

ATTITUDE OF ORTHODONTIC PATIENTS TO TREATMENT DURING COVID-19 PANDEMIC IN INDIA

¹Sachin Aditya. B and ^{2*}Dr. Remmiya Mary Varghese

¹Saveetha Dental College and Hospitals, Saveetha Institute of Medical and Technical Sciences, Saveetha University, Chennai- 600077, Tamil Nadu, India

²Reader, Department of Orthodontics, Saveetha Dental College and Hospitals, Saveetha Institute of Medical and Technical Sciences, Saveetha University, Chennai- 600077, Tamil Nadu, India
151901045. sdc@saveetha.com and ²remmiyav.sdc@saveetha.com

ABSTRACT:

Introduction: The outbreak of COVID-19 has caused significant alterations in people's lives. During the Covid 19 epidemic, dental patients and practitioners were exposed to significant numbers of harmful germs as well as a high danger of cross contamination. In addition to the fear of getting the virus, in a pandemic like COVID-19, our daily lives may be disrupted as our movements are restricted in support of efforts to contain and reduce the virus's spread. The goal of orthodontic therapy is to develop a healthy, functioning occlusion and tooth alignment however, during the pandemic, this is given less attention.

Aim: This survey aims to assess the attitude of orthodontic patients to treatment during the pandemic in India

Materials and methods: A sample size of 200 patients undergoing orthodontic treatment were selected for this study and an online survey link consisting of 10 open ended questions was administered and the data were collected in google sheets and were transferred to SPSS software. The data were validated and verified by the primary investigator and guide. Descriptive statistics were carried out. Chi-square analysis was done. The results were statistically analysed.

Results: 49 female respondents and 31 male respondents used fixed orthodontic appliances and 32 females and 40 males used removable appliances. The results from this study showed that most of the participants from age group 41-50 used more foxes orthodontic appliance.

Conclusion: From the results obtained we can conclude that the participants are having good knowledge about coronavirus, as the older age group people have more are concerned to discontinue their treatment it seems that they are not prioritizing their orthodontic treatment well enough and are more stressed as their mental health seems to be disturbed during the pandemic.

Keywords: anxiety; covid -19; orthodontic patients; pandemic; innovative technique; innovative survey.

INTRODUCTION:

The ongoing coronavirus disease 2019 (COVID-19) outbreak impacts the mental health of patients, health workers, and the public(1,2). Mental stress (or psychological distress) is a phrase used by certain mental health practitioners and users of mental health services to describe a set of symptoms and experiences in a person's internal life that are typically seen as upsetting, puzzling, or unusual.(3). COVID-19 has had a significant impact on our everyday life, businesses, global trade, and travel. Identification of the disease at an early stage is vital to control the spread of the virus because it very rapidly spreads from person to person(4). In other words, their thinking, feeling and behavior is all mixed up(3,5). Self-care methods used by social workers have been shown to benefit the worker, the client, the organization, and, as a result, the profession. On the other hand, doctors believe that there are a number of factors which may lead to mental distress: Chemical imbalance in the brain, Stress and everyday problems(6), Exposure to severely distressing experiences(7). It is difficult to be absolutely sure about the causes of mental distress in all situations(8). This virus creates significant knock-on effects on the daily life of citizens, as well as about the global economy.(7,9). The field of social psychology has provided increasing evidence to support the psychosocial benefits of orthodontic interventions, therefore orthodontic treatments enable the patients to correct their teeth arrangement thereby enhancing their looks and gain confidence(10). Previous literature related to the current study includes psychological distress and its interaction with socioeconomic position, where the Objective is to examine the relationship between psychological distress and risk of developing arthritis, cardiovascular disease(11). In a similar study, the author focuses on Psychological distress and quality of life(12). Research indicates that some people may have a genetic predisposition to develop mental distress(13). Because there are so many variables, it's best to talk to your doctor about it. Mental distress is not like a cold or the measles, it is not contagious. The most common forms of mental distress are Anxiety Disorders, Post Traumatic Stress Disorder (PTSD) Depression, Manic Depressive Distress and Schizophrenia(14,15).

