

# PERCEPTION OF FKG UPDM(B) PRE-CLINIC STUDENTS ABOUT THE EXPERIENCE OF ORTHODONTIC TREATMENT DURING COVID-19

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## ABSTRACT

Understanding perceptions regarding patients experiences of orthodontic treatment during the COVID-19 pandemic is important. This can describe how patients view orthodontic treatment during the COVID-19 pandemic, and in understanding the problems faced during the COVID-19 pandemic. **Purpose:** To explain the perceptions of orthodontic patients about the experience of orthodontic treatment during COVID-19. **Methods:** Descriptive study with a cross-sectional design. The number of research subjects was 47 students of pre-clinical FKG UPDM(B) who used orthodontic devices by distributing online questionnaires. **Results:** Based on questionnaires in this research majority of patients felt no pain (44,7%) also no discomfort (44,7%) using the orthodontic appliance. During the COVID-19 pandemic, orthodontic treatment was delayed (40,4%), and they felt needed an additional six months (31,9%). Patients communicated directly with orthodontist and performed routine checks monthly (55,3%). Patients are happy with the protocol at the clinic (51,1%). Patients prefer orthodontist to use PPE with N-95 masks when performing orthodontic treatment (80,9%). Patients feel confident about continuing orthodontic treatment during the COVID-19 pandemic (76,6%). **Conclusion:** Majority of orthodontic patients are optimistic about continuing orthodontic treatment during COVID-19; as many as 36 people are confident, and 11 are pretty sure.

## INTRODUCTION

Orthodontics is one of the sciences of dentistry that specifically studies the development, growth, variations of the face, jaws and teeth.(Harty & Ogston, 1995) The goals of orthodontic treatment is to correct and prevent abnormal conditions of the teeth or facial shape for aesthetic and physiological purposes (speech, mastication/chewing), preventing further

abnormalities in teeth, prevent wrong way of breath, eliminate bad habits, and increase self-confidence.(Williams et al., 2000)

At the beginning of 2020, a new virus emerged that spread throughout the world, named Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV 2) and the disease is known as Coronavirus Disease 2019 (COVID-19).(Syauqi, 2020) Transmission of COVID-19 can occur in dental practice due to

the presence of aerosols or droplets containing viruses or direct contact with oral fluids, mucous membranes and instruments affected by viruses. Fast transmission methods occur, such as when using a three-way syringe, high speed handpiece, and ultrasonic scaler. The aerosol that produced and the various microorganisms contained in it can enter and be inhaled by patients, dentists and doctor's assistants.(Woran et al., 2021) Orthodontic treatment really requires routine and intensive care to do monthly checks, so this is something that is very important to pay attention to. The COVID-19 pandemic has become an obstacle for patients who need orthodontic treatment due to restrictions on health services. This causes more and more impacts to arise because patients rarely undergo orthodontic treatment.(Isbaniah F, 2020)

Perception is an important psychological aspect for humans in responding to the presence of various aspects and symptoms around them. In human perception, there are those who interpret that something is good or bad which will influence human actions.(Jayanti & Arista, 2019) Experience is something that has been experienced, lived or felt which is then stored in memory. Several experiences can be felt by patients who are undergoing orthodontic treatment. Discomfort and pain can be an unpleasant orthodontic treatment experience.(Oktorina et al., 2019)

Understanding perceptions regarding patients experiences of orthodontic treatment during the COVID-19 pandemic is important. This can describe how patients view orthodontic treatment during the COVID-19 pandemic, so further explanation regarding perceptions of the orthodontic treatment experience will be very helpful in understanding the problems faced during the COVID-19 pandemic, how patients communicate with orthodontist in emergency treatment, and perceptions patient about how to proceed with orthodontic treatment in the future.(Arqub SA, 2021)

This research was conducted because the perceptions of FKG UPDM(B) pre-clinic students who used orthodontic devices regarding their experience of orthodontic treatment during COVID-19

were unclear. The aim of this study was to explain the perceptions of orthodontic patients regarding their experience of orthodontic treatment during COVID-19.

