**ARQUIVOS EM ODONTOLOGIA**

# Impact of COVID-19 social isolation on periodontal health in maintenance patients: retrospective study

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**Introduction:** The COVID-19 pandemics imposed a period of social isolation that led to the suspension of dental appointments, affecting the regularity of periodontal maintenance therapy (PMT) sessions, which are essential for maintaining the stability achieved in the active phase of periodontal treatment.

**Aims:** This retrospective observational study aimed to assess the impact of the suspension of PMT on the stability of periodontal condition of patients enrolled in this phase of periodontal treatment at the School of Dentistry, Federal University of Minas Gerais.

**Methods:** We assessed the potential progression of periodontitis by evaluating probing pocket depth (PPD), bleeding on probing (BoP), clinical attachment level (CAL), tooth loss and the number of residual pockets (≥5 mm). These parameters were assessed in two distinct moments, before (T1) and after (T2) social isolation, to evaluate the long-term impact of the absence of periodontal maintenance therapy. Data from before social isolation were collected from records available, and data from the first appointment after this period were collected by a single trained examiner. Data were registered in an electronic table and the statistical analysis was performed on SPSS, using descriptive measures such as frequencies, mean and median to characterize the sample and the Wilcoxon signed-rank test to compare clinical periodontal variables between T1 and T2.

**Results:** Twenty-six patients were enrolled in this study. The results of the comparison of the available data indicate a deterioration of the periodontal condition between T1 and T2, shown by the significant difference of BoP (p<0.001), PPD (p=0.021), CAL (p=0.003) and NT (p<0.001) between T1 and T2.

**Conclusion:** This study concludes that the suspension of PMT sessions during pandemic had a negative impact on periodontal stability of the patients showing the importance of regular visits during the periodontal maintenance therapy to maintain periodontal stability.

**Uniterms:** maintenance; periodontitis; patient compliance; tooth loss.

## INTRODUCTION

Periodontal health is defined as the absence of inflammatory periodontal disease, allowing individuals to perform their functions normally, without physical or psychological impairment[1]. Periodontitis is a multifactorial, chronic inflammatory disease associated with accumulation of dental biofilm and characterized by progressive destruction of supporting structures of the teeth, including periodontal attachment and alveolar bone[2].

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For patients with a history of periodontitis, periodontal maintenance therapy (PMT) should happen regularly and frequently, normally with intervals between 2 to 6 months[3]. A regular and appropriate recall interval allows the detection and intervention on the disease's recurrence in patients previously diagnosed with periodontitis. Patients with a higher degree of compliance with PMT show a significantly reduced tooth loss related to periodontitis when compared to patients with a poorer degree of compliance to PMT[4,5]. However, the appropriate interval must be defined after the end of active therapy and modified, if necessary, upon continuous evaluation of the individual risk for progression of periodontitis. Among the risk factors involved in the risk evaluation it is possible to cite the medical history, smoking, sites with a probing pocket depth (PPD) >5 mm and bleeding on probing (BoP)[6].

Recently, the world population has been through a challenging period, which has posed difficulties, and at times, made it impossible for clinicians and patients to maintain their regular PMT appointments. In January 2020, the World Health Organization (WHO) declared a global emergency in response to the COVID-19 outbreak in Wuhan, situated in the Chinese province of Hubei. By February 2020, WHO acknowledged the potential of SARS-CoV-2 to spread worldwide and trigger a pandemic. To prevent the regional and even global spread of the disease, social isolation measures were implemented. As a result, appointments for patients in a periodontally stable condition under the PMT program at the Federal University of Minas Gerais were temporarily interrupted for 2 years.

The aim of this study was to assess through periodontal clinical parameters, the repercussions of social isolation and the lack of periodontal maintenance on the stability of individuals' periodontal condition.
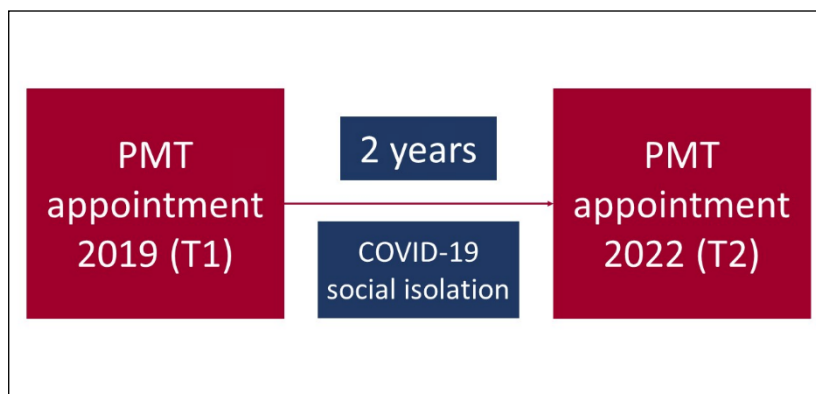
## METHODS

### Study design

This is an observational retrospective study reported according to the STROBE checklist[7].

