Behavioral Preventative Strategies Undertaken by Dental Clinics in Fiji during COVID-19 Pandemic

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Introduction: COVID-19 has created a significant impact on dentists and oral health professionals. This research aimed to explore the perspective of dental officers (DOs) and dental managers (DMs) on behavioral preventative strategies and recommendations for preventing the virus transmission in the dental clinics in Fiji. Materials and Methods: This qualitative study was conducted among DOs and DMs who worked in nine private dental clinics, eight government dental clinics, and one School of Dentistry and Oral Health clinic (SDOH), in the Central Division, Fiji between August 9 and September 12, 2021. The participants were selected using purposive sampling method using the inclusion and exclusion criteria. Self-developed semi-structured open-ended questionnaires were used for data collection through in-depth interviews via zoom. Manual thematic analysis of the data was conducted. Results: Thirty DOs and 17 DMs participated in this study. Seven themes emerged from data analysis: Risk perception-COVID-19 versus dentistry; Staff safety, satisfaction, and motivation; Breaking the chain of infection transmission; Adaptability, and acceptance; Shared responsibility; Roles and knowledge; and Importance of good planning. Majority of participants felt that dental professionals are at high risk, and hence, need to take extra precautionary measures. Participants also stated that more care should be provided to patients by accepting the situation and moving forward. Conclusion: This study highlighted the importance of dentists in preventing disease transmission in a dental setting. Continuation with the protocols and strategies gave the participants more sense of protection. The importance of good planning, accepting the situation, and moving forward was highlighted. Future research is recommended in other divisions and other healthcare professionals can be included.

KEYWORDS: COVID-19, Dental clinics, Dental health professions, Fiji, Preventative strategies

INTRODUCTION

he coronavirus-2019 (COVID-19), also known as SARS COV2, emerged as an acute pneumonia in Wuhan City, China.^[1-3] Although a lot of measures had been undertaken to control the spread of the virus, the outbreak has exceedingly spread worldwide and has become a public health crisis.^[3] The disease was declared a global pandemic by the World Health

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Organization (WHO) on March 11, 2020.^[4,5] The most common symptoms of COVID-19 are fever, cough, sore throat, fatigue, myalgia, headache, shortness of breath, and in some cases diarrhea.^[3,6-8]

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COVID-19 has become a challenge for the health professions and the system.^[9,10] COVID-19 has created a significant impact on dentists and oral health professionals.^[1,11,12] Dentist's work in close proximity to patients which causes constant exposure to body fluids such as blood and saliva as well as the spread of aerosols during dental procedures.^[13] This poses the dentists and dental professionals at high risk.^[11,14] The virus has a significant impact on dentistry as this situation has created a lot of anxiety and stress amongst the dental professionals.^[1,12] The anxiety level can have a significant impact on the decision-making, quality of work, and burnouts among the dental professionals.^[12] A lot of dental clinics had a significant economic impact following the virus.^[15] Considerable adjustments to the type of services and infection control protocols were required^[16] as the risk of infection cannot be controlled through standard personal protective equipment (PPE) in daily dental practice.^[17]

Oral health services are provided by both the public and private sector in Fiji. Due to the pandemic, all nonurgent dental services have been postponed and only emergency treatment is being carried out at the dental facilities in Fiji. However, no study has yet been conducted in Fiji on COVID-19 and dentistry to report the findings the pandemic had on dental facilities in Fiji. Hence, this study aimed to explore the perspective of dental officers (DOs) and dental managers (DMs) on behavioral preventative strategies and their recommendations in preventing the virus transmission in the dental clinics in Fiji.

MATERIALS AND METHODS

STUDY DESIGN AND SETTING

A qualitative study was conducted among DOs and DMs through in-depth interviews in Central Division, Suva, Fiji between August 9 and September 12, 2021. Qualitative studies help to explore and understand social and behavioral issues and to collect genuine ideas and provide valuable insights on relevant issues and experiences.^[18-20]

The study settings were the government dental clinics, private dental clinics, and the School of Dentistry and Oral Health clinic (SDOH). There are approximately 10 government dental clinics including the main Colonial War Memorial Hospital (CWMH) dental clinic, 26 private dental clinics, and 1 SDOH in the Central Division, Suva, Fiji. Nine private dental clinics and eight government dental clinics were selected based on random sampling. As for school, there is only one dental school in Fiji, which was selected for the study.

