraction handpieces and rubber dam isolation should also be employed to decrease the risk of transmission in high-volume saliva regions. (21).

# **Materials and Methods**

An online questionnaire from Google forms was used to perform the current cross-sectional investigation. The online survey ran from February 7th through February 22nd, 2021. There were 130 answers in all. Only dental professionals were requested to participate in the survey. The study did not include dental students or ancillary staff. There were 11 open-ended questions in the questionnaire. The responses were gathered, tallied, and analysed in an excel file. The results were shown as pie diagrams once the data was entered into SPSS. The demographic data was analysed and compared to the hardships using the Chi-square test. Age and gender are the independent variables, while dental troubles are the dependent variables.

#### Questionnaire:

1) Age

25-35

35-45

45-55

Above 55

2) Gender

Male, Female and Prefer not to say

- 3) Do you believe dentists are more likely than other healthcare workers to contract COVID-19? Yes, No and Maybe
- 4) Do you believe you may be a major source of infection transmission to your patients? Yes, No and Maybe
- 5) Do you believe that wearing PPE (Personal Protective Equipment) will protect you from the virus?

Yes, No and Maybe

- 6) Did you do any major alterations in the clinic set up for Covid safety care? Yes, No and Maybe
- 7) Due to the pandemic are you working for less clinical hours per day? Yes, No and Maybe
- 8) Has the epidemic had an impact on your everyday monetary earnings as a dentist?? Yes, No and Maybe
- 9) Is there a rise in the overall cost of treatment materials or overhead?? Yes, No and Maybe
- 10) Has the epidemic had an impact on your patient flow?? Yes, No and Maybe
- 11) Did you face any major technical issues due to non-functional equipment for a few months? Yes, No and Maybe

# Results

The present study has observed that figure 1A represents different age groups and their responses for the question that dentists are at higher risk of contracting COVID-19 than other medical professionals (Figure 1). Then in figure 2 represents different age groups and their responses for the question that they feel they are a major cause of transmitting the virus to their patients. In age group 35-45 24.24% agreed while 16.67% dentists aged from 45-55 disagreed. Further the study noticed figure 3 represents different age groups and their responses for the question that is wearing PPE necessary to prevent disease contraction. In age group 35-45 24.24% agreed while 15.15% dentists aged from 45-55 were not sure. Figure 4 represents different age groups and

their responses for the question that did they do any major changes in their clinic setup post covid. In age group 35-45 18.18% agreed while 16.67% dentists aged from 45-55 were not sure. Figure 5 represents different age groups and their responses for the question that there is a decrease in working hours. In age group 35-45 18.18% agreed while 15.15% dentists aged from 45-55 disagreed.

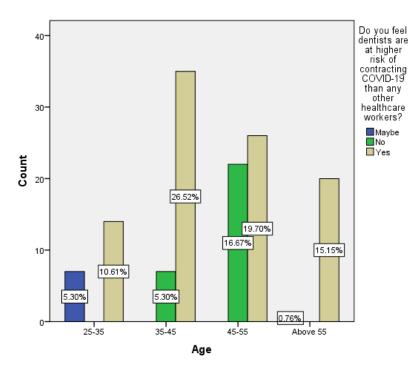


Figure 1- This figure represents different age groups and their responses for the question that dentists are at higher risk of contracting covid than other medical professionals. In age group 35-45 26.52% agreed while 16.67% dentists aged from 45-55 disagreed. The present observation shows statistically significant using Pearson Chi Square Test and confidence level of 95%.

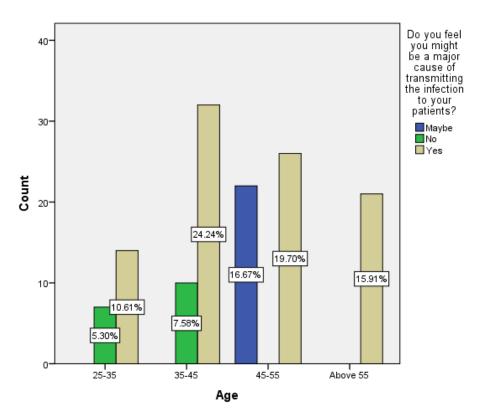


Figure 2 - This figure represents different age groups and their responses for the question that they feel they are a major cause of transmitting the virus to their patients. In age group 35-45 24.24% agreed while 16.67% dentists aged from 45-55 disagreed. The present observation shows statistically significant (p value < 0.05) using Pearson Chi Square Test (p value = 0.04) and confidence level of 95%.

