

# **COVID-19 Pandemic: The Impact on Dental Needs of Third-Grade Students**

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## INTRODUCTION

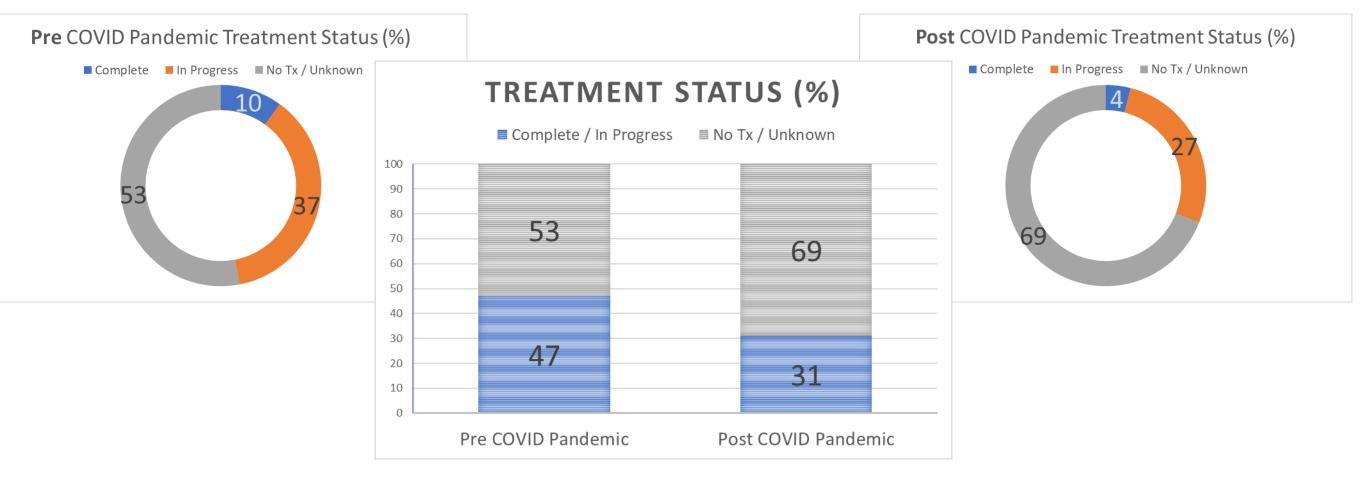
On March 23, 2020, the COVID-19 pandemic began its impact on dental care globally. Routine dental care was suspended, and an emphasis was placed on urgent dental care (1). Due to high concern over transmission of SARS-CoV-2 in the dental office, additional health screening tools and protective measures for both the patient and dental team were applied limiting the number of dental patients seen during the pandemic (2,3). Meanwhile, caries and its negative sequelae of pain and infection continued to impact children and their ability to receive dental care (4). Urgent Dental Needs (UDN) is defined as "having signs or symptoms" that include pain, infection or swelling at the time of dental examination." Children with UDN are "recommended to seek dental treatment as soon as possible" (5).

## **OBJECTIVES**

To compare the prevalence of urgent dental needs (UDN) of 3<sup>rd</sup> grade students in Collier County Florida before the COVID pandemic (school year 2019-2020) and after the COVID pandemic (school year 2021-2022) and to compare the completion of treatment of the UDN in the same population before and after the COVID pandemic.

#### **MATERIALS AND METHODS**

A chart review of the University of Florida Outreach Screening Program where dental hygienists and pediatric dental residents annually monitor the oral health of third grade students through dental screenings in 36 elementary schools using the Basic Screening Survey (BSS) by the Association of State and Territorial Dental Directors (ASTDD). The criteria for UDN include large, decayed area(s) with or without signs or symptoms of pain, infection, or swelling with a recommendation that the student be seen immediately for treatment. Parents of students with UDN are notified by mail and by phone the same day. Parents are contacted by phone 3 months after the screening and again at the end of the school year to determine treatment status.



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## CONCLUSIONS

- The COVID pandemic negatively impacted the dental health of 3<sup>rd</sup> graders as there was a 120% increase in prevalence of UDN after the COVID pandemic.
- The COVID pandemic negatively impacted the ability of 3<sup>rd</sup> graders to receive needed treatment as there was a 60% decrease in treatment completion for the students with UDN after the COVID pandemic.

# **ACKNOWLEDGEMENTS**

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#### RESULTS

• The number of students screened before the COVID pandemic was 3,323 compared to 1,880 students after the COVID pandemic.

The prevalence of UDN for the before the COVID pandemic was 6.6% (219) compared to 14.5% (272) after the COVID pandemic.

The treatment status before the COVID pandemic was 10% completed, 36.6% in progress, 53.4% no treatment/unknown.

The treatment status after the COVID pandemic was 4% completed, 27.2% in progress, 68.7% no treatment/unknown.

#### REFERENCES

- 1. Ball, M., Akintola, D., Harrington, Z. et al. Emergency dental care triage during the COVID-19 pandemic. Br Dent J (2021). https://doi.org/10.1038/s41415-021-3379-z
- 2. Falahchai M, Hemmati YB, Hasanzade M. Dental care management during the COVID-19 outbreak. Spec Care Dentist. 2020;1–10. https://doi.org/10.1111/scd.12523
- 3. Luzzi V, lerardo G, Bossù M, Polimeni A. Paediatric oral health during and after the COVID-19 pandemic. Int J Paediatr Dent. (2020) 31:20-6. doi: 10.20944/preprints202004.0002.v1
- 4. Samuel SR, Mathew MG, Suresh SG, et al. Pediatric dental emergency management and parental treatment preferences during COVID-19 pandemic as compared to 2019. Saudi J Biol Sci. 2021;28(4):2591-2597. doi:10.1016/j.sjbs.2021.02.002
- Basic Screening Surveys: An Approach to Monitoring Community Oral Health. Dec. 5. 2008, https://azdhs.gov/documents/prevention/womens-childrens-health/oralhealth/infant-youth/ASTDD-BSS-manual.pdf.