STUDY SAMPLE

The study population comprised all the dental staff of the dental clinics in Suva, Fiji. The study sample was selected based on the inclusion and exclusion criteria. The inclusion criteria for DOs included: Dentists and dental interns of any ethnicity and gender with at least 6 months working experience. The exclusion criteria included any other dental practitioners apart from DOs, DOs from other dental clinics, and those DOs who did not give consent. The inclusion criteria for DMs included sub-divisional dental officer (SDDO), senior dental officers (SDO), and principal dental officers (PDO) of the selected government and private dental clinics, DMs of any ethnicity and gender and DMs with at least 6 months working experience. The exclusion criteria included DMs of other clinics apart from the selected dental clinic and DMs who do not provide consent for the study.

Thirty DOs out of approximately 40 were selected for the study based on the inclusion and exclusion criteria; 6 from private dental clinics, 18 from government dental clinics and 6 from SDOH. Seventeen DMs out of approximately 35 were selected based on the exclusion and inclusion criteria; 9 from private dental clinics and 8 from government dental clinics. All 30 DOs and 17 DMs had undergone in-depth interview via zoom until data saturation was reached.

DATA COLLECTION TOOL

self-developed semi-structured open-ended Α questionnaire was used for data collection through in-depth interviews for DOs and DMs. Semi-structured in-depth interviews are one of the common methods used in qualitative studies to collect data in health service research.^[21] In semi-structures, depth interviews involve dialogue between the researcher and participant and guided by a flexible interview protocol.^[21] It enables the researcher to collect open-ended data, share feelings and beliefs about a particular topic, explore thoughts of participants, and also helps to explore more deeply into personal and sensitive issues as well.^[21] The questionnaires had two sections, respectively. The first section recorded the demographic information for the DOs and DMs; unique identification number, age, gender, highest qualifications attained, designations, and job experience of the DOs. The second section included 6 open-ended questions to gauge the perceptions of participants about the impact of COVID-19 on dentistry.

STUDY PROCEDURE

The DMs of the respective clinics received the flyers 2 weeks prior to commencing the data collection via email. The flyer contained brief information regarding

the study. The interested DMs and DOs emailed and called the principal investigator directly for participation. An interview time was selected by the principal investigator based on the availability of the participants. Each participant was given a participant information sheet. Consent forms were given to those who agreed to participate in the study. The consent forms were collected and kept by the principal investigator safely. In-depth interviews were conducted by the principal investigator via zoom which ranged from 30 to 60 min. The results from the first interview guided the subsequent ones.^[22] Written notes were taken during the interviews. Voice recording was also done as a means of backup.

DATA MANAGEMENT AND ANALYSIS

Each interview was transcribed manually by the principal investigator into Microsoft word. After the initial interview was transcribed, the principal researcher read the transcript repeatedly to identify any potential errors which were considered and improved in subsequent interviews.^[22] Codes were created by the principal investigator by reading the transcripts multiple times. Codes are shorthand labels to describe the contents of the interviewee.^[23] These codes were grouped to create subthemes. The principal investigator identified common patterns to create broader themes^[23] which were reviewed and confirmed by the second researcher. Data were interpreted in the context they were obtained to see if the interviewer had any influence on the participants' answers. Data were entered after each interview until data saturation was reached.^[22]

STUDY RIGOR

Methodological rigor was maintained by using the fourdimensions criteria (FDC) to establish trustworthiness; dependability, confirmability, credibility. and transferability.^[24] Credibility was ensured in various ways; engaging with participants, distribution of flyers, verbal explanation regarding the study, and the in-depth interviews ranged from 30 to 60 min. Dependability was maintained by having a thorough literature search, data coding was done and transcripts were re-read to identify errors. The raw data were kept by the principal investigator. Thorough methodology and investigator and data source triangulation ensured confirmability. To ensure transferability, random and purposive sampling methods were used, and data were collected until data saturation was reached. Each step was cross-checked by the second researcher.