### Setting

The participants for this study were recruited in the Periodontal Maintenance Therapy Program of the Faculty of Dentistry at Federal University of Minas Gerais, Brazil (FAO-UFMG), in their first appointment after the 2-year period of social isolation during Covid-19 Pandemic, in the year of 2022. This program is an extension project at FAO-UFMG focused on the control and maintenance of periodontal health in patients who have completed active periodontal therapy and achieved treatment success, indicating stability in their periodontal condition. This program has been actively providing maintenance care since 1993, and some patients in this sample have been under periodontal maintenance within the program for more than 20 years, with regular compliance to periodontal maintenance appointments. All recruited patients were compliers with regular visits to the appointments of PMT and had their last exam and appointment in the last year before social isolation (2019). Data from the last exam before social isolation were collected from the clinical records (T1) and a new exam after the return of the clinical activities posterior to social isolation was performed and registered (T2) (Figure 1).

**Figure 1.** Flowchart of the inclusion of participants in the study.



**Source:** authors.

### Participants

All participants signed an informed consent form and voluntarily agreed to participate in this study. This study was approved by the Research Ethics Committee of the Federal University of Minas Gerais, Brazil (protocol CAAE: 060/05).

### Variables

Social, demographic and biologic data were collected: sex, age, income, education, stage and grade of periodontitis, plaque index[8] and presence of risk factors (smoking and diabetes). The outcomes of interest for the analysis were periodontal clinical parameters: bleeding on probing (BoP), number of teeth (NT), clinical attachment level (CAL), probing pocket depth (PPD) and the number of residual sites with PPD > 5 mm. The circumferential probing evaluated the sites mesial, distal, buccal and lingual and registered the highest measure for each face. The same variables were collected in T1 and T2. A cut point of PPD > 5 mm was adopted for residual PPD and the absolute and relative number of residual pockets were registered.

### Data sources/measurement

Initial data was collected from the archives of the PMT program (T1). After the return of clinical activities, a new periodontal exam was performed, collecting the same clinical parameters registered using a standardized periodontal probe (UNC-15) (T2). All the exams were performed by the same examiner (MVRAM), previously trained and calibrated. BoP was registered as the percentage of gingival bleeding sites. NT was registered as the absolute number of present teeth. CAL was registered as the distance (mm) from the cemento-enamel junction to the bottom of the sulcus/pocket. PPD was registered as the distance from the gingival margin (mm) to the bottom of the sulcus/pocket. Also, the number of sites with PPD > 5 mm were counted and registered.

### Study size

This was a convenience sample based on available records from before the period of social isolation and on the feasibility of recontacting and evaluating the same patients. The sample represents a subset of individuals treated within the PMT program at the Federal University of Minas Gerais, comprising patients who attended PMT appointments in 2022 and whose previous visit occurred in the second semester of 2019, just before the lockdown. Institutional restrictions to prevent COVID-19 transmission limited our ability to obtain a larger sample, as not all patients from 2019 could be recalled. The number of appointments was regulated by the university to ensure sanitary safety, further restricting the evaluation of all eligible patients.

### Statistical methods

Data were registered on an Excel spreadsheet, with categorized variables or means calculated for future statistical analysis. The statistical analysis was performed using the software SPSS (IBM SPSS Statistics for Windows, Version 21.0. Armonk, NY: IBM Corp; 2012). Descriptive analysis of the sample was performed using absolute and relative frequencies. Mean, standard deviation and median was used to describe quantitative variables at the two moments of evaluation. The distribution of the data was tested with Shapiro-Wilk normality test. The Wilcoxon signed-rank test was used to compare quantitative variables before and after the social isolation period (T1 and T2).

