

In-Person Follow Up Following Teledental Visits During the COVID-19 Pandemic



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INTRODUCTION

The COVID-19 pandemic required significant changes in the dental field to reduce the risk of viral transmission. Many dental offices were closed except for emergency care after being advised to do so in March 2020 by the American Dental Association and the Centers for Disease Control and Prevention.

Teledentistry is defined as the “provision of real time and offline dental care such as diagnosis, treatment planning, consulting and follow up via electronic transmission from different sites.”¹

Before the COVID-19 pandemic, teledentistry was only permitted in a few states. As a result of the COVID-19 pandemic, teledentistry has been utilized more frequently due to social distancing regulations. Minimizing the number of face to face appointments and reducing the volume of people in clinical areas and inappropriate attendances is key to reduce risk of viral transmission². Teledentistry has the potential to identify high risk populations and facilitate patients’ referrals to dental specialists, thus reducing wait lists, unnecessary travel and loss of productivity³

PURPOSE

The purpose of this study was to compare the rate of follow up visits for definitive treatment between new and established patients of the Holyoke Health Center that had a teledental visit during the COVID-19 pandemic.

METHOD

- A retrospective case-control study was completed by utilizing a chart review of eligible patients at the Holyoke Health Center Pediatric Dental Clinic in Holyoke, Massachusetts from March 11, 2020-December 31, 2020.
- After approval from the IRB of NYU Langone, charts were identified by searching the electronic dental records for codes D9995 (teledentistry – synchronous; real-time encounter) and D9996 (teledentistry – asynchronous; information stored and forwarded to dentist for subsequent review).
- The patient list and was collected from NextGen electronic health records and entered into a REDCap database.
- Chi-square test for independence were conducted to determine whether there is an association between covariates for new and established patients of Holyoke Health Center.

Table 1: Demographic Characteristics of Overall Teledental Patients (N=48)

Participant characteristics	Category	Overall n (%)		
Age, years	4 to 7	10 (20.8)		
	8 to 10	14 (29.2)		
	11 to 13	9 (18.8)		
	14 to 17	15 (31.2)		
Sex	Male	25 (52.1)		
	Female	23 (47.9)		
Race	White	6 (12.5)		
	Black or African American	3 (6.2)		
	Asian	0 (0.0)		
Reason for teledental visit	Other	39 (81.2)		
	Pain	36 (75.0)		
	Infection	3 (6.2)		
	Soft Tissue lesion	3 (6.2)		
	Hard Tissue lesion	0 (0.0)		
	Trauma	1 (2.1)		
	Other	5 (10.4)		
	In person follow up	Yes	8 (16.7)	
	No	40 (83.3)		
Follow up visits (mean (SD))		1.00 (0.74)		
Diagnosis	Pain	32 (66.7)		
	Infection	3 (6.2)		
	Soft issue lesion	3 (6.2)		
	Trauma	1 (2.1)		
	Other	9 (18.8)		
Who was spoken to	Mother	41 (85.4)		
	Father	6 (12.5)		
	Legal guardian	1 (2.1)		
Photo received for visit	Yes	6 (12.5)		
	No	42 (87.5)		
New patient	Yes	24 (50.0)		
	No	24 (50.0)		
	Category	Established patient (n=24) n (%)	New patient (n=24) n (%)	p
Reason for teledental visit	Pain	16 (66.7)	20 (83.3)	0.044
	Infection	2 (8.3)	1 (4.2)	
	Soft Tissue lesion	0 (0.0)	3 (12.5)	
	Trauma	1 (4.2)	0 (0.0)	
	Other	5 (20.8)	0 (0.0)	
In person follow up	Yes	5 (20.8)	3 (12.5)	0.699
	No	19 (79.2)	21 (87.5)	
Follow up visits (mean (SD))		0.83 (0.56)	1.17 (0.87)	0.122
Diagnosis	Pain	14 (58.3)	18 (75.0)	0.036
	Infection	1 (4.2)	2 (8.3)	
	Soft issue lesion	0 (0.0)	3 (12.5)	
	Trauma	1 (4.2)	0 (0.0)	
	Other	8 (33.3)	1 (4.2)	

RESULTS

- There was a statistically significant difference between the reason for teledental visits between new and established patients (p=0.044).
 - Pain was the reason for a visit in 83% of new patients and 66.7% of established patients.
- There was a statistically significant difference in the teledental diagnosis between new and established patients (p=0.036).
 - Pain was diagnosed in 75% of new patients and 58.3% of established patients.
- There was no significant difference for in person follow up visits, with 87.5% of new patients and 79.2% of established patients not returning for a follow up visit.
- There were no significant differences in covariates between the established and new patient groups

CONCLUSIONS

- Established patients had a higher rate of in person follow up visits after teledental consultations during the COVID-19 pandemic, but the difference was not significant
- Pain was the most common reason and diagnosis for teledental consultations

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