ETHICAL CONSIDERATIONS

Ethics approval was taken from College Human Health Research Committee (CHHREC) of Fiji National University (FNU) with ID#035.21, Fiji Human Health Research Ethics Committee (FHHRERC) and facility approval from various private dental clinics selected for the study. Written consent form was obtained from them before collecting data. Participants were given unique identification numbers (codes) instead of using their names to ensure confidentiality. The participants were informed that their participation in the study is voluntary and they could leave the study at any stage. All data including the transcribed scripts and recorded interviews were only accessible to the principal investigator and were kept in a computer that was password protected.

RESULTS

CHARACTERISTICS OF DOS AND DMS

Thirty DOs participated in the interview virtually via zoom; 6 DOs from the private dental clinics, 6 DOs from the school dental clinics, and 18 DOs from the government dental clinics. More female participants were noted (66.7%). Majority of the participants were from the age range of 20–30 years (50%). Approximately 80% of the participants were Fijians of Indian Descent (FID). Majority of the participants attained Bachelors as their highest qualification level (70%). The work experience of the majority of participants was from 1 to 5 year (33.3%).

Seventeen DMs participated in the interview virtually via zoom; 9 DMs from the private dental clinics and 8 DMs from the government dental clinics. There were more male participants (58.8%). Approximately 47.1% of the participants were from the age range of 31–40 years. Equal number of FID and I-taukei (IT) (47.1%) participants were noted. Approximately 58.8% of the participants had work experience ranging from 11–20 year. Majority of the participants had Bachelor's level (94.1%) as the highest qualification [Table 1].

THEMES RELATED TO SERVICE DELIVERY AND COVID-19

Six themes emerged from data analysis. These are discussed under perceptions of DOs and DMs; Risk Perception- COVID-19 versus Dentistry, Staff safety, satisfaction, and motivation, Breaking the chain of infection transmission, Adaptability, and Acceptance, Shared Responsibility, roles and knowledge, and Importance of good planning. Table 2 summarizes the themes and codes.

THEME 1: RISK PERCEPTION-COVID-19 VERSUS DENTISTRY DOs perceptions

Recommendations were made for those practicing to be more cautious as dentists are at high risk.

Table 1: Characteristics of DOs* $(n = 30)$ and DMs ⁺ $(n = 17)$				
Characteristics		DOs*	DMs†	
		Frequency (%)	Frequency (%)	
Gender	Male	10 (33.3)	10 (58.8)	
	Female	20 (66.7)	7 (41.2)	
Age group (years)	20-30	15 (50)	4 (23.5)	
	31-40	9 (30)	8 (47.1)	
	41–50	3 (10)	3 (17.7)	
	51-60	2 (6.7)	2 (11.7)	
	Above 60 years	1 (3.3)	0 (0)	
Ethnicity	I-taukei	3 (10)	8 (47.1)	
	Fijian of Indian Descent	24 (80)	8 (47.1)	
	Others	3 (10)	1 (5.8)	
Highest qualification	Bachelor level	21 (70)	16 (94.1)	
	Post graduate level	9 (30)	1 (5.8)	
Number of years of practice	6 months–1 years	2 (6.7)	0 (0)	
	1–5 years	10 (33.3)	3 (17.7)	
	6–10 years	7 (23.3)	3 (17.7)	
	11–20 years	7 (23.3)	10 (58.8)	
	21–30 years	3 (10)	1 (5.8)	
	More than 30 years	1 (3.3)	0 (0)	