## **METHOD**

The design of this research is descriptive, with a cross-sectional research design, a research design that carried out at a certain point in time on the research object. The research was conducted by distributing questionnaires regarding the perceptions of FKG UPDM(B) pre-clinic students who use orthodontic devices regarding their experience of online orthodontic treatment during COVID-19. The questionnaires used in this research were taken from Arqub SA, et al. (2021). Patients' Perceptions of Orthodontic Treatment Experiences During COVID-19: a Cross-Sectional Study. Progress in Orthodontics, 22(17), 1-12. Before the questionnaires is distributed, ethical approval is carried out first, No. 26/KEPK/FKGUPDMB/IV/2022.

The population of this study was all 89 FKG UPDM(B) pre-clinic students who used orthodontic devices. Research sampling was carried out using purposive sampling and calculated using the Slovin formula with the result that the sample size was 47 people.

The research inclusion criteria were FKG UPDM(B) pre-clinic students who used orthodontic devices and were willing to fill out informed consent and a research questionnaire in a google form. The research exclusion criteria were FKG UPDM(B) pre-clinic students who used orthodontic devices and had agreed to informed consent, but did not fill the questionnaire and did not complete the questionnaire in a google form.

The data analysis carried out was univariate analysis (descriptive). Data were analyzed using a computer-based statistical program, then the results were presented in percentage form in tables. The design of this research is descriptive.

## **RESULT AND DISCUSSION**

The goal of this study is to determine and analyze the perceptions of the orthodontic patients, regarding the experience of orthodontic treatment during COVID-19 with a sample size of 47 FKG

UPDM(B) pre-clinic students who used orthodontic devices and carried out in May 2022.

## Result

**Table 1.** Characteristics of Respondents

| Characteristics | Amount | Percentage (%) |
|-----------------|--------|----------------|
| <b>Gender</b>   |        |                |
| Man             | 6      | 12.8           |
| Woman           | 41     | 87.2           |
| <b>Age</b>      |        |                |
| 18 years old    | 4      | 8.5            |
| 19 years old    | 4      | 8.5            |
| 20 years old    | 5      | 10.6           |
| 21 years old    | 16     | 34.2           |
| 22 years old    | 17     | 36.2           |
| 23 years old    | 1      | 2.1            |
| <b>Class of</b> |        |                |
| 2018            | 31     | 66.0           |
| 2019            | 6      | 12.8           |
| 2020            | 3      | 6.4            |
| 2021            | 7      | 14.9           |

Based on the data obtained, it shows the 47 FKG UPDM(B) pre-clinic students who used orthodontic devices, 6 people (12.8%) were men and 41 people (87.2%) were women. Based on age, the majority of the patients who were 22 years old were 17 people (36.2%), 16 people were 21 years old (34%), 5 people were 20 years old (10.6%), 4 people were 18 years old and were 19 years old (8.5%) and 1 person was 23 years old. Based on class, the majority of the 2018 class was 31 people (66%), the 2021 class was 7 people (14.9%), the 2019 class was 6 people (12.8%) and the 2020 class was 3 people (6.4%).

**Table 2.** Overview of Basic Information on Orthodontic Treatment During COVID-19

| No | Question                                                                | Answer     | Amount | %    |
|----|-------------------------------------------------------------------------|------------|--------|------|
| 1  | How long have you been using orthodontic treatment?                     | >3 years   | 17     | 36.2 |
|    |                                                                         | 0-1 month  | 2      | 4.3  |
|    |                                                                         | 1-12 month | 7      | 14.9 |
|    |                                                                         | 1-2 years  | 8      | 17.0 |
|    |                                                                         | 2-3 years  | 13     | 27.7 |
| 2  | How long have you not visited the dentist during the COVID-19 pandemic? | >3 month   | 16     | 34.0 |
|    |                                                                         | 0-1 month  | 19     | 40.4 |
|    |                                                                         | 2-3 month  | 12     | 25.5 |
|    |                                                                         | Total      | 47     | 100  |

An overview of basic information regarding orthodontic treatment during COVID-19, the majority of the patients have undergone orthodontic treatment for more than 3 years were 17 people (36.2%), 2-3

years were 13 people (27.7%), 1-2 years were 8 people (17%), 1-12 months were 7 people (14.9%) and 0-1 month were 2 people (4.3%). Furthermore, regarding how long patients did not go to the dentist during the COVID-19 pandemic, the majority of the patients stated 0-1 months were 19 people (40.4%), more than 3 months were 16 people (34%) and 2-3 months were 12 people (25.5%).

