

Psychological status of patients undergoing orthodontic treatment in Chennai during Covid-19.

¹Dr. Nadar Anthonu Selva Pinky Amuldas, Post Graduate, Department of Orthodontics, Thai Moogambigai Dental College And Hospital, Chennai

²Dr. Aishwariya PS., Post Graduate, Department of Orthodontics, Thai moogambigai Dental College And Hospital, Chennai

³Dr. R.Saravanan, Professor, Department of Orthodontics, Thai moogambigai Dental College And Hospital, Chennai

Corresponding Author: Dr. Nadar Anthonu Selva Pinky Amuldas, Post Graduate, Department of Orthodontics, Thai Moogambigai Dental College And Hospital, Chennai

Citation of this Article: Dr. Nadar Anthonu Selva Pinky Amuldas, Dr. Aishwariya PS, Dr. R.Saravanan, “Psychological status of patients undergoing orthodontic treatment in Chennai during Covid-19.”, IJDSIR- October - 2020, Vol. – 3, Issue - 5, P. No. 446 – 450.

Copyright: © 2020, Dr. Nadar Anthonu Selva Pinky Amuldas, et al. This is an open access journal and article distributed under the terms of the creative commons attribution noncommercial License. Which allows others to remix, tweak, and build upon the work non commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

Type of Publication: Original Research Article

Conflicts of Interest: Nil

Introduction

Coronavirus Disease (COVID-19) caused by the novel coronavirus (SARSCov-2) caused a medical emergency since it commenced in December 2019¹. The perpetual pandemic of COVID-19 is a global challenge which resulted in consequential morbidity and mortality². Because of which there is an ascending concern about the psychological health of the general population, COVID-19 infected patients, elderly, children and health professionals. During this pandemic, lockdown is imposed in almost all over the state. Most of the department of dentistry is scarcely special, as many dental procedures would engender aerosols in the workplace and aerosol transmission of COVID-19 is considered possible if one is exposed to a highly concentrated coalescence in an enclosed area for a prolong time while orthodontic

procedure deal with less aerosol compare to all other dental procedures but frequent follow up with a 2-6 weeks is necessary for the treatment to complete due to which the psychological status of the patients undergoing orthodontic treatment may be effected. The effects of COVID-19 on the psychological status of patients undergoing orthodontic treatment is undetermined¹. The aim of this study was to evaluate the psychological status of the orthodontic patients in Chennai during the COVID-19 lockdown.

Materials and Methods

Patients undergoing Fixed Orthodontic therapy in the age range of 14 to 35 years, at Thaimoogambigai dental college, Chennai, Tamil Nadu. Orthodontic patients with removable appliances and with fixed retainers, follow up

and who were in between 9-13 years age groups were excluded from the study.

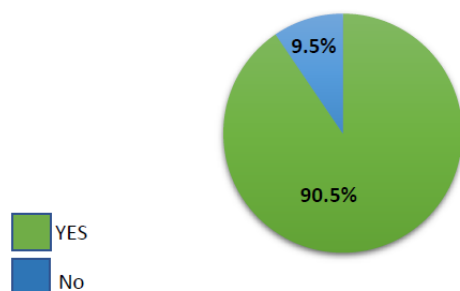
200 patients undergoing orthodontic treatment participated in this online based questionnaire study. An online incognito Questionnaire were engendered in Google forms and forwarded in WhatsApp application via link (WhatsApp Inc., Chennai, India). The data were acquired keeping their designation confidential.

Patients and their respective orthodontists were not identified and the participants concurred to participate in the study.

Results

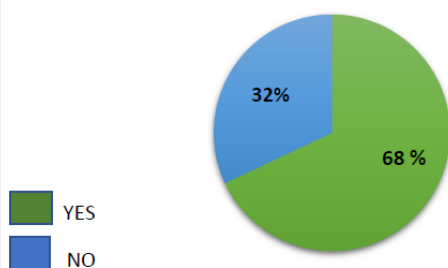
The Questionnaire and statistical data obtained are as follows:

1. Do you agree that social distancing breaks the spread of CoVID-19?



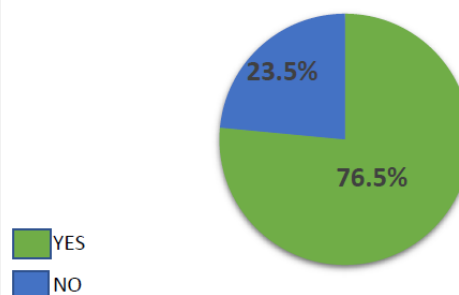
Out of 200 responses about social distancing, 90.5% are agreed and only 9.5% disagreed.

