

COVID-19's Effect on Access to Dental Care for Pediatric Patients

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ABSTRACT

Purpose: Dental literature is available as to how the COVID-19 pandemic affected access to pediatric dental care, but there are few articles which investigate why it did. This study seeks to identify which factors caused pediatric dentists to adjust the ways they practiced during the re-opening period when elective dental care was allowed to resume.

Methods: A survey consisting of 24 questions was sent via Survey Monkey to 6,058 active pediatric dentist members of the American Academy of Pediatric Dentistry. The data was collected over a 6-week period.

Results: Three hundred and sixty-four responses were obtained out of 6,058 emailed surveys (RR = 6%). When pediatric dentists were asked about staff concerns about returning, the most prevalent issue was worry about contracting the virus themselves (82%), while the most common concern that pediatric dentists reported about returning to work was transmitting the virus to loved ones (62%). Most respondents reported difficulty in obtaining necessary PPE (76%) and that prices for PPE significantly increased (79%). Approximately 79% of participants reported that they feel the pandemic has affected their staff's well-being/mental health, as well as their own (67%). Roughly 75% of pediatric dentists applied for a relief program to maintain the financial health of their practice.

Conclusion: Pediatric dentists faced multifaceted issues during the re-opening period following the COVID-19 pandemic shutdown that may have affected access to pediatric dental care. The most widespread issues reported included ability to obtain necessary PPE to practice (N95/K95 masks and disinfecting wipes/sprays), staffing challenges, mental health difficulties, and financial hardships.

INTRODUCTION

Pediatric dentists, and dentists in general, have a central role in the healthcare system by providing dental care and managing emergency dental situations.¹ However, many dental procedures require the use of aerosol-generating equipment. Due to the transmission of SARS-CoV-2 via aerosols, dental personnel are in a high-risk category for the acquisition of the virus.^{2,3}

As the seriousness of COVID-19 escalated in the United States in March 2020, many dentists began to worry about providing treatment, while also being able to maintain a healthy environment for the patients, themselves, and the dental team. Guidelines put forth by dental associations and legislators varied around the world, ranging from advising practitioners to close their practices throughout the United States, to reducing the number of routine check-ups in the UK, to no advice at all.⁴ While these discrepancies are expected due to the varying degree of COVID-19 outbreaks in different countries, many pediatric dentists found themselves acting without a lack of centralized information to guide them during this extraordinary time.⁵

On March 18, 2020, the American Dental Association (ADA), the United States largest dental association, released guidance for dentists in the United States on what to consider a dental emergency requiring urgent treatment versus elective care that can be postponed. These guidelines were released to help control the spread of COVID-19, while also alleviating the burden of dental emergencies on hospital emergency departments.⁶ Additionally, studies began to make suggestions regarding how dentists should move forward with seeing patients during the pandemic to reduce the spread of the virus, including protocols prior to the patients' visit, during in-office dental treatment, and post-treatment.^{7,8} However, despite these recommendations, many dentists still had many questions and concerns. Many dentists found themselves in precarious situations, with no answers as to when or if their jobs will ever return to "normal."

Throughout the COVID-19 pandemic, limitations on routine pediatric dental care and prevention led to a period of insufficient and unpredictable access to emergency dental care, possibly increasing the suffering of pediatric patients in need of urgent dental care. Current literature does not address reasons as to why the pandemic affected access to pediatric dental care. The purpose of this study is to assess which factors affected access to dental care for pediatric patients and to find a way to address these issues so that when there is another pandemic, pediatric dentists are prepared.

MATERIALS AND METHODS

A survey consisting of 24 questions was sent via SurveyMonkey to 6,058 active pediatric dentist members of the American Academy of Pediatric Dentistry (AAPD) in the United States. The survey investigated the participants' demographics, as well as changes that they may have made in the way they practice pediatric dentistry, including staff adjustments, use of teledentistry, infection prevention procedures, and personal protective equipment. The survey also inquired about the mental health and concerns of the dentists and their staff during the reopening period. The data was collected over a 6-week period. The list of the emails was obtained from the AAPD. A cover letter was sent via email along with the survey. The cover letter included the purpose of the study, as well as the fact that completion of the survey was voluntary and would incur no potential physical, social, or legal risks to the participants, but may evoke feelings of stress or anxiety as it may bring to mind the uncertainty and discord of the beginning phases of the COVID-19 pandemic. No costs or expenses were incurred to the participants associated with this research study. Institutional Review Board approval (2021-13298) was obtained from Albert Einstein College of Medicine prior to electronic distribution of the survey.

