

Mother's knowledge, attitude and fear about dental visit during Covid-19 pandemic

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Abstract

Mothers have high anxiety about the health of their child during the pandemic. They feel that visiting dental clinics will be more risky as it has the possibility of getting affected by viruses. The aim of the study was to assess the mother's knowledge, attitude and fear about dental visits during the pandemic.

Materials and methods

The survey was taken from mothers of children visiting pediatric dental outpatients in a private dental college. A pre-validated questionnaire was prepared containing 14 questions in both English and vernacular language (Tamil) was distributed directly to them. The results were analysed statistically through SPSS software version 23.0. Descriptive statistics and inferential statistics were performed

Results

In the present study 31.15% of mothers have the fear of waiting in the waiting room while their child is being treated. About 85.25% of mothers have the fear of spreading the virus from someone in the clinic. About 83.61% of mothers have had anxiety since the beginning of COVID-19 pandemic. About 59.02% of mothers had extreme fear during their visit to the dental clinic.

Conclusion:

Most mothers have the fear of contracting the virus on their way, from an infected surface or from someone in the clinic. The aim of this research is to know about the mothers knowledge, attitude and fear about dental visits during Covid- 19 pandemic. **Key words:** knowledge, attitude, fear, mother, pandemic, novel method, innovative technology

Introduction

COVID-19 virus originated in Wuhan, China. It causes acute respiratory symptoms. Children are not at much higher risk of getting affected by COVID-19 virus but they are the asymptomatic carriers transmitting the virus to the old people at home. The virus is transmitted directly through cough, sneeze and drop inhalation. The COVID-19 virus is transmitted through saliva also (1). The viruses have an incubation period of about 14 days (2). The virus is communicable during its latency period (3). Coronavirus has a crown-like appearance because of the presence of glycoprotein projection on its surface (4). Covid- 19 pandemic was considered as a natural disaster that spread throughout the world

over a short period of time (5). Cross infections through many diseases causing organisms present in the oral cavity can occur in dentistry. In that sense, COVID-19 virus has the ability to spread through aerosols (6). So dentists are at high risk of being affected by the virus. But they take necessary measures to prevent the spread of disease to the fellow patients in the clinic.

Mothers accompany their children during medical visits. Mostly they used to take decisions on pediatric dental visits. Since the lockdown is being implemented, mother's fear, anxiety of being affected by the virus or transmitting the virus to their children has increased. In that sense they think that dental clinics are a dangerous place for contracting viruses. Majority of mothers take their child to the dentist only during emergency conditions. They prefer tele-dentistry. They are not confident about the control measures taken by the clinic (1). Some parents have adapted to raise a child with special needs during the outbreak (7)

A study conducted in 2003 during the outbreak of SARS suggests that attitude, practices and knowledge towards viruses during such an outbreak are associated with people's emotions and can complicate the measures taken to prevent the spread of viruses (8). In a study done by Deema Farsi et al., about a mother's knowledge, attitude and fear about dental visit during a pandemic, the willingness of the mother to take their child to the dentist is more than those not willing (1). In a study by Berrak Mizrah Sahin et al., reported that pregnant women had a negative impact on worrying about their baby's health (9). In a study by Nazli Hossain et al., said that pregnant women have belief that there is a possibility of transmission to the child (10). Our team has extensive knowledge and research experience that has translate into high quality publications (11–30).

This research is needed to assess the mother's knowledge, attitude and fear about dental visits during the Covid- 19 pandemic. It helps the mother's to overcome the fear of dental procedures during the pandemic. The aim of this study is to assess mother's knowledge, attitude and fears about dental visits during the COVID-19 pandemic.

Materials and methods

A cross-sectional study was conducted employing a self administered questionnaire to the mothers visiting a private dental college to seek dental care for their children. Prior ethical approval to conduct the study was obtained from the Institutional Review Board of the author's university. A non-probability convenience sampling method was employed. Mothers having children at any age were included. Oral consent from the participants was obtained after explaining the need for the study. The participation of the subject was voluntary and their identities were kept anonymous. A prevalidated and reliable questionnaire containing 15 questions both in English and in vernacular language (Tamil) has been distributed to participants (Annexure 1). The internal consistency of the questionnaire using Cronbach's alpha was found to be 0.72.