## RESULTS

### Participants and descriptive data

A total of 26 participants were enrolled in this study. Table 1 shows social, demographic and biologic characteristics of the sample. The basic demographic characteristics of the patients were collected from previous records available, explaining the missing data for some social and demographic features of some patients. Some data are considered sensitive (e.g., income and education), and patients were free to decline to answer without any impact on their treatment within our program. The sample was balanced regarding sex, composed by 42% females and 58% males. The majority of participants had an income between 1 to 3 Brazilian minimum wages (equivalent to U$270,00 United States dollars). Smokers represented almost 27% of the sample, former smokers represented 15% and non-smokers represented 50% of the sample. Diabetic patients comprised 11.5% of the sample. More than half of individuals (57.7%) were diagnosed with stage III periodontitis, and most individuals (38.5%) were classified in grade B. As for the Plaque Index, most of the individuals showed a bad or awful score.

**Table 1.** Social, demographic and biological characteristics of the sample.

| Variables | N (%) | |
|---|:---:|:---:|
| **Sex** | | |
| *Male* | 11 (42.3) | |
| *Female* | 15 (57.7) | |
| **Age (years)** | | |
| Mean 57.85 (SD=10.87) | | |
| **Income (Brazilian minimum wage, equivalent to U$270,00 United States dollars)** | | |
| *> 1* | 6 (23.0) | |
| *1 to 3* | 5 (57.7) | |
| *Superior to 4* | 1 (3.8) | |
| *Not informed* | 14 (53,84) | |
| **Education** | | |
| *Superior* | 1 (3.8) | |
| *Complete high school* | 10 (38.5) | |
| *Incomplete high school* | 1 (3.8) | |
| *Complete elementary school* | 2 (7.7) | |
| *Incomplete Elementary school* | 5 (19.2) | |
| *Not informed* | 7 (26.9) | |
| **Stage of Periodontitis** | | |
| | **T1** | **T2** |
| *I* | 3 (11.5) | 2 (7.7) |
| *II* | 9 (34.6) | 2 (7.7) |
| *III* | 9 (34.6) | 12 (46.2) |
| *IV* | 5 (19.2) | 10 (38.5) |
| **Grade of Periodontitis** | | |
| | **T1** | **T2** |
| *A* | 4 (15.4) | 4 (15.4) |
| *B* | 15 (57.7) | 15 (7.7) |
| *C* | 7 (26.9) | 7 (26.9) |
| **Plaque Index**[8] | | |
| *Great (0% to 16%)* | 1 (3.8) | |
| *Good (16% to 33%)* | 8 (30.7) | |
| *Bad (33 to 66%)* | 11 (42.3) | |
| *Awful (66 to 100%)* | 4 (15.4) | |
| **Smoking status** | | |
| Non-smoker | 13 (50) | |
| Former smoker | 4 (15.4) | |
| <10 cigarettes | 5 (19.2) | |
| >10 cigarettes | 2 (7.7) | |
| Non informed | 2 (7.7) | |
| **Diabetes** | | |
| Non-diabetic | 21 (80.8) | |
| Diabetic | 3 (11.5) | |
| Non informed | 2 (7.7) | |

### *Outcome data*

A mean interval of 29 months was observed between the consultations at T1 and T2. Table 2 shows a detailed descriptive analysis of the clinical variables in T1 and T2, and Table 3 shows the results of Wilcoxon test for the comparison of variables in these two moments.