**Table 3.** Overview of Patient Pain and Discomfort Aspects in Orthodontic Treatment During the COVID-19 Pandemic

| No | Question                                                                                              | Answer                  | Amount | %    |
|----|-------------------------------------------------------------------------------------------------------|-------------------------|--------|------|
| 1  | Do you feel pain when using the orthodontic appliance?                                                | a. Very painful         | 3      | 6.4  |
|    |                                                                                                       | b. Painful              | 8      | 17.0 |
|    |                                                                                                       | c. Currently            | 9      | 19.1 |
|    |                                                                                                       | d. Mild pain            | 6      | 12.8 |
|    |                                                                                                       | e. No pain              | 21     | 44.7 |
| 2  | Do you feel uncomfortable with the orthodontic appliance used?                                        | a. Very painful         | 1      | 2.1  |
|    |                                                                                                       | b. Painful              | 5      | 10.6 |
|    |                                                                                                       | c. Currently            | 21 15  | 44.7 |
|    |                                                                                                       | d. Mild pain            | 5      | 31.9 |
|    |                                                                                                       | e. No pain              |        | 10.6 |
| 3  | How often do you feel pain and discomfort with the orthodontic appliance you use?                     | a. less than a day      | 3      | 6.4  |
|    |                                                                                                       | b. Every day            | 3      | 6.4  |
|    |                                                                                                       | c. Several times a week | 14     | 29.8 |
|    |                                                                                                       | d. Once a week          | 6      | 12.8 |
|    |                                                                                                       | e. Not at all           | 21     | 44.7 |
| 4  | What is your expectations of the standard of care provided?                                           | a. Very good            | 15     | 31.9 |
|    |                                                                                                       | b. Good                 | 14 18  | 29.8 |
|    |                                                                                                       | c. Satisfying           |        | 38.3 |
| 5  | Has your orthodontic treatment been delayed during the COVID-19 pandemic?                             | a. Strongly agree       | 17     | 36.2 |
|    |                                                                                                       | b. Agree                | 19 11  | 40.4 |
|    |                                                                                                       | c. Don't agree          | 0      | 23.4 |
|    |                                                                                                       | d. Strongly disagree    |        | 0    |
| 6  | How many additional months do you expect to continue using orthodontics due to the COVID-19 pandemic? | a. >18 months           | 6      | 12.8 |
|    |                                                                                                       | b. 18 months            | 1      | 2.1  |
|    |                                                                                                       | c. 12 months            | 10     | 21.3 |
|    |                                                                                                       | d. 6 months             | 15     | 31.9 |
|    |                                                                                                       | e. 3 months             | 5      | 10.6 |
|    |                                                                                                       | f. 0                    | 10     | 21.3 |

Questions related to respondents pain and discomfort aspects in orthodontic

treatment during the COVID-19 pandemic consisted of 6 items. Based on the recapitulation table, it can be seen that the majority of the patients felt no pain (44.7%) in the orthodontic appliance used, the majority of the patients felt quite comfortable/medium when the orthodontic appliance was used, the majority of the patients felt no pain or discomfort at all in the orthodontic appliance used were 21 people (44.7%), the majority of the patients had satisfactory expectations regarding the standard of care provided were 18 people (38.3%), the majority of the patients agreed with delayed orthodontic treatment during the COVID-19 pandemic were 19 people (40.4%) and most stated that they needed 6 months of additional time to continue using orthodontics due to the COVID-19 pandemic, were 15 people (31.9%). The results of this research concluded that in the aspect of pain and discomfort of respondents in orthodontic treatment during the COVID-19 pandemic, some patients did not feel pain and felt comfortable.

**Table 4.** Overview of Orthodontic Treatment Follow-up During the COVID-19 Pandemic

| No | Question                                                                                                   | Answer                          | Amount | %    |
|----|------------------------------------------------------------------------------------------------------------|---------------------------------|--------|------|
| 1  | How do you communicate with dentists when carrying out orthodontic treatment during the COVID-19 pandemic? | a. Teledentistry (via internet) | 10     | 21.3 |
|    |                                                                                                            | b. Call/Text                    | 11     | 23.4 |
|    |                                                                                                            | c. Meet in person               | 26     | 55.3 |
| 2  | How often do you want to connect with your dentist during the COVID-19 pandemic?                           | a. Once every 3 months          | 7      | 14.9 |
|    |                                                                                                            | b. Once every 2 months          | 8      | 17.0 |
|    |                                                                                                            | c. Once every 1 month           | 32     | 68.1 |
| 3  | How often do you have routine orthodontic checkups during the                                              | a. Once every 12 weeks          | 7      | 14.9 |
|    |                                                                                                            | b. Once every 10 weeks          | 1      | 2.1  |
|    |                                                                                                            | c. Once every 8 weeks           | 12     | 25.5 |
|    |                                                                                                            | d. Once every 6 weeks           | 3      | 6.4  |