Although a lot of studies have been done on this topic there are not many studies which explain the prevalence and risk factors of common mental health conditions, or any validated instruments to measure psychological distress or evaluate the quality of life during the pandemic. Thus this survey aims to assess the knowledge, awareness and perception of Mental distress in orthodontic patients during the coronavirus disease 2019 pandemic in India

MATERIALS AND METHODS

This survey is prospective observational study, the advantages of this study were it was economical, easy to create and believed to have a wide reach, gathers large data, quick interpretation and involves a heterogeneous population. This survey has been approved by the scientific review board, Saveetha Dental College, Chennai. The sample size of this survey includes 200 patients in the age group of 18-50 years old and this survey was administered in March - 2021. The sampling method for the survey conducted is a non-probability convenient method.

A self structured questionnaire, comprising 10 open ended questions, was administered by an online link which contains outputs such as demographic information, application, advantages, method of representing each output variable including pie charts and bar diagrams. The data was statistically analyzed, and the chi square test was performed using SPSS software, with the findings displayed in pie charts. The Chi Square test was used to analyze the relationship between groups, with a p value lesser than 0.05 was considered statistically significant.

RESULTS AND DISCUSSION

The responses were recorded and results were analyzed, where a total of 200 patients from the general population participated, these results showed that the majority of the participants were Females with 53.29% and remaining 46.71% were males. The majority of the participants were from the age 21-30 and 31-40 years old i.e., 38.16% and 31.58% respectively. Out of the total study population, over 53.29% were undergraduates, 26.32% were postgraduates and 20.39% were high school graduates, this shows that most of the participants were well educated and literate. Out of the total study population the response to the question for covid symptoms was over 67.76% responded negatively and 32.24% said that they had symptoms like fever and fatigue, this shows that most of them may not have been infected with coronavirus. Out of the total study population, the results show that over 58.55% have not been in close contact with infected people and the remaining 41.45% have been in close contact with suspected people, this shows that the given population may not have been infected but can possibly be carriers. Out of the total study population the response to the possibility of getting infected are high for more social people, for which 31.58% strongly agreed, 30.26% agreed, 21.05% strongly disagreed and 17.11% disagreed. Out of the total study population, 48.68% of the respondents felt they had a low possibility of getting infected, 34.21% said high possibility and remaining 17.11% said fair possibility. Out of the total study population, 42.11% said that danger of the disease was their main concern for the pandemic, 17.11% said it was risk of infection to relatives, for 9.21% it was impact on work and the remaining 31.58% said all of the above. Out of the total study population, the pie chart shows that 47.37% seek orthodontic treatment in a dental hospital, 32.24% go to a private clinic and the remaining 20.39% go to a dentist in a general hospital. Out of the total study population, the pie chart shows 52.63% were using fixed appliances and the remaining 47.37% used removable appliances. Out of the total study population, the pie chart shows 31.58% said they last visited a dentist 6-12 months ago, 9.87% said <1 month, 20.39% said more than a year and 38.16% said 1-5 months ago. Out of the total study population, the question was about how they were informed about the closing of their hospital, for which 38.16% said through the internet, 31.58% said through fellow patients and 30.26% said they were informed by their doctors. Out of the total study population, 38.16% of the respondents disagreed with the statement that an outbreak may cause infection during their treatment, whereas 31.58% agreed to the same, 21.05% strongly disagreed and 9.21% agreed. Out of the total study population, 38.16% disagreed whether they wanted to end their treatment as soon as possible, 21.05% strongly agreed, 31.58% agreed and 9.21% strongly agreed. Out of the total study population 41.45% of the respondents said they were having fear of coming back to the hospital for continuing treatment, 38.16% said No and 20.39% said maybe. Out of the total study population 53.29% feel nervous about getting treatment again for sometime, 28.32% said most of the time and 20.39% said not at all. Out of the total study population 38.16% of the respondents sometimes felt like stopping their treatment, 21.05% said all of the time and 40.79% said most of the time, Out of the total study population 34.21% were sometimes depressed during the pandemic, 31.58% were mostly depressed and 34.21% felt that they were always depressed.