This study was conducted by assessing responses to 15 selected questions directly from 60 participants. Statistical analysis was performed using the statistical package for the social sciences (SPSS) software version 23.0 (IBM, Chicago, USA). Descriptive statistics were performed to present the frequency distribution of the options of the question items.

Results

In the present study, about 73.77% of females have the fear of contracting the virus from the infected surface in the clinic and 26.23% don't have it. About 85.25% of mothers have the fear of spreading a virus from someone in the clinic and 14.75% don't have it [Figure 1]. About 59.02% of mothers had extreme fear and 40.98% had no fear [Figure 2]. About 83.61% of mothers had anxiety since the beginning of COVID-19 pandemic but 16.39% didn't have it [Figure 3]. About 45.90% of mothers have the fear of clinic non-compliance with infection control measures but 54.10% mothers did not have fear [Figure 4]. About 34.43% of mothers had an inability to get an appointment during the pandemic and 65.57% of mothers got an appointment during the pandemic [Figure 5]. About 54.10% of mothers reported that cleaning is the main reason for visiting the dentist. About 6.56% of mothers took their child only during an emergency. About 39.34% of mothers reported that the first check-up is the main reason for visiting the dentist. About 63.94% mothers say that complete lockdown is the main reason for missing the appointment. About 4.92% of mothers say that they cancelled the checkup and 4.92% said that the clinic cancelled the check up. About 31.15% of mothers have the fear of waiting in the waiting room while their child is being treated while 68.85% of mothers don't have one. Within the age group of 25-35, 41.67% of mothers had anxiety since the beginning of Covid 19 pandemic and 10% mothers had no anxiety. Within the age group of 36-45, 21.67% of mothers had anxiety since the beginning of Covid 19 pandemic and 1.67% of mothers had no anxiety regarding this. Within the age group of 46-55, 8.33% of mothers had anxiety since the beginning of Covid 19 pandemic and 1.67% of mothers had no anxiety regarding this. Within the age group of 56-65, about 11.67% of mothers had anxiety since the beginning of Covid 19 pandemic and 3.33% of mothers had no anxiety since the beginning of Covid 19 pandemic.[Figure 6]. Within the age group of 25-35, about 43.33% of mothers had the fear of the spread of virus from someone in the clinic and 8.33% didn't have. Within the age group of 36-45, 21.67% of mothers had the fear of the spread of virus from someone in the clinic and 1.67% of mothers don't have. Within the age group of 46-55, 8.33% of mothers had the fear of the spread of virus from someone in the clinic while 1.67% of mothers didn't have one. Within the age group of 56-65, about 11.67% of mothers had the fear of spread of virus from someone in the clinic while 3.33% of mothers had no fear of spread of virus from someone in the clinic [Figure 7].

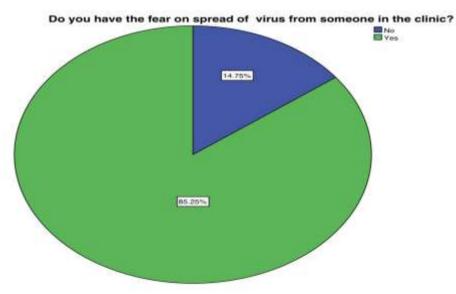


Figure 1: The above pie chart represents the percentage distribution of anxiety level among the participants about their fear of spreading viruses from someone in the clinic. Majority of the participants, 85.25% had the fear of the spread of virus from someone in the clinic represented by green colour. Blue colour represents 14.75% participants who had no fear of spreading viruses from someone in the clinic.

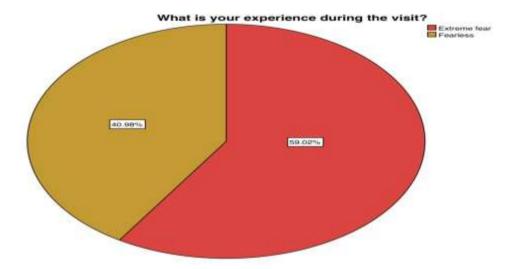


Figure 2: The above pie chart represents the percentage distribution of anxiety levels among the participants during their visit to the dental clinic. Majority of the participants 59.02% had extreme fear during their visit which is represented by red colour. Yellow colour represents 40.98% of participants who had no fear during their visit to the dental clinic.