2. Do you fear of infection if you visit the hospital for routine check up within the next two months?



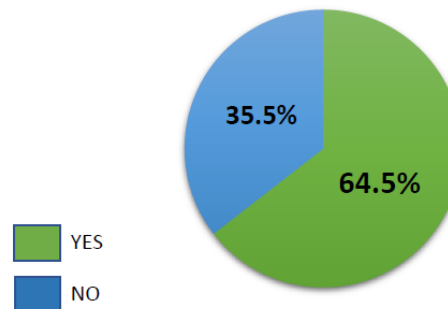
Out of 200 responses, 68% of the participants feared of infection during their visit to the dental hospital.

3. Do you think that missing appointments will worsen your treatment?



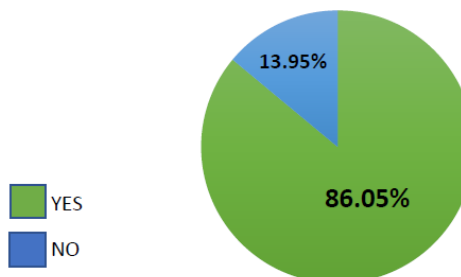
Out of 200 responses about missing appointment, 76.5% said it will worsen the treatment and 23.5% said will not worsen the treatment.

4. Do you fear of breaking of brackets/wire components?



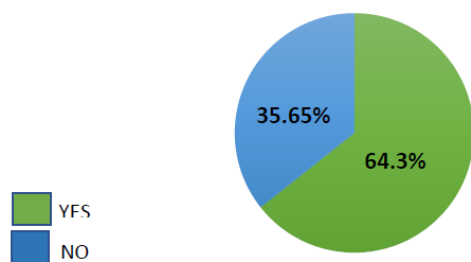
64.5% were afraid of breaking brackets or wire components and 35.5 % did not.

5. If yes, have you tried consulting with your orthodontist?



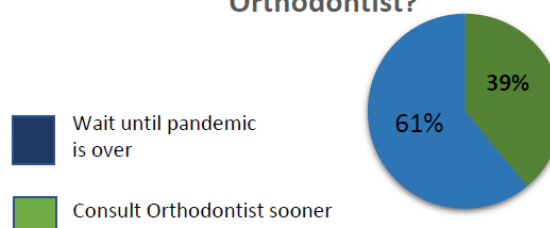
Out of 129 responses about consulting their orthodontist, 86% attempted to consult orthodontist while 13.95% did not attempt.

6. If yes, was your problem resolved?



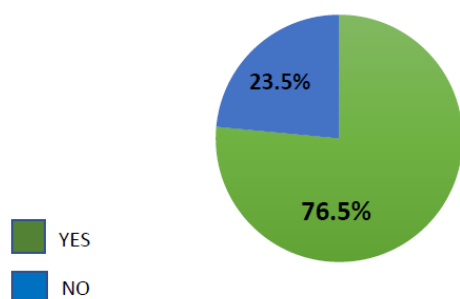
Out of 111 responses, 64.3% replied that their problem had resolved while 35.65% of the patient's problem did not resolve.

9. Do you want to consult your orthodontist sooner or you Wait until pandemic is over Consult Orthodontist?



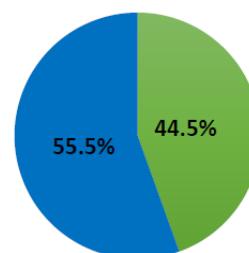
Out of 200 responses, 61% were willing to wait until pandemic gets over while 39% want to consult Orthodontist sooner.

7. Do you feel Online consultation is better in this time?



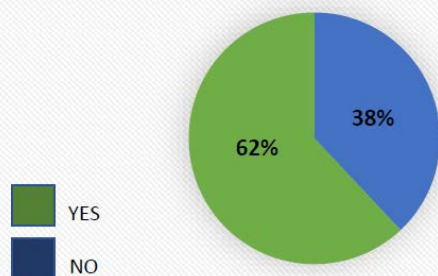
Out of 200 responses, 76.5% agreed that online consultation is better during this period, while the rest of the participants disagreed.

10. Do you prefer Online consultation after Covid-19 on missing appointment?



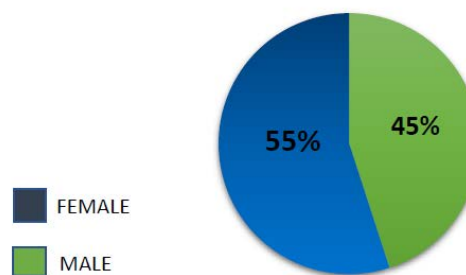
Out of 200 responses, 44.5% preferred online consultation on missing future appointments.

8. Do you think that your dental problem is getting worse?



Out of 200 responses, 62% responded their dental problem getting worse.

SEX



The sample consisted of 55% females and 45% male participants.

