

The impact of COVID-19 related restrictions on orthodontic patients in Trinidad and Tobago





C Atkinson, C Clark, A Imasekha, C London, A Sampath, C Shaffrali, B Ventour, <u>A Bissoon, V Ramroop</u> SCHOOL OF DENTISTRY, FACULTY OF MEDICAL SCIENCES, UWI

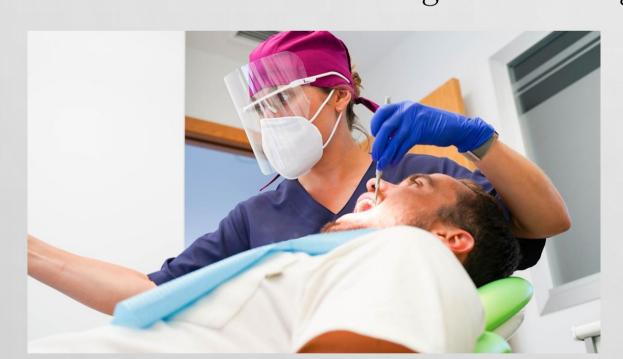
celeste.shaffrali@my.uwi.edu arlana.bissoon@sta.uwi.edu

Introduction

- The Coronavirus disease 2019 (COVID-19) caused by severe acute respiratory syndrome coronavirus (SARS-CoV-2) is a highly contagious disease that emerged as a global pandemic in early 2020.
- The mode of transmission of COVID-19 and consequently its high transmission power has led to the closure of most dental clinics and orthodontic practices.
- The ramifications of the COVID-19 pandemic have greatly influenced the approach to dentistry and the availability of prompt dental care.

Objective

• The objective of this study was to evaluate how the restrictions affected the treatment of orthodontic patients and determine the prevalence of orthodontic emergencies during March 2020 to May 2020, a period of intense lockdown in Trinidad and Tobago that was government mandated.



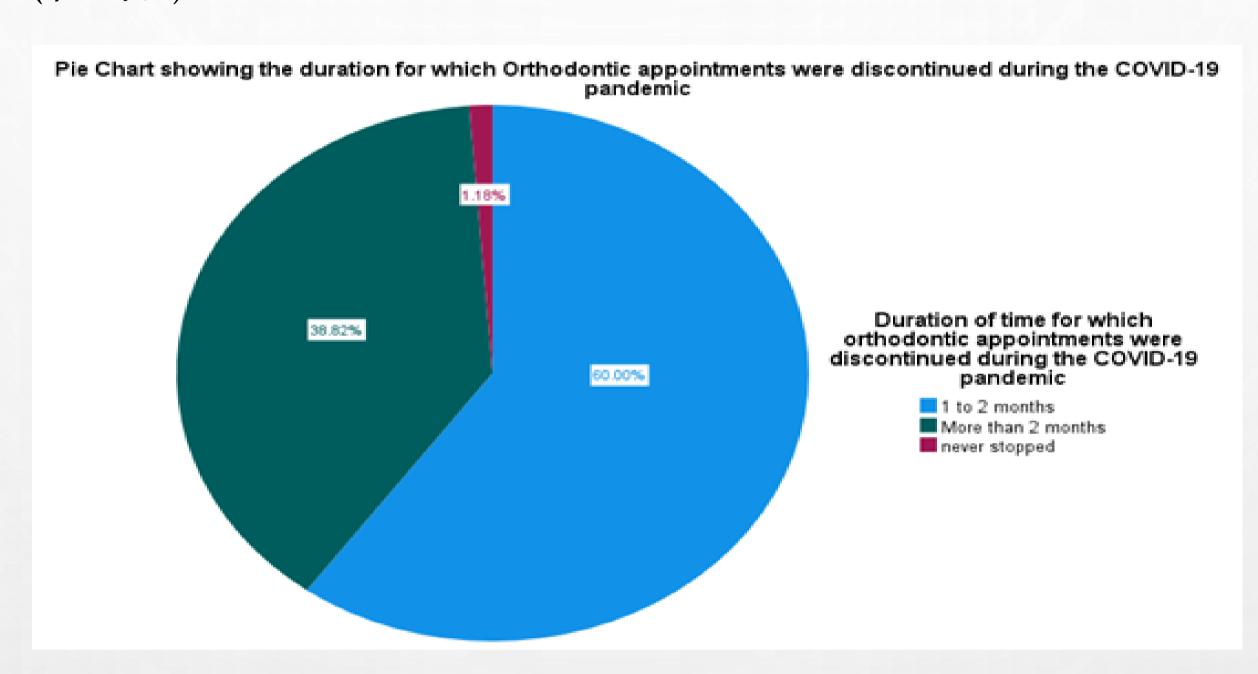
Methodology

• The study design used involved a cross sectional survey conducted on patients of orthodontic dental offices located throughout Trinidad and Tobago. These participants were selected based on the criteria of having ongoing orthodontic treatment during the lockdown period of the COVID-19 pandemic and questionnaires were utilized to assess the impact of the lockdown on the overall treatment of orthodontic care and treatment.