**Table 2.** Individual results for periodontal variables analyzed in T1 and T2.

| | T1 | | | | | | T2 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | PPD | CAL | BoP | NT | Pockets ≥5mm (%) | Stage and Grade | PPD | CAL | BoP | NT | Pockets ≥5mm (%) | Stage and Grade |
| Patient 1 | 2.16 | 2.44 | 18.75 | 26 | 0 | I B | 2.36 | 2,65 | 56.48 | 26 | 0.96 | I B |
| Patient 2 | 2.05 | 3.41 | 67.85 | 14 | 0 | III B | 2.28 | 3.28 | 44.23 | 14 | 3.85 | IV B |
| Patient 3 | 1.38 | 1.92 | 9.82 | 28 | 0 | I B | 2.41 | 2.70 | 34.82 | 28 | 0.89 | I B |
| Patient 4 | 1.84 | 2.02 | 10.41 | 24 | 0 | II B | 3.38 | 3.85 | 91.64 | 23 | 20.65 | III B |
| Patient 5 | 2.23 | 3.54 | 10.29 | 17 | 7.35 | IV B | 3.55 | 7.44 | 94.64 | 14 | 94.64 | IV B |
| Patient 6 | 2.87 | 3.44 | 8.92 | 14 | 7.14 | IV C | 2.98 | 4.17 | 46.42 | 14 | 12.50 | IV C |
| Patient 7 | 1.43 | 1.85 | 30.26 | 20 | 0 | II B | 2.19 | 3.06 | 72.36 | 19 | 0 | III B |
| Patient 8 | 3.22 | 6.32 | 57.5 | 10 | 25 | IV C | 3.27 | 6.1 | 77.5 | 10 | 15 | IV C |
| Patient 9 | 3.7 | 4.22 | 43.75 | 20 | 26,25 | IV B | 3.78 | 4.33 | 66.25 | 20 | 35 | IV B |
| Patient 10 | 3.07 | 3.42 | 60.93 | 16 | 12,5 | III C | 2.57 | 4.14 | 96.4 | 7 | 0 | IV C |
| Patient 11 | 2.86 | 2.86 | 7.5 | 19 | 14.47 | III B | 3.54 | 4.48 | 63.88 | 17 | 30.88 | IV B |
| Patient 12 | 2.13 | 2.15 | 51.04 | 24 | 0 | II C | 2.72 | 2.72 | 81.81 | 22 | 4,55 | III C |
| Patient 13 | 2.09 | 2.18 | 20.19 | 26 | 5.77 | II A | 2.23 | 2.58 | 38.46 | 26 | 3.85 | II A |
| Patient 14 | 2.43 | 2.75 | 19.06 | 28 | 10.72 | II B | 2.87 | 3.25 | 38.46 | 28 | 38.46 | III B |
| Patient 15 | 2.14 | 3.17 | 23.91 | 23 | 5.43 | III B | 1.64 | 2.73 | 17.85 | 21 | 0 | IV B |
| Patient 16 | 2.38 | 2.91 | 3.75 | 20 | 5 | III A | 2.67 | 3.75 | 40 | 20 | 1.25 | III A |
| Patient 17 | 3.14 | 3.14 | 32.14 | 28 | 14.29 | II B | 2.03 | 2.28 | 12.5 | 28 | 3.57 | II B |
| Patient 18 | 2.44 | 2.88 | 17.39 | 23 | 3,26 | III A | 2.32 | 2.60 | 34.52 | 21 | 0 | III A |
| Patient 19 | 2.60 | 2.82 | 30.55 | 27 | 9,26 | II C | 2.08 | 2.75 | 36.53 | 26 | 1.92 | III C |
| Patient 20 | 2.58 | 3.3 | 22.5 | 20 | 15 | III B | 2.89 | 3.78 | 51.31 | 19 | 19.74 | III B |
| Patient 21 | 2.35 | 2.82 | 27.63 | 19 | 13.16 | III B | 2.44 | 3.26 | 38.29 | 17 | 4.41 | IV B |
| Patient 22 | 2.11 | 2.56 | 8.75 | 20 | 0 | II B | 2.90 | 3.21 | 44,73 | 19 | 7.89 | III B |
| Patient 23 | 2.04 | 2.07 | 64.13 | 23 | 2.17 | II B | 2.58 | 2.84 | 60.86 | 23 | 6.52 | III B |
| Patient 24 | 1.92 | 1.94 | 7.14 | 14 | 1.79 | IV C | 2.41 | 3.38 | 11.11 | 9 | 5.56 | IV C |
| Patient 25 | 2.29 | 2.29 | 49.03 | 26 | 2.88 | I A | 3.20 | 3.68 | 88.46 | 26 | 22.12 | III A |
| Patient 26 | 2.02 | 3.5 | 14.42 | 24 | 11.46 | III C | 1.71 | 2.73 | 29.34 | 22 | 0 | III C |

