



## Original Research Article

## Knowledge and fear for dental treatments due to Covid-19

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## ABSTRACT

**Introduction:** Covid 19 have created severe worries, fear & anxiety among every individual. Production of aerosols during various dental procedure have definitive potential of transmitting covid 19 to one another. After three phases of COVID pandemic in India, there is lot of changes and challenges in health care services. The dental treatment have become an issue which need to be well addressed.

**Materials and Methods:** Out of 500 individual only 410 individual gave their consent for the study. Offline questionnaire survey was conducted among adults above 21 years. The questionnaire included their demographic details and question related to their knowledge and fear of undergoing dental treatment during this pandemic situation.

**Results:** Among 410 individual who participated in the study, 21% of the individual had covid symptoms. 35% told that they are afraid of dental treatment during pandemic where as 45% almost half the individual said they will take the treatment if its only emergency. The main reason for this fear was infection that they can get while getting treated or while in a dental clinic or hospital.

**Conclusion:** The fear of dental treatment during pandemic is not that high. This may be due to recent advances in dental procedure and sterilization. The knowledge of maintaining good oral care is been adapted by maximum individual.

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## 1. Introduction

COVID-19 was declared as pandemic by WHO on March 11, 2020.<sup>1</sup> Government and different media methods put all their efforts to spread the awareness regarding the precautions & prevention, sign & symptoms and different treatment modalities of covid-19 infection. The social media played an important role in updating information regarding any new information on the infection and increased mortality rate. This led to fear and anxiety in

not just medicos but in general population too. Transmission through droplets was one of the main reasons of the spread, which was more under situations like dental procedure. Various dental treatment involves procedure in which productions of aerosols are high ex- scaling, cavity preparation by air rotor and so on and that may be one of the major reasons for avoiding dental procedure during covid phase. The aerosols containing microorganisms just not only involved the patient and the operator but also attendant and para medical staff of the clinic.

So the awareness among the infection transmission of COVID-19 among general population so that the level of

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fear and anxiety remains less among dental treatment seeing individual

**2. Materials and Methods**

A offline survey was conducted among general population of 500 out of which 410 individual got ready to answer the questions been asked in the form. The question included their demographic details and question related to their knowledge and fear of undergoing dental treatment during this pandemic situation. The questionnaire were given in printed form. The participating individual were asked to answer the question without discussing with anyone to avoid bias in the study.

**3. Results**

hows demographic characteristics of the study population. There was total of 230 males and 180 females, and majority of subjects were of age group 20years to 40 years (51.21%). 51.21% of the total individual participated were earning more than 10000 rs per month. Majority population was literate accounting for 69.51%.

Figure 1 shows 21% of the participant were having COVID-19 symptoms.

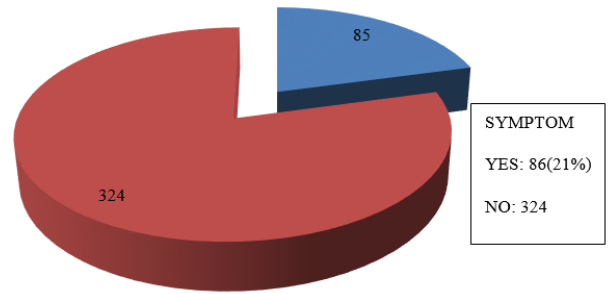
howsmaximum individual were anxious i.e 207(50.48%) that contributes almost half the total study population, still 20 individual got there treatment done during pandemic and most of study population were ready for treatment if dental surgeon give them prior appointments. But only 14.63% of individual i.e 60 subjects were ready for treatment only if there was an emergency. Maximum subjects thought of getting infected by dental treatment so the level of anxiousness was quite high.

There was minimum effect of quarantine on the subjects affecting there treatment. Moreover 210(51.21%) individual considered that use of PPE disposables were useful and proper time interval between two patient was also needful for avoiding the risk of COVID-19 infection.

**Table 1:** Demographic details of the individual participated in the study

Demographics	Frequency (%)
Gender	
Male	230(56.09)
Female	180(43.90)
Age	
<20	80(19.51)
20-40 >40	210(51.21) 120(29.26)
Income	
<2000	90(21.95)
2000-10000	110(26.82)
>10000	210(51.21)
Education	
Illiterate	125(30.48)
Literate	285(69.51)

Percentage of individual who had symptoms of COVID-19



**Fig. 1:** Percentage of individual who had symptoms of COVID-19

Response of the individual to questionnaire related to knowledge & fear about dental procedure

1. Considering the anxiety level, how are you feeling about the dental treatment during quarantine and pandemic period?
  - (a) Anxious -207(50.48%).
  - (b) Calm-78(19.02%).
  - (c) Fear-89(21.70%).
  - (d) Indifferent-14(3.14%).
  - (e) Panic-22(5.36%).
2. Did you got your dental treatment done during the COVID-19 pandemic?
  - (a) Yes -20(4.8%)
  - (b) No-390(95.12%)
3. If your dental surgeon schedule appointment, are you willing for treatment
  - (a) Yes -190(46.34%).
  - (b) No-160(39.02%).
  - (c) Yes, In case of emergency-60(14.63%).
4. Your knowledge, what is the main reason to avoid dental treatment during pandemic.
  - (a) Dental surgeon at high risk-30(7.3%).
  - (b) Not a emergency -50(12.19%).
  - (c) No need for a treatment-70(17.07%).
  - (d) Risk of getting infected (self or family) - 260(63.41%).
5. Effect of 14 days quarantine on dental procedure.
  - (a) No effect-30(7.3%).
  - (b) Delay in treatment-360(87.80%).
  - (c) Failure in treatment-20(4.8%).
6. What is of major precaution to be taken in dental clinic/hospital during pandemic.
  - (a) Sterilization & Sanitization-50 (12.19%).
  - (b) Proper gap between two patient-150 (36.58%).
  - (c) Use of diaposable PPE -210(51.21%).

#### 4. Discussion

In this study subjects had different knowledge & fear about dental treatment during pandemic. It was mainly due to belief that the procedure can be a cause of getting exposed to infection. Dental procedure were performed using a handpiece accompanied by irrigation producing aerosols containing saliva or other secretion.<sup>2,3</sup>

Very rarely individual underwent treatment during pandemic. It was mainly the self care methods being used by the individual to overcome their dental problem. But once the appointment was fixed mostly of them were ready for dental treatment.

The main reason to avoid dental treatment was due to fear of getting infected and few of them also thought that there was no need of dental treatment.

The delay in treatment had no effect on subjects. Only 20 out of 410 subjects i.e 4.8% of total subject delay may lead to failure of the treatment. The use of PPE was thought to be essential.

This indicates that the awareness & knowledge of the study population was average and they are ready to take precautions as to avoid infection.

#### 5. Conclusion

The fear of dental treatment during COVID-19 pandemic was moderate. This may be due to self care and knowledge towards oral healthcare which have drastically changed in the last couple of years. However, fear of getting infected by COVID-19 virus was due to contamination caused by air-borne infections. All this is leading to improve the dental healthcare segment by use of extraoral suction, PPE & maintaining proper sterilization and sanitization. Infection control practices have become a necessity to reduce anxiety & fear due to pandemic.

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#### 7. Conflict of Interest

None.

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