



RESEARCH ARTICLE

COVID-19 Induced Dental Practice Modifications Could Have Made Some Dentists Optimistic: A Public Health Concern of Emerging Importance?

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Abstract

The unprecedented global pandemic of COVID-19 has impacted heavily on health care systems across the globe and dental care is no exception. Dentists working in oral cavities of people are at increased risk of the infection whilst ensuring safety to supportive staff and dental patients. Therefore, COVID-19 induced dental practice modifications have become the new normal but often perceived by dentists with concerns and fears underpinned by pessimism as reported by a plethora of studies from different countries. It is not known whether those modifications could have made some cohorts of dentists optimistic as it could be a promising approach to mitigate the negative impact of COVID-19 on dental fraternity. Therefore, we aim to provide some insights into this under searched timely concern of public health importance.

Keywords

COVID-19, Dental practice modifications, Dentists, Optimism, Perceptions, Tele-medicine, Sri Lanka

Introduction

The unprecedented COVID-19 global pandemic caused by SARS-CoV-2 virus denotes an unprecedented public health emergency and remains to impact health services and health workers across the globe [1]. Dentists working in oral cavities of people are at increased risk

of catching the infection [2]. Consequently, COVID-19 induced dental practice modifications became the new normal informed by explicit evidence-based technical guidance [3]. Burgeoning research explored knowledge, perceptions, attitudes and concerns of dentists in this regard [4,5]. However, findings painted the portrait of the gloomy picture of pessimism, fears and confusions expressed by dentists. Given the persisting nature of the pandemic, resumption of dental practices while ensuring patient and dental staff safety has become increasingly challenging. Emerging concern on oral hygiene and severity of SARS-CoV-2 infection mediated by non-communicable diseases and co-morbidities adds new dimensions to dentist's role in the battle against COVID-19 [6]. In this backdrop, we aim to communicate a brief report of initial data from original ongoing research on pros and cons of COVID-19-induced dental practice modifications perceived by a cohort of Sri Lankan dentists.

Methods

An online cross-sectional survey was conducted among a cohort of Sri Lankan dentists. Google Forms were used to develop the questionnaire and to collect data. Present paper is based on data of an ongoing research



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on pros and cons of COVID-19 induced dental practice modifications. The online questionnaire included socio-demographic and professional information and perceptions on 5 core items marked on a Likert-scale with scores ranging from 0-5 on 1) Meticulous infection control; 2) The reduced workload of the dental practice; 3) Regaining financial loss; 4) Practicing telemedicine; 5) Better communication opportunities.

The data were entered and analysed using SPSS-21 statistical package. Likert scale scores for 5-core items on perceptions of COVID-19-induced practice modifications were dichotomized as negative (scores = 0-3) and positive (scores = 4-5). Descriptive statistics and frequency distributions were used to present data. Ethics approval for this pilot study was obtained from Ethics Review Committee, Faculty of Dental Sciences, University of Peradeniya, Peradeniya, Sri Lanka.

Results

Table 1, demonstrates the socio-demographic and

Table 1: Distribution of dental surgeons by socio-demographic and professional profile.

Attribute	N	%
Age category		
24-30 years	9	33.3
31-40 years	10	37.0
41-46 years	8	29.6
Gender		
Male	20	81.5
Female	7	18.5
Practice type		
Public & part-time private	14	51.9
Public only	5	18.5
Private only	8	29.6
Duration of practice		
0-5 years	10	37
5-10 years	4	14.8
10-20 years	13	48.1

professional attributes of respondents. Accordingly, the majority of dentists were aged 31-40 years followed by 24-30 year range. Males overwhelmingly dominated (81.5%) in the sample. Over half (51.9%) of the respondents were engaged in public and part-time private practices while 29.6% were exclusively practicing as general dental practitioners. Nearly half (48.1%) of dental surgeons had 10-20 years of work experience.

Figure 1 depicts the distribution of dentists by their perceptions on 5-item- COVID-19-induced dental practice modification scale. Accordingly, the majority demonstrated positive perceptions on COVID-19 induced dental practice modifications, 78.2% positively perceived better opportunity for meticulous infection control. Another, 70.4% perceived opportunity for better communication with dental patients. Moreover, two third of dental surgeons (66.7%) perceived better opportunity for practicing telemedicine among dental patients while 59.3% was optimistic on regaining financial losses due to temporary closure of dental practices. Over half (51.9%) of respondents perceived the reduced workload as a blessing to spare time for own-self and for families than before.