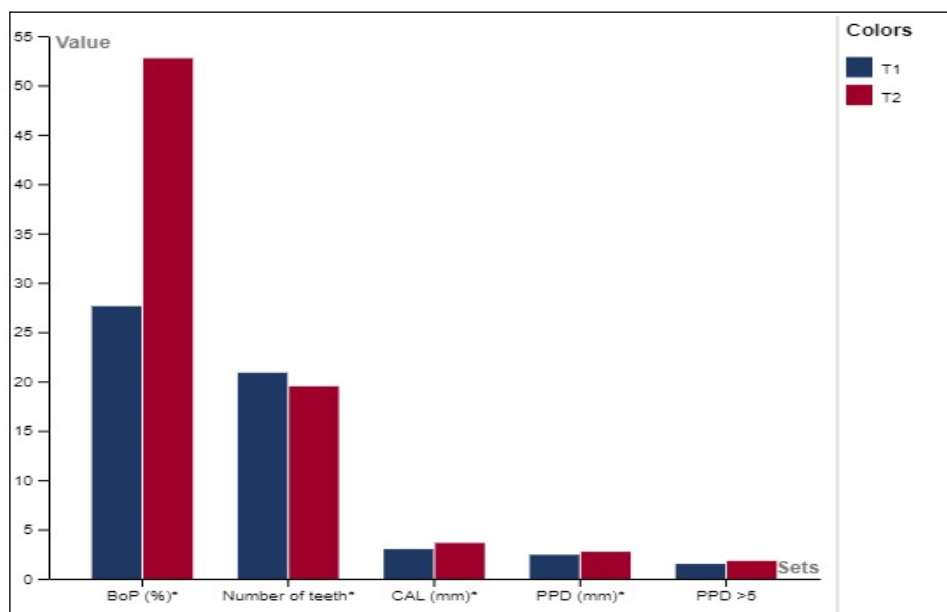*BoP: bleeding on probing; CAL: clinical attachment level; PPD: probing pocket depth; NT: number of teeth.

**Table 3.** Descriptive analysis of the clinical variables in T1 and T2.

| Variable | T1 | T2 | P* |
|----------|-----|-----|-----|
| **BoP (%)** | | | p < 0.001 |
| Mean (±SD) | 27.61 (±19.79) | 52.7 (±24.96) | |
| Median | 21.3 | 45.6 | |
| **Number of teeth** | | | p < 0.001 |
| Mean (±SD) | 21.27 (±4.98) | 19.96 (±5.94) | |
| Median | 21.5 | 20.5 | |
| **CAL (mm)** | | | p = 0.003 |
| Mean (±SD) | 2.92 (±0.92) | 3.52 (±1.14) | |
| Median | 2.90 | 3.34 | |
| **PPD (mm)** | | | p = 0.021 |
| Mean (±SD) | 2.36 (±0.53) | 2.65 (±0.56) | |
| Median | 2.27 | 2.65 | |
| **PPD ≥ 5mm** | | | p = 0.333 |
| Mean (±SD) | 7.41 (±7.49) | 12.85 (±20.22) | |
| Median | 1.00 | 1.50 | |

* Wilcoxon signed-rank test. BoP: bleeding on probing; CAL: clinical attachment level; PPD: probing pocket depth.

Figure 2 shows the comparison of the clinical periodontal variables between the groups T1 and T2, before social isolation and after the return of the clinical activities. The variables BoP (p < 0.001), NT (p < 0.001), CAL (p = 0.003) and PPD (p = 0.021) showed a statistically significant difference in T2 when compared to T1. These parameters deteriorated, which means an increase in BoP, CAL and PPD and a decrease in the number of teeth showing that the tooth loss was significant in this sample. In individual assessments, it was generally observed that the lost teeth were those presenting with greater attachment loss and deeper probing pocket depths at T1. This finding suggests that tooth loss was primarily due to periodontitis, which subsequently influenced the Stage classification of the disease in these patients, as detailed in Table 2 for some individuals. The number of residual sites with PPD > 5 mm did not show a statistically significant difference between T1 and T2 (p = 0.478).

**Figure 2.** Mean values in T1 and T2 (*Wilcoxon signed-rank test, p<0.05).



**Source:** authors.

Stratified analysis by diabetes status was not feasible due to the small number of diabetic individuals in the sample (n = 3). However, stratification by smoking status (smoker, non-smoker, and former smoker) showed that, for NT, only the smoker category was significant (p = 0.027). This indicates that, within this sample, smokers experienced significantly greater tooth loss compared with non-smokers (p = 0.063) and former smokers (p = 0.102).