*Dental officers

†Dental managers

Table 2: Themes and codes identified in interviews				
Themes	Open codes	Quotation examples		
Risk perception-COVID-19	Nature of our work, high risk, cross infection	"The nature of our work it's"		
versus dentistry	control	"I think the dentists have"		
Staff safety, satisfaction and	I feel much safer, make sure that there is	"I think from now on every"		
motivation	compliance, feel more courageous, feel defeated,	"For managers, it's their job"		
	anxiety	"the first was that I told"		
		"And you know you sometimes"		
Breaking the chain of	Wear proper PPEs*, universal rule, infection	" all dental practitioners who"		
infection transmission	control, guidelines, transmission	"So, what dentists can do, anybody"		
		"I would say, just follow the"		
		"I would say that dentists"		
		"To the dental colleagues, you"		
		"Even when they become		
		asymptomatic"		
		"Yes, definitely dentists play"		
Adaptability and acceptance	Except, accept, new normal, changes, support.	"I believe, I feel that we still"		
		"The first thing is for the dentist"		
		"At the beginning when we"		
		"I'd say look read the guideline and"		
Shared responsibility, roles,	Updated, literature, knowledge, responsibility,	" just be updated with things"		
and knowledge	educate, train, workload, evidenced based,	"Dental and medical schools"		
	information	"If you are managing"		
		"I think the other challenge"		
		"In terms of evidenced based"		
Importance of good planning	Future thorough planning, knowledge and	"So, my recommendation for"		
	information, risk management	"All of these clinics have their"		

*Personal protective equipment's

The nature of our work it's just impossible to not get aerosols, especially the droplets, we cannot avoid it, you know, there is no such thing as social distancing in dentistry (laughs). So, because of the nature of our work, we are really at a high risk in terms of transmission. (DO10, a 46-year-old, others)

DMs perceptions

Majority DMs stated that dentists maintain really good infection control way before the pandemic times. The good infection control protocols control the spread of infection as well as enable safe dental care delivery to the patients.

I think the dentists have always done a good job in maintaining good cross infection control. I think we are way...mile and miles ahead of most other medical and health professionals in terms of managing cross infection controls because of the way we sterilize because of the way we have used our PPEs and our pre and post operation of our clinics have made it possible for us to provide safe dental care..... (DM5, a 47-year-old, FID)

THEME 2: STAFF SAFETY, SATISFACTION AND MOTIVATION *DOs perceptions*

The DOs suggested to continue wearing full PPEs even after the pandemic is gone as this gave them a better sense of protection.

I think from now on every dental practitioner even after wearing the coat, they should also be given gowns. That's one of the change that I would like. I know once this thing normalizes, the PPEs, we won't be given because we don't have enough resources. But then even just by wearing coats our hands are exposed and I feel much safer wearing the full PPEs.... DO21, a 29-year-old, FID)

The DOs also highlighted the fact that DMs need to oversee and maintain compliance in the clinics.

For managers, it's their job also to make sure that there is compliance in the clinic, that this is done, my assistants are doing what they are supposed to do after every patient, how they are cleaning up, how are they preparing for the next patient, so all those things, triaging, so all those steps we are using in our clinics. (DO10, a 46-year-old, others)

DMs perceptions

During the pandemic, the staff were in constant fear and lacked motivation to continue providing care. The above issue was solved by DMs via staff motivation.

...the first was that I told the staff not to turn any patients away, you just need to see them, whether they are positive or negative, we just need to improve and strengthen our PPEs ay...and how we see them. That was done to change their mentality ay, so that really helped and they started to feel more courageous to see patients even though they did not know their status ay... (DM14, a 40-year-old, IT)

When the health system of the nation was getting overwhelmed with the COVID-19 situation, the DMs felt defeated and helpless during this pandemic.

And you know you sometimes feel defeated, like there is no hope when you think how this pandemic is affecting our work. And sometimes I sit back and think why did I choose this field of dentistry. Like working from home for some people doesn't give them anxiety, but like for me, it really gives me anxiety to go out and work. (DM1, a 46-year-old, others)

THEME 3: BREAKING THE CHAIN OF INFECTION TRANSMISSION DOs perceptions

One of the DOs recommended to refer cases not within the scope of the practicing officers and highlighted the importance of proper PPEs.