Other studies related to this topic focus on the COVID-19 pandemic which has disrupted or halted critical mental health services in 93% of countries worldwide while the demand for mental health is increasing, according to a new WHO survey(16). The survey of 130 countries provides the first global data showing the devastating impact of COVID-19 on access to mental health services and underscores the urgent need for increased funding, the results shows that over 60% reported disruptions to mental health services for vulnerable people, including children and adolescents (72%), older adults (70%), and women requiring antenatal or postnatal services (61%)(17). In a similar study During the pandemic, about 4 in

10 adults in the U.S. have reported symptoms of anxiety or depressive disorder, a share that has been largely consistent, up from one in ten adults who reported these symptoms from January to June 2019(16,18).

The present study has some limitations like the study population has a small sample size as there are only 150 participants. We could create more awareness and have a better understanding of the mental health of orthodontic patients during COVID-19 pandemic if the sample size was larger. The future scope of the study is to assess the mental health of people undergoing different treatment during the pandemic. Our team has extensive knowledge and research experience that has translate into high quality publications(19),(20),(21),(22),(23),(24),(25),(26),(27),(28),(29),(30),(31–35)(36),(37),(38)(39)

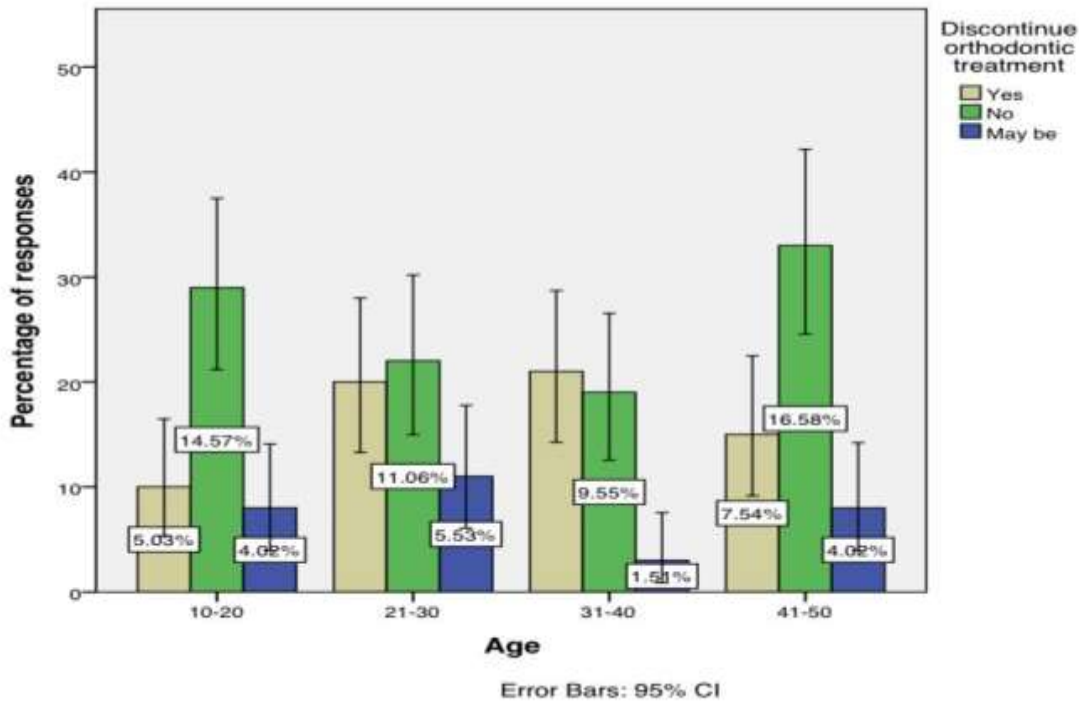


Figure1: The bar graph shows the association between age group and patient’s will to discontinue orthodontic treatment, X-axis represents the gender and Y-axis represents the percentage of responses. Majority of the male participants were more aware of the main concerns compared to female participants. However the difference is statistically significant (Chi-square value-7.370, p value-0.025 (<0.05) hence significant.