RESULTS

Three hundred and sixty-four responses were obtained of 6,058 emailed surveys (RR = 6%). Women represented 51% of respondents, while men represented 48%. Participants from all district chapters of the AAPD participated in the study: northeastern (26%), northcentral (20%), western (19%), southwestern (18%), southeastern (17%). The majority of participants work primarily in private practice (85%) and in a suburban area (61%). Sixty-one percent of respondents maintained their hours of availability to patients, while 39% reduced their number of hours.

STAFFING | The most common concerns that pediatric dentists reported that staff raised about returning to work were concerns about possibly acquiring the virus (82%), issues with childcare (70%), concerns about possibly transmitting the virus to loved ones (66%), financial concerns (52%), and anxiety/depression due to the pandemic (42%). The most common concern pediatric dentists had regarding returning to work were concerns about possibly transmitting the virus to loved ones (62%) and concerns about possibly acquiring the virus (59%) (figure 1). Approximately 41% of participants report having a smaller workforce than prior to the pandemic.

SUPPLIES | Most respondents reported difficulty in obtaining necessary PPE (76%) and that prices for PPE significantly increased (79%). It was most difficult for pediatric dentists to obtain N95/K95 masks, followed by surgical masks, gloves, gowns, and then face shields. Three-fourths of participants also reported difficulty in obtaining disinfecting wipes/sprays. Further, 45% of respondents reported difficulty obtaining routine dental materials; the most reported supplies that practitioners had difficulty obtaining were disposables.

MENTAL HEALTH | Seventy-nine percent of participants reported that they feel the pandemic has affected their staff's well-being/mental health. Roughly 67% reported that the pandemic affected their own well-being/mental health as well. Participants reported that they were most stressed at the height of the pandemic as compared to now or before, but still report higher stress levels than pre-pandemic times (figure 2).

FINANCES | Sixty-nine percent of participants reported applying for the Paycheck Protection Program to maintain the financial health of their practice and 42% of participants started providing teledentistry as a result of the pandemic; however, 66% of them reported that they were unable to be compensated properly by insurance companies for their teledentistry visits.

GUIDANCE | Approximately half of the participants felt they received adequate guidance from government agencies regarding how to resume practicing routine dental procedures post-shutdown: 31% reported that their state dental association was the most helpful in providing guidance, while 30% reported that the ADA was the most helpful source.

CONCLUSIONS

During the re-opening period following the COVID-19 pandemic shutdown, pediatric dentists faced a variety of issues that may have affected access to dental care to pediatric patients. These issues include:

- Difficulty obtaining necessary PPE, particularly N95/K95 masks and disinfecting wipes/sprays
- Significantly increased prices of PPE
- Significant challenges in maintaining an adequate number of support staff
- Mental health difficulties personally and in staff members, including increased levels of anxiety, depression, and stress
- Financial hardship requiring assistance

Please note that these results must be interpreted with caution due to the low response rates.