## DISCUSSION

The present study has found a deterioration of clinical periodontal parameters of individuals enrolled in maintenance therapy who did not attend the PMT program during the suspension of the clinical activities at FAO-UFMG due to social isolation imposed by COVID-19. There was a statistically significant difference regarding BoP, NT, CAL and PPD between T2 e T1. These results showed that the impossibility of performing the maintenance appointments during this period affected negatively the stability of the individual's periodontal condition. Our results were in accordance with previous results of the literature showing that the number of postponement days was positively correlated with changes in average PPD[9]. Literature shows that in the absence of PMT after the active phase of periodontal treatment, clinical periodontal parameters such as BoP, PPD and CAL can return to pre-treatment levels, or even worsen[10].

BoP is an important periodontal stability predictor. Its absence shows the absence of the disease's activity, and its presence denotes that the inflammatory process is active, highlighting the possibility of progression of the disease. On the sample evaluated, BoP was significantly higher in T2 when compared to T1. BoP percentages reflect the patient's compliance and the patient's ability to properly control the presence of plaque[11], emphasizing the essential role of PMT in motivating the patient in oral self-care.

This study identified a decrease in the number of teeth between T1 and T2, indicating that during this period of social isolation, patients experienced tooth loss. The chronicity of the disease over the years in patients without periodontal stability may lead to tooth loss, and this is the final outcome in cases of periodontitis progression. This finding is consistent with the literature that shows that patients with a satisfactory degree of compliance to the PMT have significantly less tooth loss through the years[12,13]. A prospective study showed that the group of patients who were regular compliers to the PMT lost significantly less teeth than the group of individuals who were irregular compliers in a period of 5 years[14]. A recent meta-analysis evaluating the loss of molars during PMT showed that a higher risk for molar loss was observed in non-compliant patients[15].

The data concerning CAL were statistically significant, indicating a progression of disease in non-monitored patients. Older patients under PMT, typically exhibit a higher mean of CAL loss as a sequela of previous disease. Despite having a reduced periodontium, as suggested by the 2017 World Workshop on the Classification of Periodontal and Peri-Implant Diseases and Conditions, these individuals can maintain periodontal health if they keep disease under control[1]. Assessment of CAL related to the individual's age is useful to evaluate the rate of destruction/progression of periodontitis over the years. CAL can be used to calculate the risk of an individual under PMT, along with other factors such as PPD[11]. In this study, the increase in mean values for PPD between T1 and T2 was statistically significant. In a similar study, Paolantoni et al. (2022) also demonstrated an increase in the mean PPD for all groups when measurements from the posterior appointment to the social isolation were compared to measurements from before social isolation[16].

Residual sites with PPD higher than 5 mm impact the risk for periodontitis progression in individuals under PMT. This is an important factor that composes the risk diagram, demonstrated by Lang & Tonetti (2003) which classifies individuals into low, medium and high-risk for periodontitis progression. Individuals with up to 4 sites with PPD higher than 5 mm are patients in a low risk, meanwhile patients with more than 8 residual pockets are at high risk for disease recurrence[11]. It is noteworthy to emphasize that the mean sites with a residual PPD higher than 5 mm were not statistically significant in the sample. One possible explanation for this phenomenon is that teeth with a higher likelihood of disease progression may have been lost or extracted during the period that individuals were without treatment, thereby supporting the observed data on tooth loss in the sample. This supposition is supported by data available in the literature, showing that teeth with PPD > 5 mm are at higher risk for periodontitis progression and tooth loss[17].

Smoking is the main risk factor for periodontitis, since this habit creates a better environment to the bacterial recolonization and lead to worst results on the PMT[18]. Smoking

can affect periodontal tissues through different pathways, including disfunctions in blood circulation, oxidative stress, inflammation and immune disfunction. Smokers lose more teeth and respond less favorably to periodontal therapy. During the maintenance phase, smokers have a greater risk for the presence of non-responsive pockets[19]. In a cross-sectional study, smokers had a higher number of sextants with presence of periodontal pocket and calculus than non-smokers[20], being at a greater risk for progression of periodontitis in the absence of treatment[21]. Our findings are consistent with previous reports in the literature, as we observed that smokers in our sample experienced significantly greater tooth loss after discontinuing their PMT.

Diabetes is another risk factor taken into consideration when we delineate the treatment plan for the patient. In this study, only 11.4% of the patients were diabetic, and due to the limited sample size, stratification analysis was not possible to be accomplished. Diabetes is characterized by systemic inflammation accompanied by the increase of several immunomodulators on the body that contributes to periodontitis and the development of other systemic conditions[22]. A case-control study with diabetic individuals undergoing periodontal maintenance therapy over 5 years showed that individuals with poor glycemic control had a significantly higher progression rate of periodontitis and tooth loss than individuals with good glycemic control and non-diabetic individuals[23].