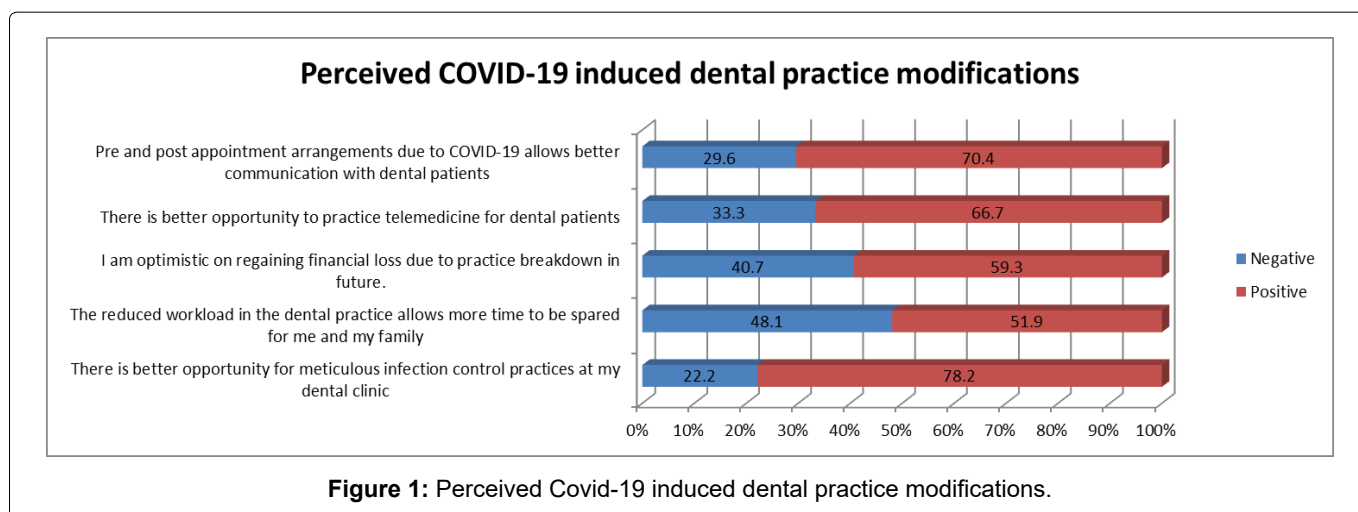
Discussion/Conclusions

Main findings of this study

The majority of Sri Lankan dentists in the initial analysis of present study expressed optimism on selected aspects of COVID-19 induced dental practice modifications pertaining to cross-infection pre- and post-appointment arrangement, practice of telemedicine, regaining financial loss, reduced workload and cross-infection control.

What is already known about this topic

Dental team is expected to stringently adhere to enhanced infection control practices, nevertheless, many studies reported less comprehension and confidence among dentists in this regard [7] and low compliance even in areas of high prevalence of the infection despite dentists themselves reporting related



symptoms [8]. Overall, dentists across many countries indicated inadequate preparation for patient care during COVID-19 pandemic fearing of many professional and medico-legal concerns [4]. Moreover, a recent study reported high psychological distress among dentists attributed to perceived job insecurity and fears of cross-infection augmented by financial loss [9]. However, advanced communication technology and its applications garnered acceptance as a mode to mitigate COVID-19 pandemic induced barriers in oral health care provision into some extent [5,10].

What this study adds

At the outset, optimistic perceptions indicated in initial responses of Sri Lankan dentists on some aspects of COVID-19 induced dental practice modifications merit further investigations. Access to oral health care services considered to be a human right as it allows people to perform vital daily functions such as eating, speaking, smiling and interacting without pain, suffering, discomfort and embarrassment. Therefore, tele-medicine technology and enhanced communication opportunities with patients would enable fostering and sustaining a fruitful dentist-patient relationship during COVID-19 pandemic era underpinned by social and physical distancing. Besides, dentistry deemed a stressful and exhausting profession with high levels of stress and burnout substantiated by research evidence. Hence, reduced work load attributed to COVID-19 service restrictions leading to involvement in other activities could reduce the work-related stress and burn-out of dentists. Present findings provide a promising approach and useful insights into mitigation of COVID-19 induced negative impact on dental fraternity. Propagating optimism and resilience enriched with positive perceptions among dental fraternity as well as other categories of health workforce across the globe have become important in the era of COVID-19 pandemic.

Limitations of this study

Nevertheless, *as one swallow does not make summer*, it is important to analyse the full data set of present research on optimism expressed in initial responses of dentists. Our findings based small sample dominated by young males engaging both in public services as well as in part-time private practices may not represent the full spectrum of Sri Lankan dentists.

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Conflicts of Interest/Competing Interests

None declared.

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