..... all dental practitioners who are operating they need to wear proper PPEs. You should not do an elective procedure if you do not have good protocols in place. Or patients can be referred to a hospital setting if the risk is high where they can be proper managed if they are not having proper PPE. (DO6, a 35-year-old, FID)

The importance of universal precautions was highlighted as well.

So, what dentists can do, anybody that comes to your clinic, you just apply the universal rule, that they are infected. The virus can affect anybody. So basically, any patient that is coming to your office is a COVID patient. You treat that patient with the highest level of infection control that you can do in the office. (DO2, a 34-year-old, FID)

A few DOs emphasized on the importance of following the guidelines.

I would say, just follow the guidelines. Basically, the guidelines are there to prevent you from getting the infections and to prevent you from spreading the infection because dental setting is a very... very... I would say very dangerous setting. (DO2, a 34-year-old, FID)

Almost all DOs stated that dentists play vital roles in preventing the transmission of the infections.

I would say that dentists play a huge role in preventing the transmission of COVID 19 in a dental setting. But apart from dentists, it is actually the whole team in place. So, whether it be a private practice or whether it be a school clinic or whether it be a public hospital. (DO8, a 33-year-old, FID)

DMs perceptions

Recommendations were made, by the DMs, to the DO to maintain high level of infection control to protect themselves and loved ones.

To the dental colleagues, you just have to uplift your standard of infection control. Right now, we have to be serious with our infection control. Coming from someone who has been seeing positive cases, I'll say that efficient infection control breaks the chain of transmission and it also protects yourself from getting infected. So, once you are protected, you go back home, your families are protected as well. Plus, you also break that chain of transmission from that positive patient to the next, so you just have to be vigilant ay when you are seeing patients. (DM13, a 28-year-old, IT)

The DMs recommended dentists to stay home if infected as this can allow laxity in infection control, thus, allow spreading of the virus.

Even when they become asymptomatic then they won't be doing their work well then there will be some laxity in infection control and then people will get infected ay... that's one of the ways that we as operators a spread it to our patients or patients spreading it to us because of us not being vigilant in our work. (DM10, a 48-year-old, IT)

Majority DMs agreed that dentists have a big role to play in preventing the transmission of the virus.

Yes, definitely dentists play a big role in preventing the transmission of COVID 19 basically because of the nature of our work...ummm we work in the oral cavity with aerosols being generated in the majority of our procedures so yes we have a big role to play. (DM11, a 37-year-old, IT)

THEME 4: ADAPTABILITY AND ACCEPTANCE DOs perceptions

The DOs suggested to think long term regarding the preventive measures and services. Suggestions were made to look into ways to start practicing aerosolized procedures again despite the pandemic.

I believe, I feel that we still need to have a bit more knowledge, regarding treatments and treating patients using the drill. That's what I feel, I think we need to except that this is the new normal now. (DO27, a 34-year-old, IT)

DMs perceptions

The DMs also highlighted on the importance of adapting to the current situation, as this is the right attitude.

The first thing is for the dentist to accept that this is the new normal. If they don't accept it then there is no way they are going to be doing these changes. I think in Fiji we have a bit of an issue with acceptance. We need to take the responsibility. You can't be selective about what you want to agree and what you don't want to agree on. Whatever is there it's from research and it's from papers that's already been proven, so I think acceptance is very important. (DM4, a 34-year-old, FID)

Majority DMs highlighted on the importance of vaccination for the practitioners and patients.

At the beginning when we started there were a few who did not believe in this disease. There are some who don't want to get vaccinated either. I think collectively as medical staff we should support MOH and all of us should get vaccinated just to prevent transmission between us and between our patients. When patients become vaccinated and they come to you, they trust their doctors. (DM3, a 39-year-old, FID)

A few DMs stressed on following the guidelines in place.