|                    |                       |    |      |
|--------------------|-----------------------|----|------|
| COVID-19 pandemic? | e. Once every 1 month | 24 | 51.1 |
|--------------------|-----------------------|----|------|

Questions related to the follow-up of orthodontic treatment during the COVID-19 pandemic consisted of 3 items. Based on the recapitulation table, it can be seen that 26 patients (55.3%) communicated with dentists in carrying out orthodontic treatment during the COVID-19 pandemic directly, 11 patients (23.4%) communicated via telephone/SMS and communicated via teledentistry (via the internet) were 10 patients (21.3%). Furthermore, regarding how often patients want to connect with a dentist during the COVID-19 pandemic, 32 patients (68.1%) answered once every 1 month, then 8 people (17%) once every 2 months and 7 patients (14.9%) answered once every 3 months. How often do routine orthodontic examinations during the COVID-19 pandemic? 24 patients (51.1%) answered once a month, 12 patients (25.5%) answered once every 8 weeks, 7 patients (14.9%) answered once every 12 weeks and 1 patient (2.1%) answered once every 10 weeks.

**Table 5.** Overview of Orthodontic Treatment After Lockdown

| No | Question                                                                                                    | Answer                  | Amount | %    |
|----|-------------------------------------------------------------------------------------------------------------|-------------------------|--------|------|
| 1  | I am happy with the restriction protocols at the clinic due to the COVID-19 pandemic                        | a. Strongly agree       | 12     | 25.5 |
|    |                                                                                                             | b. Agree                | 24     | 51.1 |
|    |                                                                                                             | c. Neutral              | 1      | 2.1  |
|    |                                                                                                             | d. Don't agree          | 0      | 0    |
| 2  | Checking the patient's temperature is very important to see signs and symptoms of COVID-19 before treatment | a. Strongly agree       | 22     | 46.8 |
|    |                                                                                                             | b. Agree                | 24     | 51.1 |
|    |                                                                                                             | c. Neutral              | 1      | 2.1  |
|    |                                                                                                             | d. Don't agree          | 0      | 0    |
| 3  | Checking with dentists and employees is very important for signs and symptoms of COVID-19 before treatment  | a. Strongly agree       | 28     | 59.6 |
|    |                                                                                                             | b. Agree                | 19     | 40.4 |
|    |                                                                                                             | c. Neutral              | 0      | 0    |
|    |                                                                                                             | d. Don't agree          | 0      | 0    |
| 4  | I prefer my dentist to use                                                                                  | a. Complete PPE without | 2      | 4.3  |

|    |                                                       |    |      |
|----|-------------------------------------------------------|----|------|
|    | N-95 mask                                             | 6  | 12.8 |
| b. | An N-95 mask should be sufficient with eye protection | 1  | 2.1  |
| c. | I personally don't care                               | 38 | 80.9 |
| d. | Complete PPE with N-95 mask                           |    |      |

This statement related to orthodontic treatment after lockdown consists of 4 items. Based on the recapitulation table, it can be seen that the majority of the patients were happy with the restriction protocols in clinics due to the COVID-19 pandemic; 24 people (51.1%) answered in the affirmative. A total of 24 patients (51.1%) answered that they agreed that checking the patient's temperature was very important to see the signs and symptoms of COVID-19 before treatment. A total of 28 people (46.8%) answered that they strongly agreed that checking dentists and employees is very important to see the signs and symptoms of COVID-19 before treatment and 38 people (80.9%) answered that respondents preferred dentists to use PPE complete with N-masks 95.