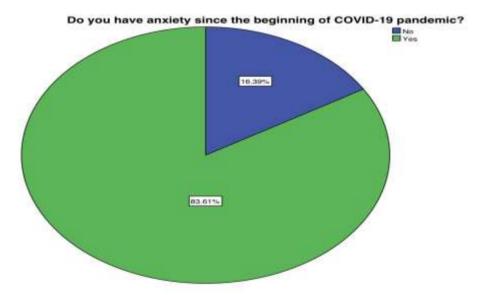


Figure 3: The above pie chart represents the percentage distribution of anxiety levels among the participants since the beginning of COVID-19 pandemic. Majority of the participants 83.61% had anxiety since the beginning of COVID-19 pandemic which is represented by green colour. Blue colour represents 16.39% of participants who had no anxiety since the beginning of COVID-19 pandemic.

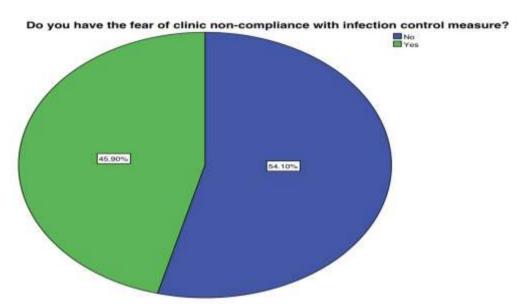


Figure 4: The above pie chart represents the percentage distribution of anxiety level among the participants about their fear of clinic non-compliance with infection control measures. Majority of the participants 54.10% had no fear of clinic non-compliance with infection control measures which is represented by blue colour . Green colour represents 45.90% of participants who had fear of clinic non-compliance with infection control measures.

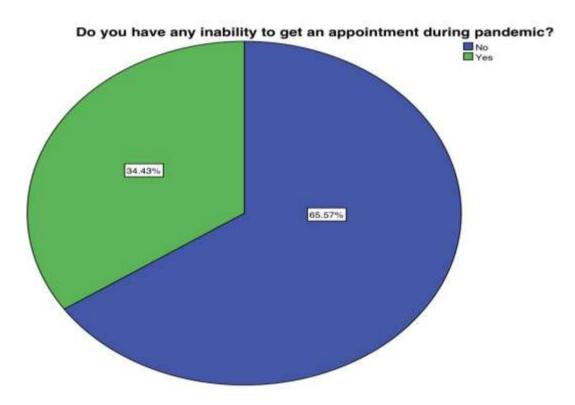


Figure 5: The above pie chart represents the percentage distribution of inability to get an appointment during the pandemic. Majority of participants 65.57% were able to get an appointment during the pandemic which is represented by blue colour. Green colour represents 34.43% of participants who were not able to get an appointment during the pandemic.

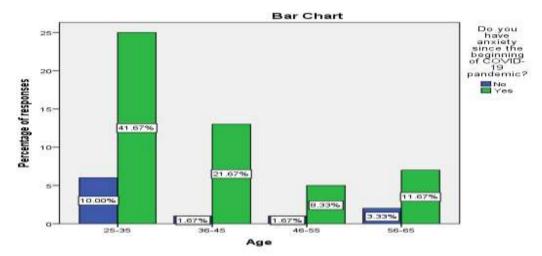


Figure 6: Bar graph depicts the association between the age of mother and about their anxiety since the beginning of COVID-19 pandemic. X axis represents the different age group of mothers and Y axis represents the number of participants. Green colour represents the mothers who had anxiety since the beginning of COVID-19 pandemic. Blue colour represents the mothers who have not had anxiety since the beginning of COVID-19 pandemic. Majority of mothers between the age group of 25-35 had anxiety since the beginning of COVID-19 pandemic. This difference is statistically not significant. (Chi square test value: 1.276, p value: 0.735 not significant)

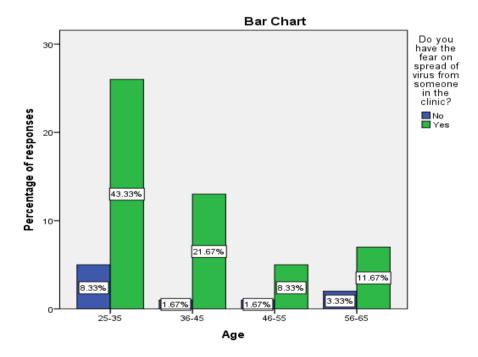


Figure 7: Bar graph represents the association between the age of mother and about their fear of spread of virus from someone in the clinic. The X axis represents the different age group of mothers and the Y axis represents the number of participants. Green colour represents the mothers who had the fear of the spread of virus from someone in the clinic. Blue colour represents the mothers who do not have fear of the spread of virus from someone in the clinic. Majority of mothers between the age group of 25-35

had the fear of the spread of virus from someone in the clinic. This difference is statistically insignificant. (Chi square test value:1.090, p value:0.779- insignificant).