I'd say look read the guideline and that's like the bible for me. We spent so many weeks like about 4 weeks coming up with the guideline. A lot of time invested by a lot of professionals to do that so whatever is in there that's definitely what I think is the way forward. (DM4, a 34-year-old, FID)

THEME 5: SHARED RESPONSIBILITY, ROLES AND KNOWLEDGE DOs perceptions

The DOs suggested to be updated with the situation by keeping the knowledge updated.

.... just be updated with things that is happening around us. I would suggest in terms of literature, knowledge or whether it be journals and all. So basically, be updated of things happening around you. (DO17, a 26-year-old, FID)

The importance of shared responsibility to serve the public was also highlighted on.

Dental and medical schools should have a shared responsibility for community services and not just be dependent on the ministry of health to do it. I understand we are at level 3 and we cannot go out to the community, but we have a moral responsibility as well, we can always call and enquire! At least for pain control, referrals and preventive service, we should be sensitive to the community at large. (DO11, a 69-year-old, FID)

Recommendations were made for education of dental assistants particularly for private dental mangers.

If you are managing a clinic, I think it's my job to educate my dental assistants, or whoever else is working, my receptionists, you know it's my role to educate them on this type of virus on what the nature is, how can it be transmitted and also on how to prevent it and probably do proper training for them on how to avoid this from spreading ay. I think they should be the champions in terms of infection controls (DO10, a 46-year-old, others)

DMs perceptions

The DMs in the MoHMS dental clinics had dual responsibilities of managing the command centers as well as the dental clinics, when the staff of the clinics turned positive.

I think the other challenge we have faced is human resources, during the pandemic ay.... I had 3 of my staff turning out positive. We have a total of 5 staff. We were just left with only one hygienist and I had to come back from the command center to see patients. So, I was doing both because 3 of them turned out positive. So, the workload for at least a week fell back on me. (DM14, a 40-yearold, IT)

A few DMs highlighted on the importance of evidenced based knowledge for dentists.

In terms of evidenced based, I'd say we have room for improvement. We can still improve knowledge in terms of evidenced based. Receiving what the information we have from Infection prevention and control nurse, or from CPDs, I think we should read up and just educate ourselves, otherwise we will be left behind. (DM12, a 29-year-old, IT)

THEME 6: IMPORTANCE OF GOOD PLANNING DOs perceptions

The DOs particularly suggested to the DMs to have plan for the future for such outbreaks.

So, my recommendation for the higher-level managers would be that they need to do a future thorough planning because this is just an example on one outbreak. We don't know in future what kind of outbreaks we will be encountering. (DO17, a 26-year-old, FID) Good planning should be based on literature and evidences. This advice was particularly for those clinics which are still not operational.

All of these clinics have their own sets of people who manage the clinic, so the planning has to be quite properly done if they have to be open during a pandemic.... a lot of research is happening now and a lot of information is out there to be given to dentists. So, with all those knowledges and the information that is out there, so I think in our own groups we can plan how are going to open the clinics and do our appropriate risk management. (DO8, a 33-year-old, FID)

DISCUSSION

Thirty DOs and seventeen DMs were interviewed for this study to explore the perspective of DOs and DMs on behavioral preventative strategies and recommendations by DOs and DMs in preventing the virus transmission in the dental clinics in Fiji. The themes identified were: Risk Perception- COVID-19 versus Dentistry, Staff safety, satisfaction, and motivation, Breaking the chain of infection transmission, Adaptability, and Acceptance, Shared Responsibility, roles and knowledge, and Importance of good planning.

Due to the nature and work environment conditions of a dental setting, if appropriate infection control measures are not implemented, the dental offices and staff can become a dangerous source of the virus transmission.^[25] Therefore, a strategic cross-infection protocol needs to be implemented.^[26] The participants in this study also stated that dental settings are regarded as high risk.

DMs, particularly in the government dental settings faced issues with their staff, whereby the staff were not motivated enough to see patients due to the fear of contagion. Hence, DMs had to step up in terms of their roles and look for ways to motivate these staff. One of the studies also displayed that the respondents were also reluctant to treat a suspected patient.^[27] The participants in this study requested for the strategies and protocols to continue as this offered them better sense of protection.