Individuals in PMT need regular reminders of the importance of oral self-care for maintaining periodontal stability. An important step on the PMT appointments is the emphasis on the hygiene measures and personalized care[24]. This motivation process was not feasible due to the absence of appointments in the social isolation period. In a retrospective study, the lack of oral hygiene represented by the plaque accumulation were evaluated in association with periodontal parameters of individuals in PMT, and the authors showed that individuals with poor oral hygiene exhibited increased means of BoP, PPD and CAL, as well as tooth loss[4]. During the pandemic period, patients may have experienced a lack of motivation related to self-care and oral hygiene, which, combined with the absence of PMT appointments may have worsened their periodontal condition.

This study has some limitations. The sample size could not be increased due to operational issues and availability of complete records from T1. We suppose that with a bigger sample we would observe a negative impact on sites PPD>5mm as well. Despite the small sample, it was possible to identify a statistically significant difference in four out of five evaluated parameters.

## CONCLUSION

The interruption of the PMT for two years led to a worsening of most analyzed parameters in periodontal health status of the sample. Regular appointments during PMT phase have a fundamental importance for success, assuring better chances of a well succeeded treatment, reducing chances of returning to the active phase of the disease.

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## AUTHORS CONTRIBUTION (CREDIT)

MVRAM: Investigation; Writing – Original Draft; Writing – Review and editing. KSSV: Formal analysis; Data curation; Visualization; Writing – Original Draft; Writing – Review and editing. FOC: Conceptualization; Methodology; Writing – Review and editing. RPEL: Conceptualization; Methodology; Writing – Review and editing. LOMC: Conceptualization; Methodology; Writing – Review and editing. RMC: Conceptualization; Methodology; Formal analysis; Supervision; Project administration; Writing – Review and editing.

## CONFLICT OF INTERESTS

The authors have no conflict of interests to declare.

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# Impacto do isolamento social devido à COVID-19 na saúde periodontal de pacientes em tratamento de manutenção: estudo retrospectivo

**Introdução:** A pandemia de COVID-19 impôs um período de isolamento social que levou à suspensão das consultas odontológicas, afetando a regularidade das sessões de terapia de manutenção periodontal (TMP), essenciais para a manutenção da estabilidade alcançada na fase ativa do tratamento periodontal.

**Objetivo:** Este estudo observacional retrospectivo teve como objetivo avaliar o impacto da suspensão da TMP na estabilidade da condição periodontal de pacientes inscritos nessa fase do tratamento periodontal na Faculdade de Odontologia da Universidade Federal de Minas Gerais.

**Métodos:** Avaliamos a potencial progressão da periodontite por meio da avaliação da profundidade de sondagem (PS), sangramento à sondagem (SS), nível de inserção clínica (NIC), perda dentária e número de bolsas residuais (≥5 mm). Esses parâmetros foram avaliados em dois momentos distintos, antes (T1) e depois (T2) do isolamento social, para avaliar o impacto a longo prazo da ausência da terapia de manutenção periodontal. Os dados do período anterior ao isolamento social foram coletados a partir dos prontuários disponíveis, e os dados da primeira consulta após esse período foram coletados por um único examinador treinado. Os dados foram registrados em uma tabela eletrônica e a análise estatística foi realizada no SPSS, utilizando medidas descritivas como frequências, média e mediana, para caracterizar a amostra e o teste de Wilcoxon, para comparar as variáveis periodontais clínicas entre T1 e T2.

**Resultados:** Vinte e seis pacientes foram incluídos neste estudo. Os resultados da comparação dos dados disponíveis indicam uma deterioração da condição periodontal entre T1 e T2, demonstrada pela diferença significativa de sangramento à sondagem (p<0,001), profundidade de sondagem periodontal (p=0,021), nível de inserção clínica (p=0,003) e profundidade de sondagem (p<0,001) entre T1 e T2.

**Conclusão:** Este estudo conclui que a suspensão das sessões de terapia periodontal de manutenção durante a pandemia teve um impacto negativo na estabilidade periodontal dos pacientes, demonstrando a importância de consultas regulares durante a terapia periodontal de manutenção para manter a estabilidade periodontal.

**Descritores:** manutenção; periodontite; cooperação do paciente; perda de dente.