Impact of COVID-19 Pandemic on Emergency Pediatric Dental Care

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BACKGROUND

- Dental providers are at the highest risk to contract and transmit the virus due to aerosol generating procedures.
- Dental offices were closed during the corona virus pandemic of 2019 (COVID-19) due to fear of virus transmission and hence, dental patients had no access to care.
- Anecdotal evidence pointed out that the a significantly higher number of cases reported for pediatric dental emergencies during COVID-19.
- The study objective was to objectively determine how the pandemic effected the dynamics of the pediatric dental emergencies during the pandemic.

METHODS

- Electronic medical-dental records of children (0-18 years) reporting to the Children’s Hospital Colorado for dental emergencies during COVID-19 were selected and compared with the previous year.
- Demographic, clinical, and radiographic findings were summarized for statistical analysis to compare between the pre-pandemic (March-August 2019) and pandemic (March-August 2020) periods.
- The Group differences were tested via t-test or Kruskal-Wallis test for continuous and Chi Squared test of Fisher’s Exact test for categorical variables with an alpha value of 0.05.

RESULTS

- Randomly selected chart review demonstrated no significant differences in the demographics of patient reporting for pediatric dental emergencies during COVID-19.
- There was no significant differences in the dynamics of dental care provided during COVID-19.

DISCUSSION

- Initially it was hypothesized that there would be a significantly higher volume of pediatric patients reporting to the ER during the pandemic for odontogenic infections.
- Our results disproved the anecdotal evidence and demonstrate that there were no increase in the number of patients reporting to the emergency room during COVID-19 as compared to the previous year.
- The dynamics of the pediatric dental care were not changes and comparable number of patients reported for trauma or odontogenic infection during COVID-19 as compared to the prior year.
- This study provided valuable evidence that fear of the transmission risk during pandemic did not influence provider’s ability to provide uninterrupted care and did not influence the choice or modality of dental care.

CONCLUSIONS

- The dynamics of emergency dental care at the children’s hospital were unchanged during COVID-19.
- There were no significant changes in dental management modalities due to the pandemic.

REFERENCES


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