Discussion

The study is about the mother's knowledge, attitude and fear about dental visits during COVID-19 pandemic. Most of the mothers have the fear of taking their child to the dental clinic. Most of the mothers had the fear of contacting the virus on their way to or from the clinic, from infected surfaces in the clinic, from someone in the clinic. Most mothers didn't take their child to the dental clinic even though their child had a dental check-up. Most mothers have had anxiety since the beginning of COVID-19 pandemic. Most mothers had extreme fear during the pandemic .Most mothers reported that complete lockdown is the reason for missing the dental check-up. Most of them said that cleaning is the main reason for visiting the dental clinic .

During the pandemic, parents and children were living with increased stress and fear(31). Aslihan et al.reported that 68% of mothers quit their job during Covid 19 pandemic(32). Nearly 70.2% parents preferred self-medication than direct visit for their children's dental problems during the pandemic(33)

In a study by Ryan Wai Kheong Lee et al., about the pregnant women's attitude and the precaution practises they take towards Covid-19. 47% of women think that if they are affected by coronavirus, it will be transmitted to the foetus also (34). In my study also most of the mothers have the fear of contacting the virus from an infected surface or someone in the clinic. In the survey taken by Jin Sun et al., about the knowledge and attitude of parents regarding dental visits during a pandemic. They reported that most parents think that the dental environment was more dangerous (35). This is similar to the present study results. In research by Deema Farsi et al, reported that most of the mothers had the fear of contracting the virus from someone in the clinic which is similar to my results (1). A study reported that 49% of people had a positive attitude towards control measures taken against COVID-19 virus (36). In the present study also, most mothers had a positive attitude towards the infection control measures taken by the clinic. In a study by Kamate et al., nearly 99.2% had taken preventive measures (37). In the present study most of the mothers had faith about the preventive measures taken by the clinic. Ricardo et al., reported that most of the parents visited the dentist only if there was an emergency(38) which was in contrast to the results of the present study. As this research is done among females in an urban area. In the future this research has to be done among mothers in rural areas to extrapolate the study results.

Conclusion

The mothers are very much concerned about their child's health. Maximum mothers have the fear that their child might be contacting a virus on their way to the clinic. They are even frightened when they are in the clinic because of the spread of a virus from an infected person. The mother even cancelled the appointment. Only a few mothers had a positive attitude, they took their child to the dentist by taking necessary precautions.

Conflict of interest

All the authors declare that there was no conflict of interest in the present study.

Author contribution

Binigha: Literature search, data collection, analysis, manuscript drafting. Arthi Balasubramanian: Data verification, manuscript drafting.

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Annexure 1

1.Age:

2. Monthly income:

- Less than 50,000
- More than 50,000

3.Education:

- Diploma
- Bachelor
- Masters
- Uneducated

4. Working status:

- Home-maker
- Working women

5.Do you have the fear of waiting in the waiting room while your child is being treated?

- Yes
- No

6.Do you have the fear of contacting the virus on your way to or from the clinic?

- Yes
- No

7.Do you have the fear of contacting the virus from an infected surface in the clinic?

- Yes
- No

8.Do you have the fear of spreading the virus from someone in the clinic?

- Yes
- No

9. Whether your child had a dental check-up during a pandemic but you didn't take the child to the clinic?

- Yes
- No

10. Reason for missing the check-up?

- Complete lockdown
- Check-up cancelled/rescheduled by the clinic
- Check-up cancelled/rescheduled by the parent
- Other

11.Do you have anxiety since the beginning of COVID-19 pandemic?

- Yes
- No

12. What is the main reason to visit a dentist?

- First check-up
- Cleaning
- Emergency

13. What is your experience during the visit?

- Extreme fear
- Fearless

14.Do you have the fear of clinic non-compliance with infection control measures?

- Yes
- No

15.Do you have an inability to get an appointment during a pandemic?

- Yes
- No