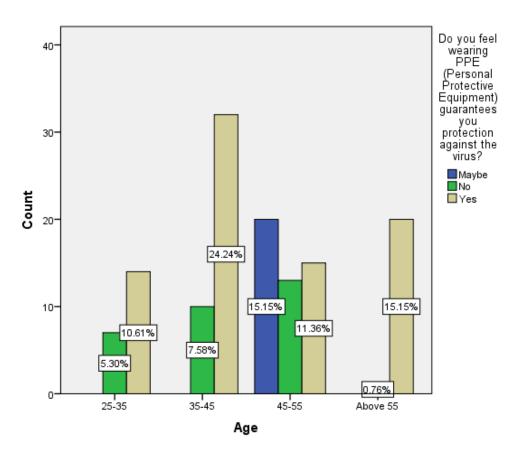


Figure 3 - This figure represents different age groups and their responses for the question that is wearing PPE necessary to prevent disease contraction. In age group 35-45 24.24% agreed while 15.15% dentists aged from 45-55 were not sure. The present observation shows statistically significant (p value < 0.05) using Pearson Chi Square Test (p value= 0.038) and confidence level of 95%.

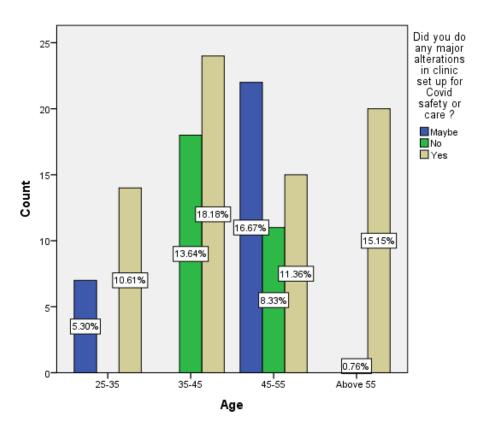


Figure 4 - This figure represents different age groups and their responses for the question that did they do any major changes in their clinic setup post covid. In age group 35-45 18.18% agreed while 16.67% dentists aged from 45-55 were not sure. The present observation shows statistically significant (p value < 0.05) using Pearson Chi Square Test (p value = 0.046) and confidence level of 95%.

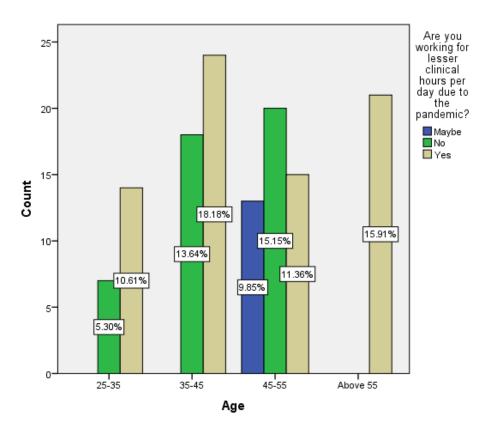


Figure 5 - This figure represents different age groups and their responses for the question that is there a decrease in working hours. In age group 35-45 18.18% agreed while 15.15% dentists aged from 45-55 disagreed. The present observation shows statistically significant (p value < 0.05) using Pearson Chi Square Test (p value = 0.046) and a confidence level of 95%.

#### **Discussion**

The survey looked at the difficulties that dentists in our nation confront. Our current study is a cross-sectional questionnaire survey conducted in a single country, and although sending the questionnaire to a large number of dentists via various platforms, we received fewer than half of the responses; the sole restriction of a survey is the small sample size. (1),(22).

Despite distributing a significant number of questionnaires, we obtained less than half of the replies to the current survey, which was a cross-sectional questionnaire study conducted in one country. Our survey has a small sample size, which is one of its drawbacks. (Figure 1-5). The study's future goals include tracking how dentists are dealing with the pandemic. Data from this study could be used as a baseline for future advances and in the creation of interventions. (12,13).

The majority of dentists reported financial difficulties as a result of their reduced working hours and limited dental operations. (21).

To reduce nosocomial infection, the dental operatory should be well equipped, and strict infection control and waste management protocols should be followed. (23). Hand washing is

effective in preventing the spread of different infections. The first step in ensuring the safety of healthcare professionals is to guarantee that PP is properly prepared. (24). It's equally crucial to take care of yourself once you've finished your therapy. COVID-19 control relies heavily on rumination and surface disinfection. (25),(8–15)).

Dental professionals should ensure that all members of the oral healthcare team are well-versed in COVID-19 transmission and prevention methods. (14,15). The accessibility of PPE, which is as it were, granted for treatment in emergency instances, should be considered when planning dental administrations. Cross-infection control measures should be meticulously connected at all times, and social separation should be encouraged within the home unless otherwise advised. (9,10)). In general, dental strategies are divided into two groups, each corresponding to a different age. Planning cavities for fillings, rotating disobedience for root canal treatment, scaling and cleaning of teeth, dental implants, and surgical ejection of teeth are only a few examples of dental methods that cause airborne. (26),(27). Asymptomatic COVID-19 patients may require emergency dental care. These patients' spit is expected to be contaminated with the virus, and they are a confirmed source of infection. (28).

#### Conclusion

Dentists all around the world were forced to close their practises due to government regulations or fear for their safety during the COVID-19 epidemic, which had a devastating influence on their financial, physical, and mental well-being. The findings of this study can be used to better understand the issues that health professionals encounter.

# Author contributions:

Mithil V: Literature search, data collection, manuscript writing.

Mrs.S.Sangeetha: Study design, data verification, manuscript drafting

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Conflict of interest:

None to declare.

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