**Table 6.** Overview of Confidence in Continuing Orthodontic Treatment

| No | Question                                                                                             | Yes |       | No |      |
|----|------------------------------------------------------------------------------------------------------|-----|-------|----|------|
|    |                                                                                                      | N   | %     | N  | %    |
| 1  | I am confident about continuing orthodontic treatment and completing it during the COVID-19 pandemic | 46  | 97.87 | 1  | 2.13 |
| 2  | I trust my dentist to provide the same standard of care during the COVID-19 pandemic                 | 46  | 97.87 | 1  | 2.13 |
| 3  | I have maintained the same                                                                           | 46  | 97.87 | 1  | 2.13 |

|    |                                                                                                                     |    |        |    |       |
|----|---------------------------------------------------------------------------------------------------------------------|----|--------|----|-------|
|    | oral hygiene standards as instructed by my dentist during the COVID-19 pandemic                                     |    |        |    |       |
| 4  | I have complied with post-procedure instructions and maintained orthodontic appliances during the COVID-19 pandemic | 47 | 100.00 | 0  | 0.00  |
| 5  | Dentists need to follow up with their patients during the COVID-19 pandemic                                         | 46 | 97.87  | 1  | 2.13  |
| 6  | I feel safe seeing a dentist during the COVID-19 pandemic                                                           | 36 | 76.60  | 11 | 23.40 |
| 7  | I want to postpone my treatment until the COVID-19 pandemic is over                                                 | 38 | 80.85  | 9  | 19.15 |
| 8  | I want to stop my treatment and remove my braces due to the COVID-19 pandemic                                       | 42 | 89.36  | 5  | 10.64 |
| 9  | I agree with the idea of reducing the number of visits to orthodontic clinics during the COVID-19 pandemic          | 34 | 72.34  | 13 | 27.66 |
| 10 | It is difficult for me to interact and communicate with my dentist while at the clinic during the COVID-19 pandemic | 23 | 48.94  | 24 | 51.06 |
| 11 | I am happy with how my appointment was handled during the COVID-19 pandemic                                         | 46 | 97.87  | 1  | 2.13  |

Overview of self-confidence to continue orthodontic treatment. The majority of patients have good self-confidence. This can be seen from the fact that more patients answered "Yes" than patients who answered "No". However, it should be noted that point 9 (nine) shows that it was difficult for the respondent to interact and communicate with my dentist while at the clinic during the COVID-19 pandemic. To make it easier to assess self-confidence to continue orthodontic treatment, the following calculations are made.

Categorization of confidence to continue orthodontic treatment in general, most respondents answered that they were confident about continuing orthodontic treatment were 36 people (76.6%) and 11 people (23.4%) quite confident.

## Discussion

The results of the study showed that the majority of FKG UPDM (B) pre-clinic students who used orthodontic devices were 41 women (87.2%). Based on age, the majority of patients using orthodontic devices were 22 years old, 17 people (36.2%). Age and gender are factors that influence knowledge. The majority of patients who use orthodontic devices understand the benefits of using orthodontics. Knowledge can be a basis for someone to behave by thinking about the benefits that will occur with that action. Thus, the high level of knowledge among orthodontic patients regarding orthodontic treatment can be the basis for behaving as a prospective orthodontist.(Paryontri & Adisiyasha, 2019)

This is in accordance with research conducted by Oley et al., and Christy et al., which stated that some men do not really care about dental and oral health problems, which can cause malocclusion. This is because women are more sensitive to the condition and appearance of their bodies, including the appearance of their teeth, so that if malocclusion and aesthetic problems occur with their teeth, they will respond more quickly and visit the orthodontist. Apart from that, men are more likely easy to feel satisfied with the aesthetics of their

teeth than women.(Hansu et al., 2013; Oley et al., 2015)

An overview of basic information regarding orthodontic treatment during COVID-19, the majority of the patients have undergone orthodontic treatment for more than 3 years, there are 17 people. Furthermore, the majority of the patients did not go to the dentist during the COVID-19 pandemic, stating that 0-1 months were 19 people, more than 3 months were 16 people, and 2-3 months were 12 people. Orthodontic treatment takes months to complete and requires follow-up after treatment at intervals of around 4-6 weeks. High motivation and persistence in carrying out orthodontic treatment are very necessary. In line with research by Wahyuni (2019) which states that orthodontic patients who have high motivation to comply with control are higher at 63.5% than those who do not comply with control at 28.8%. However, after the emergence of the COVID-19 pandemic throughout the world and especially in Indonesia at the beginning of 2020, the health sector, one of which was dentists, was the health worker who was most at risk of contracting the Corona virus, giving rise to a policy to limit dental care activities.(Wahyuni et al., 2020)