Discussion

The study consisted of 200 participants who were undergoing fixed orthodontic therapy in Thaimoogambigai Dental College and Hospital, Chennai, Tamil Nadu, India and were determined to analyse their psychological status during the CoVID- 19 pandemic situation, under complete lockdown of the city. Studies like this are utilizable because they raise clinically consequential information and more nuanced understanding regarding the present situation, besides the needed dental care, with all indispensable hosting and attention⁵.

Patients were asked about their personal details such as age and gender, while their names were kept anonymous. Out of 200 participants, 120 subjects were females and remaining 80 were males. The majority of the orthodontic patients were in the age group of 21 to 25-years. The questions were made simple and understandable for the participants. The results of the questionnaires showed that the majority of the participants considered CoVID-19 as a serious disease and showed great concerns, though this study was conducted at a relatively early stage of the pandemic. Patients were unable to visit the orthodontists for over 3 months amid the outbreak. Over half of the patients seldom got contact with their orthodontists, since some orthodontists might not share their contact details with the patients. Many factors were found to be associated with psychological health of Orthodontic patients.

Majority of the patients (90%) responded that social distancing will prevent the spread of COVID-19. Sen-Crowe et al concluded that social distancing is an authentic solution that all individuals can take part into, to reduce the spread of the infection during this pandemic⁷.

Most patients reported the fear of spread of infection if they visit the hospital during this pandemic. While some

patient had no concern with the impact of quarantine in their orthodontic treatment. Regarding missing appointments, most patients were concerned that it may worsen the treatment outcome.

Almost two-thirds of the participants communicated their orthodontists relatively often, which illustrates the high anxiety levels during this lockdown⁵. As far as the present situation, when questions were asked regarding their visit during this pandemic. Half of the patients preferred to wait until the pandemic gets under control.

In this particular period, tele-dentistry occupies an important role. Orthodontist and dental staff must be attentive to establish an effective rapport with patients, to increase mutual trusts, provide information and care, remotely³. But when asked about the patients' opinion on tele-dentistry continuation after the pandemic, majority did not find it beneficial.

The results imply that Orthodontists ought to develop a good rapport with their patients to avoid any psychological distress via Common modalities such as phone calls, live video/tele- consultations, text messages via WhatsApp or social media and e-mails⁴. Certainly, this care and contact with patients will bring greater confidence in the orthodontists as well as gain trust in the patients⁶ thus ensuring a good doctor-patient relationship.

Conclusion

The quarantine and the coronavirus pandemic showed to have highly impacted orthodontic practice in the current area of study. 90% of the patients undergoing treatment were aware of the social distancing which can reduce the spread of disease during follow up.⁵ 55% Female participants undergoing orthodontic treatment were more anxious about their missing appointments during pandemic when compare to males. Around two-third of the participants

had a fear of contracting infection while visiting orthodontic office. Most of the participants preferred teleconsultation during pandemic and despite communicating with their orthodontists personally, it did not resolve their complaints on emergencies. Hence proper concern should be considered on psychological aspects of the patients undergoing orthodontic treatment when hospitals and clinic re-opens after the Covid-19 pandemic situation resolves.

References

1. Wang C, Pan R, Wan X, Tan Y, Xu L, Ho CS, Ho RC. Immediate psychological responses and associated factors during the initial stage of the 2019 coronavirus disease (COVID-19) epidemic among the general population in China. *International journal of environmental research and public health*. 2020 Jan;17(5):1729.
2. Cotrin PP, Peloso RM, Oliveira RC, Oliveira RC, Pini NI, Valarelli FP, Freitas KM. Impact of coronavirus pandemic in appointments and anxiety/concerns of patients regarding orthodontic treatment. *Orthodontics & Craniofacial Research*. 2020 May 25.
3. Xiong X, Wu Y, Fang X, Sun W, Ding Q, Yi Y, Huang Y, Gong J, Liu J, Wang J. Mental distress in orthodontic patients during the COVID-19 epidemic. *American Journal of Orthodontics and Dentofacial Orthopedics*. 2020 Jul 10.
4. Wu Y, Xiong X, Fang X, Sun W, Yi Y, Liu J, Wang J. Differences of psychological status of TMD patients, orthodontic patients and the general population during the COVID-19 epidemic: a cross-sectional study.
5. Dailey YM, Humphris GM, Lennon MA. The use of dental anxiety questionnaires: a survey of a group of UK dental practitioners. *British dental journal*. 2001 Apr;190(8):450-3.
6. Satici B, Gocet-Tekin E, Deniz ME, Satici SA. Adaptation of the Fear of COVID-19 Scale: Its association with psychological distress and life satisfaction in Turkey. *International Journal of Mental Health and Addiction*. 2020 May 8:1.
7. Sen-Crowe B, McKenney M, Elkbuli A. Social distancing during the COVID-19 pandemic: Staying home save lives. *The American journal of emergency medicine*. 2020 Apr 2.