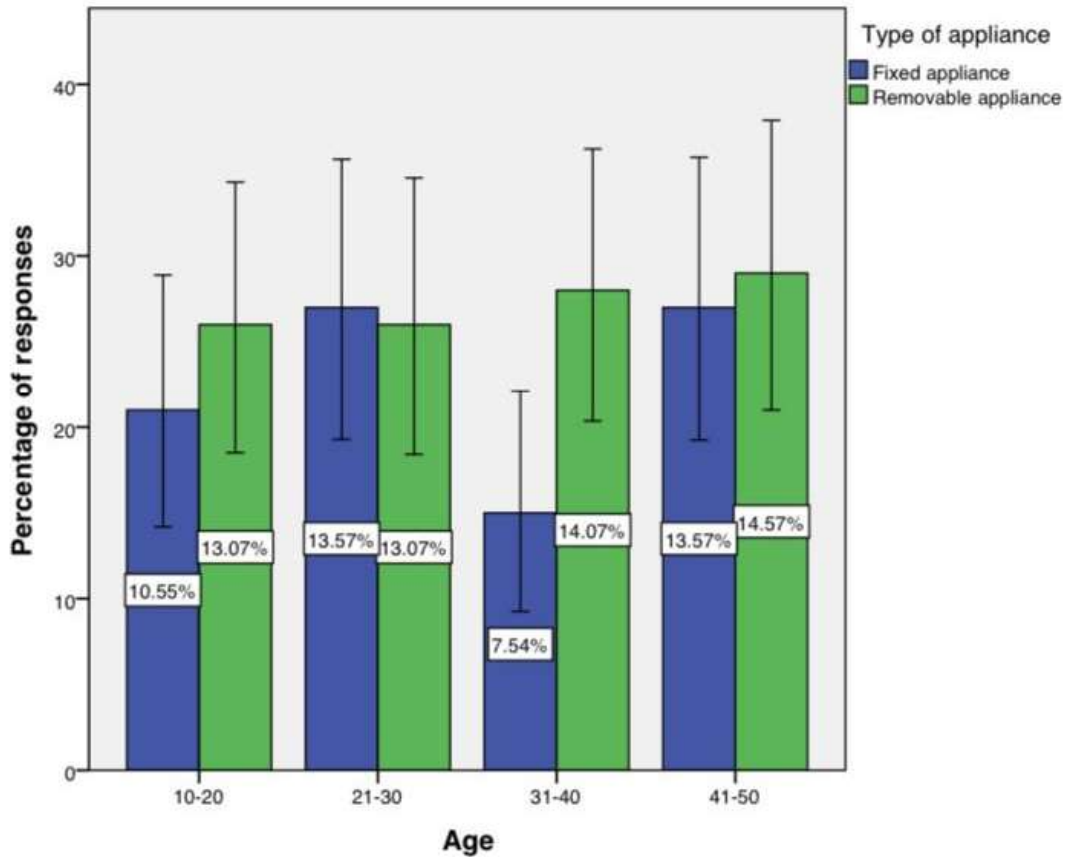


Figure 2: The bar graph shows the association between age group and the type of appliances used, X- axis represents the age group and Y-axis represents the percentage of responses. Majority of the male participants required more dental assistance compared to female participants. However the difference is statistically significant (Chi-square value-7.372 , p value-0.026 (<0.05) hence significant.

CONCLUSION

From this study we can conclude that orthodontic treatment should be more prioritised and the pandemic had caused to increase the mental stress of orthodontic patients, thus more awareness and proper guidance can ensure better decision making and therefore reduces anxiety during the times.

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CONFLICT OF INTEREST

There was no potential conflict of interest.

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