Based on the aspects of pain and discomfort of respondents in orthodontic treatment during the COVID-19 pandemic, it can be seen that some patients felt no pain in the orthodontic tools used by 21 people (44.7%). 18 patients (38.3%) had satisfactory expectations regarding the standard of care provided, the majority of the patients agreed that orthodontic treatment was delayed during the COVID-19 pandemic, 19 people (40.4%) and who stated that they needed 6 months of additional time and expected to continue using orthodontics due to the COVID-19 pandemic were 15 people (31.9%). In contrast to Caprioglio's (2019) research, it is stated that patients may also be uncomfortable and have to carry out control visits during the pandemic because of the current situation, however, if there is an emergency that is felt if treatment is not carried out immediately, it will result in repeated damage to the teeth or periodontal tissue. so that it can prolong orthodontic

treatment time and cause a decrease in patient motivation due to loss of trust in the doctor and the treatment that has been received.(Saccomanno et al., 2020)

Based on the follow-up of orthodontic treatment during the COVID-19 pandemic, it can be seen that 26 patients (55.3%) communicated with dentists in carrying out orthodontic treatment during the COVID-19 pandemic directly. The majority of patients want to connect with a dentist once a month during the COVID-19 pandemic as many as 32 patients (68.1%), and 24 patients (51.1%) answered routine orthodontic examinations once a month. In contrast to Saccomanno (2020) who stated that during the pandemic several studies have proposed orthodontic treatment via tele-orthodontics. It's easier to do, such as a general examination that can be done via tele-orthodontics without having to come to the clinic. Apart from that, special video meetings can be held to monitor the progress of the patient's dental condition.(Saccomanno et al., 2020)

Based on the results of research on orthodontic treatment after lockdown, it can be seen that the majority of students were happy with the restriction protocols in clinics due to the COVID-19 pandemic were 24 patients (51.1%). The majority of students answered that they agreed that checking the temperature of patients, dentists and employees is very important to see the signs and symptoms of COVID-19 before treatment. A total of 38 patients (80.9%) answered that they preferred dentists to use PPE complete with an N-95 mask when carrying out orthodontic treatment. In contrast to research by Martina et al. in 2021, during the pandemic, 16% of patients undergoing orthodontic treatment would not return to the dental practice to continue their treatment after lockdown. Lockdown has had a huge impact on patients and dentists. Apart from that, the lockdown also made people aware that orthodontic treatment is very important during the COVID-19 pandemic. Students prefer not to undergo any treatment because patients do not want to see a doctor due to the dangers of COVID-19 and the lack of use of tele-orthodontics among students.(Martina et al., 2020)

Most of the patients have good self-confidence to continue orthodontic treatment. This is supported by research by Nurhaeni (2017) which states that the level of need for orthodontic treatment among respondents who experienced malocclusion among students at the Dental Nursing Department of the Makassar Health Polytechnic in 2015 was very high, there were 93% who needed orthodontic treatment and only 7% who did not need treatment. orthodontics. The high value of the need for orthodontic treatment is not only influenced by age but also by the surrounding environment. The development of orthodontic treatment has triggered many people to undergo orthodontic treatment due to the emergence of awareness and increased knowledge of maintaining and improving the structure of teeth so that the value of the need for orthodontic treatment is very high as seen in this study.(Arifin et al., 2017)

## CONCLUSION

Based on the results of research data analysis conducted regarding the perceptions of FKG UPDM (B) pre-clinic students who use orthodontic devices about their experience of orthodontic treatment during COVID-19, the following conclusions can be drawn:

1. Patients felt no pain and no discomfort with the orthodontic tools used and have expectations that the standard of care provided is very satisfactory. During the COVID-19 pandemic orthodontic treatment was delayed and patients felt they needed an additional six months to continue using orthodontics.
2. Most of the patients communicate with orthodontist to carry out orthodontic treatment during the COVID-19 pandemic directly and carry out routine check-ups once a month.
3. Patients are happy with the restrictions protocols in the clinic and agree that checking the temperature of the patients, orthodontist, and employees is very important to watch for signs and symptoms of COVID-19 before treatment. Patients prefer dentists to use PPE complete with N-95 masks

when carrying out orthodontic treatment.

4. Most of the patients feel confident to continue orthodontic treatment during the COVID-19 pandemic.

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