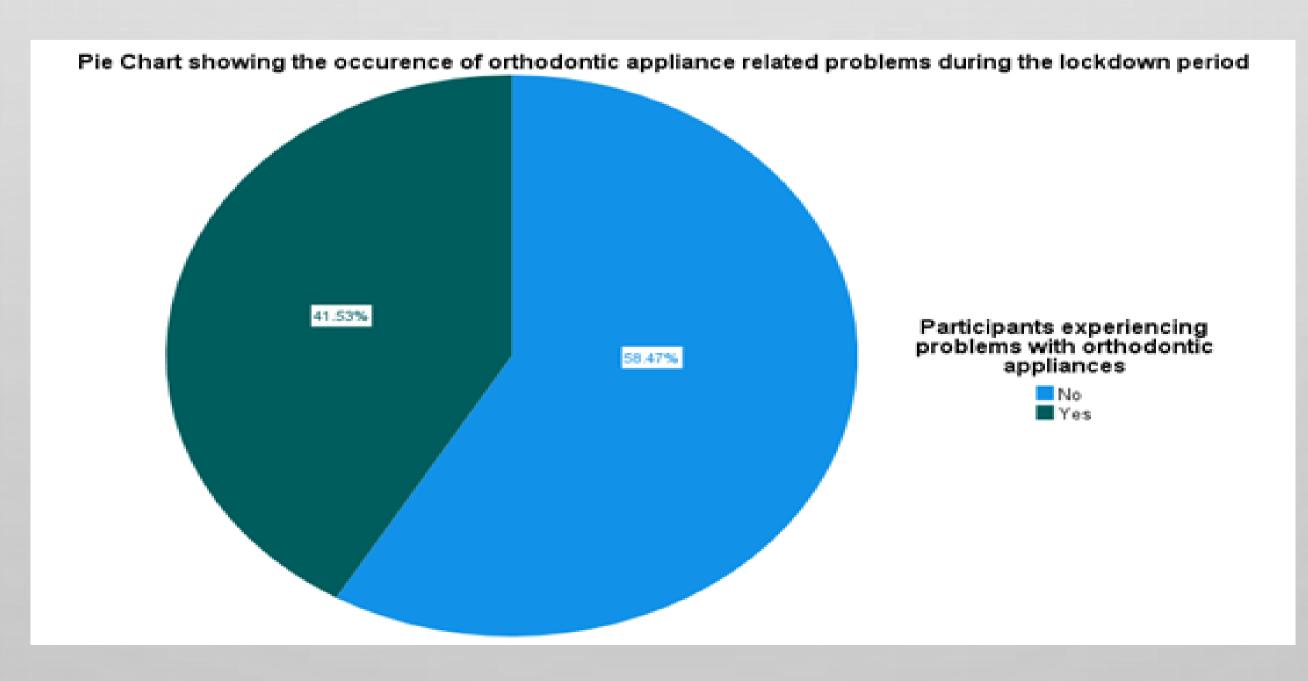
Results

• A total of 118 responses were obtained. Findings revealed 72.03% of orthodontic patients missed appointments during the pandemic; 60% discontinued appointments for 1 to 2 months mainly due to fear of contracting the COVID-19 infection (45.78%) and clinic closure (43.37%).



Pie Chart showing the duration of discontinued Orthodontic appointments during the COVID- 19 pandemic

• The findings expressed that 58.47% of the population experienced problems with their orthodontic appliance during the lockdown whilst 41.53% of them had no issues. It was further analysed that those in possession of fixed appliances reported the majority of problems being due to exposed wires (18.60%), bracket/band off (9.30%) and other causes whilst the minority reported on issues like swollen gums (2.33%) and front teeth trauma (2.33%) etc.



Pie Chart showing the occurrence of orthodontic appliance related problems during the lockdown period

Discussion

- The majority (92.85%) of the participants in this study agreed with the government's decision to close the dental clinics at the time. These participants may have preferred to follow the health guidelines given by the Ministry of Health of Trinidad and Tobago, in hopes of decreasing the spread of COVID-19.
- The participants in this study who encountered problems with their fixed orthodontic appliances (97.77%), sought assistance from their orthodontist. Seeking assistance was mostly achieved by calling the orthodontist's dental office.
- Some patients also sent pictures to their orthodontist in their pursuit of medical assistance while others attempted to book emergency appointments. Participants even attempted to use the internet as a means of resolving their orthodontic issue(s).

Conclusion

- It has been concluded that in order to obtain effective orthodontic treatment outcomes, the need for continual visitation of orthodontic patients exists.
- The results of this preliminary study have highlighted the problems faced/challenges by patients receiving orthodontic care during the periods of restriction whereby only emergency dental treatment was allowed.
- As such consideration needs to be taken to the revision of public health guidelines to include orthodontic care as emergency dental care in any future public health crisis.

References

• Turkistani KA. Precautions and recommendations for orthodontic settings during the COVID-19 outbreak: A review. American Journal of Orthodontics and Dentofacial Orthopaedics. 2020;158(2):175–81.

Acknowledgments

We would like to extend gratitude to the participating dental offices for their time and willingness, the Public Health department of U.W.I. St. Augustine and The Ministry of Health for their approval. A debt of gratitude is also owed to the presiding supervisors who continuously afforded us their expertise, as well as the group members who dedicated their time, effort and resilience for without these persons the completion of this project would not have been possible.