Dentists have a role to play during COVID-19 crisis.^[28] This includes to create awareness among people regarding the deadly disease, its mode of transmission and protective measures.^[28] Dental professionals need to impart knowledge to the general public regarding social distancing.^[28] It is vital to make the patients understand, during this crucial time, regarding emergency dental services and what can be the advantages and disadvantages of unnecessary exposure.^[28] The dental team plays a role in managing the dental clinics and minimizes the risk of viral infection in the dental environment by following the recommendations made by local health authorities.^[29] Relevant policy makers and equipment manufacturers should address these points to increase the implementation of infection control measures against COVID-19 and potential future pandemics.^[30]

Since dental clinics are "dangerous settings" for the transmission of the virus, the majority of DMs and DOs in this study particularly those from the MoHMS setting strongly recommended for upgrading of dental facilities and more resources for the dental departments to be able to offer wider range of care during the new normal. DOs particularly in the MoHMS were eager to return to normalcy as they were in the fear that they will lose their dental skills as they were not performing "real dentistry." DOs and DMs from the private dental settings urged for government funds in order to upgrade facilities during the pandemic and be better prepared for any such issues in future.

In order to keep the practitioner's knowledge current, there will be greater need to have refresher courses for practicing dentists on new infection control strategies.^[31] In a study, it was recommended for expansion of curriculum in dental schools to include competencies in pandemic and disaster relief.^[31] Suggestions were also made that dental schools, as part of the community dentistry curriculum, should be providing voluntary medical work during the pandemic.^[31] Although this was practiced in the pre-pandemic period by the SDOH, the school is currently closed to safeguard staff and students.

The measures undertaken to ensure safe and effective oral care during the pandemic can be revised as the knowledge of virus transmission is evolving.^[14] Hence, the guidelines may change from time to time depending on the course of the diseases and regional needs.^[32] Therefore, it is the responsibility OHCP to be aware of the updates and redefine their facilities and practice accordingly.^[32] The guidelines and protocols need to be reviewed and updated accordingly after getting feedback from those involved to identify the gaps in the contingency plan or needs for additional resources, supplies, and equipment.^[33] Similar suggestions were made by the DOs in this study.

LIMITATIONS

The in-depth interviews were conducted via zoom instead of face-to-face interviews, due to the pandemic. The study was limited to central division only, hence,

perspectives of DMs and DOs outside this division has not been included.

CONCLUSION

The participants elaborated on the important role that dentists play in preventing the transmission of COVID-19 in a dental setting. Recommendations were also made by DOs to continue with the current protocols and strategies as this gave them better sense of protection. The DMs motivated their staff to keep going during trying times. Light was thrown on the importance of evidenced-based knowledge. The DOs and DMs stressed on the importance of accepting the new normal in order to provide all range of services to the general public. The importance of good future planning and preparedness was also highlighted on.

The recommendation of the staff should be taken into consideration to enhance staff satisfaction and productivity. This study was only conducted in central division of Fiji Islands. Future research can be conducted in other divisions and include other health care professionals as well apart from just DOs and DMs.

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CONFLICTS OF INTEREST

The authors declare that there are no conflicts of interest in this work.

AUTHORS CONTRIBUTIONS

KK: Conceptualisation; data collection; formal analysis; methodology; project administration; writing – original draft preparation; writing – review and editing. MM: Conceptualisation; data analysis; supervising; writing – review and editing.

ETHICAL POLICY AND INSTITUTIONAL REVIEW BOARD STATEMENT Ethics approval was taken from College Human Health Research Committee (CHHREC) of Fiji National University (FNU), Fiji Human Health Research Ethics Committee (FHHRERC) and facility approval from various private dental clinics selected for the study.

PATIENT DECLARATION OF CONSENT

Consent was also obtained from each participant prior to data collection.

DATA AVAILABILITY STATEMENT

The datasets used and/or analyzed during the current study are available from the corresponding author on reasonable request.

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