CONCERNS STAFF AND PEDIATRIC DENTISTS HAD ABOUT RETURNING TO WORK

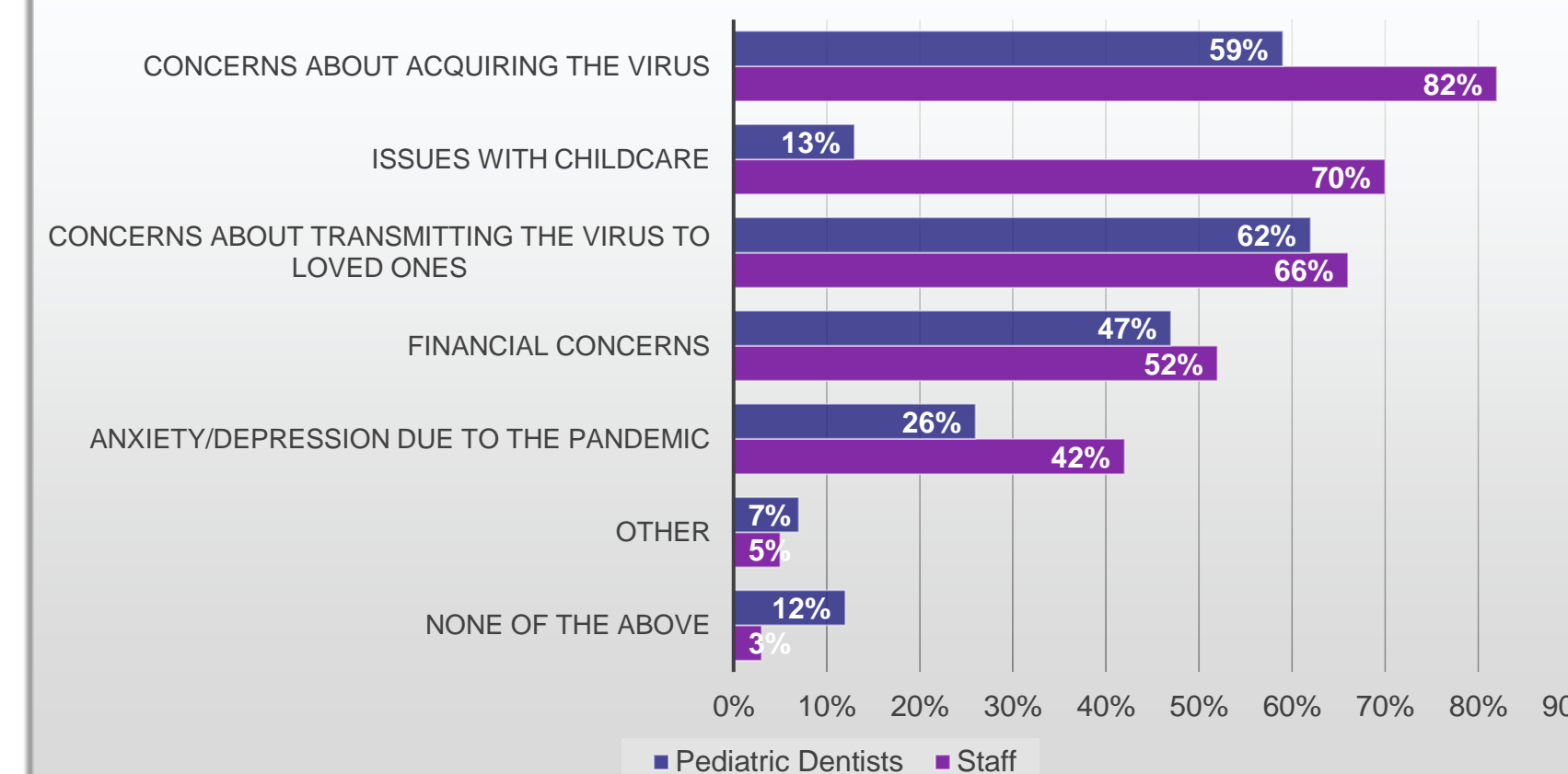


Figure 1. Percentages of concerns pediatric dentists and staff had about returning to work, as reported by pediatric dentists (percentage responding positively).

DAILY STRESS LEVEL OF PEDIATRIC DENTISTS

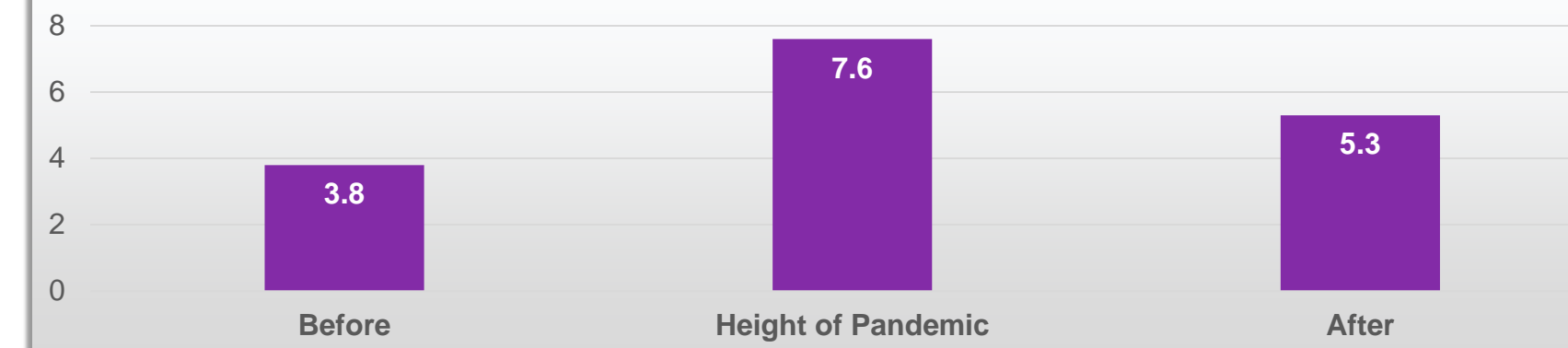


Figure 2. Daily stress levels reported by pediatric dentists before the onset of the pandemic, during the height of the pandemic, and now on a scale of 0-10 (0 = lowest, 10 = highest).

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