

# Impact of the COVID-19 Pandemic on Caregivers' Perceptions & Willingness to Attend Dental Appointments

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## RESULTS & CONCLUSIONS:

### INTRODUCTION & OBJECTIVE:

- In March 2020, the World Health Organization (WHO) declared COVID-19 a pandemic, leading to global extreme measures to limit the spread of infectious disease.<sup>1</sup> On March 16, 2020, the American Dental Association (ADA) recommended that dental offices postpone non-emergency dental procedures.<sup>2</sup> While non-emergency dental procedures have resumed, COVID-19 pandemic continued to influence pediatric dental care.

- The purpose of this study was to evaluate caregivers' attitudes toward dental visits and the perceived danger of contracting COVID-19.

### METHODS:

- Caregivers of pediatric patients (N=295) were surveyed on the child's diet, the child's oral health habits, and their attitudes toward attendance at dental appointments during the COVID-19 pandemic.

- Bivariate logistic regression models were constructed and analyzed to examine the relationship between demographics, dietary changes, attitudes towards dental visits, concerns related to contracting COVID-19, and oral hygiene practices on the outcome variable: caregiver willingness to take their child to the dentist during the lockdown.

- Significant predictors from the bivariate analysis (P<0.05) were added simultaneously to a multiple logistic regression model.

**Table 1:** Bivariate and multivariate regression model associated with caregiver willingness to take the child to the dentist during the lockdown.

VARIABLE	Bivariate Results			Multivariate Results		
	Odds Ratio	95% CI	P	Odds Ratio	95% CI	P
<b>DIET</b>						
<b>Child Consumed Comfort Food Once a Week Prior to Pandemic</b>	<b>2.02</b>	<b>1.23, 3.34</b>	<b>0.01</b>	<b>2.42</b>	<b>1.37, 4.29</b>	<b>0.00</b>
Child Increased Comfort Food	1.06	0.67, 1.77	0.80			
<b>ORAL HEALTH HABITS</b>						
Child Brushing Decreased	0.74	0.42, 1.31	0.31			
No Change in Child Brushing	1.19	0.73, 1.95	0.49			
Caregiver Attention to Oral Health Habits Increased	0.73	0.43, 1.23	0.23			
No Change in Caregiver Attention to Oral Health Habits	1.47	0.92, 2.37	0.11			
<b>CAREGIVER CONCERNS</b>						
<b>Likely to Contract COVID-19 in Public</b>	<b>0.62</b>	<b>0.38, 1.01</b>	<b>0.05</b>			
Dental Clinic More Dangerous to Contact COVID-19	0.29	0.17, 0.50	<.001			
<b>Very Worried About Contracting COVID-19 in Dental Office</b>	<b>0.23</b>	<b>0.14, 0.40</b>	<b>&lt;.001</b>	<b>0.30</b>	<b>0.15, 0.60</b>	<b>&lt;0.01</b>
Dental Visits During Pandemic						
<b>REASON FOR VISIT</b>						
<b>Main Reason for Child Appointment: Cleaning</b>	<b>2.99</b>	<b>1.82, 4.89</b>	<b>&lt;.001</b>	<b>4.61</b>	<b>2.55, 8.32</b>	<b>&lt;0.01</b>
<b>Caregiver Attended Dental Appointment</b>	<b>2.74</b>	<b>1.57, 4.77</b>	<b>&lt;.001</b>	<b>2.17</b>	<b>1.15, 4.13</b>	<b>0.02</b>

- Caregiver concerns related to COVID-19 were significantly associated with lower odds of willingness to take their child to the dentist during the pandemic. Bivariate analysis indicated that those who believed that **COVID-19 contraction was likely in public places** had significantly lower odds of being willing to take their child to the dentist (OR 0.62; [95% CI 0.38, 1.01]; P=0.05), and those very worried about **contracting COVID-19 in the dental office** were less likely to be willing to take their child to the dentist (OR 0.23; [95% CI 0.14, 0.40]; P=<0.01). **Caregivers' perceptions of dental appointments and willingness to attend appointments were negatively affected by the pandemic.**

- Multivariate analysis indicated that the caregivers' odds of willingness to take their child to the dentist during the pandemic remained greater for those who had **diets low in cariogenic food (consumption of one comfort food a week)** (OR: 2.42 [95% CI 1.37, 4.29], P=0.00), those whose main reason for the visit was a **dental cleaning** (OR: 4.61 [95% CI 2.55, 8.32], P=<0.01), and those who attended a **dental visit of their own** during the lockdown (OR: 2.17 [95% CI 1.15, 4.13], P=0.02). **Caregivers and patients that had positive oral health behaviors were associated with higher willingness to attend dental visits.**

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