Utilization of pediatric emergency dental care pre/post COVID-19 pandemic

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INTRODUCTION

As a result of the COVID-19 pandemic, utilization of emergency dental care among pediatric patients has shifted from previous years. Urgent dental needs may have been delayed due to dental facility closures during the Spring of 2020. Anxiety and panic surrounding the spread of the virus as well as other contributing factors such as misinformation, finances, new office protocols, etc. have impacted overall access to care[1]. Parents' concerns surrounding the COVID-19 virus led to postponed dental treatment, resulting in changes in frequency of limited oral evaluations and periodic oral exams.

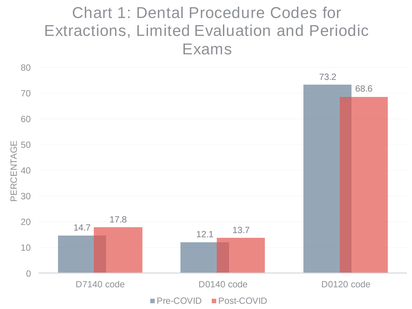
Access to preventative dental services for young children is important in order to limit the need for emergency dental visits and to avoid costly, invasive dental care[1]. The importance of establishing a dental home supports the goal of reducing hospital visits for dental emergencies in order to allow room for other medical emergencies, which at the time consisted of COVID-19 patients.

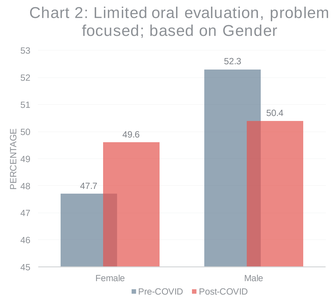
While the dental sector has initiated steps to normalcy since the COVID-19 vaccine was introduced, the use of emergency visits for limited oral evaluation likely shifted. By reviewing the relationship of various factors such as age, gender and ethnicity to the use of urgent dental care in children, we can better understand the prevalence among different populations and improve outcomes for patients if access to emergency care is limited again due to a future pandemic.

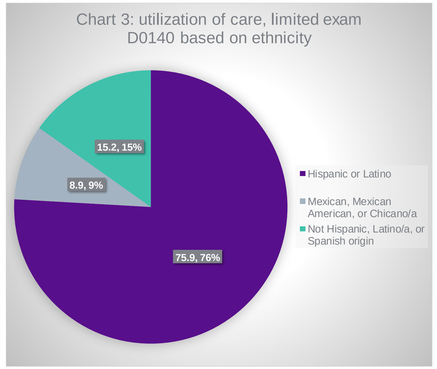
PURPOSE

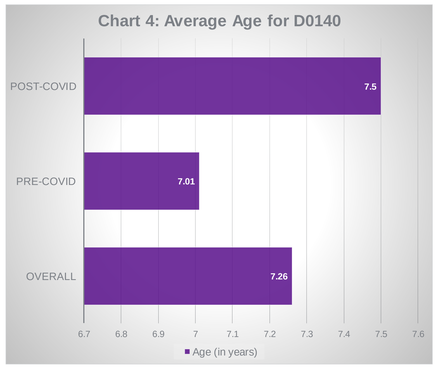
The purpose of this research study is to understand the effects of the COVID-19 pandemic on utilization of emergency dental visits, specifically among pediatric patients (ages 0-13) over a 6-month period, pre-pandemic and post-pandemic. The intent of this study is to evaluate an increase and/or decrease in numbers of limited oral evaluations (D0140) compared to periodic oral exam visits (D0120) and extraction visits (D7140) in the same timeframes due to delayed care.

FIGURES









METHODS

A chart review of electronic dental health records at El Rio Community Health Center was completed using a database searching dental procedure codes D0140, D7140 and D0120. A total of 10,194 charts were collected and used for statistical and bivariate analysis.

RESULTS

The average age of pediatric patients was 7.26 years old, with age difference pre-and post-Covid statistically significant (P< 0.001). 48.6% of participants were female, while 51.4% were male. Gender differences were not statistically significant (P=0.06). The number of limited oral evaluations (D0140) and extractions (D7140) increased post-Covid from 12.1% to 13.7% for D0140 and 14.7% to 17.8% for D7140. Periodic exams (D0120) decreased post-Covid from 73.2% to 68.6%. A P value of < 0.001 for extraction code D7140 was significantly significant.

CONCLUSIONS

Limited oral evaluation and extraction visits among pediatric patients at El Rio Community Health Center increased in the period following the Covid-19 pandemic closure. The largest percentage of patients utilizing limited oral exam visits was the Hispanic or Latino ethnic group.

REFERENCES

1 Meyer BD, Casamassimo P, Vann WF Jr. An Algorithm for Managing Emergent Dental Conditions for Children. J Clin Pediatr Dent. 2019;43(3):201-206. doi:10.17796/1053-4625-43.3.10

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