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The Knowledge, Awareness, and Attitude Regarding COVID-19 among Trinidad and Tobago Dentists. A Cross-Sectional Survey

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Abstract: The COVID-19 virus is highly infectious, and it places both patients and dental health care providers at high risk for contracting the disease. Therefore, it is crucial for dental teams to practice preventative measures against COVID-19 by wearing personal protective equipment (PPE), handwashing, ensuring adequate ventilation and sticking to strict protocols when conducting aerosol-generating procedures. Methods: A cross-sectional survey using an online platform was conducted to assess dentists' knowledge, attitude and awareness of COVID-19 in Trinidad and Tobago. Descriptive statistics, Pearson's chi-square and Fisher exact test were performed. Results: One hundred and ninety-two dentists participated in the survey. The age group, 30–39, comprised 40.6% of the respondents. General dentists comprised 80.7% of the sample. The majority of the respondents evaluated their awareness of COVID-19 as above average. There was no difference in knowledge between dentists and specialists regarding routes of transmission and preventative techniques. More female dentists reported feeling anxious and fearful. Conclusions: There was a high level of agreement between different professionals about the preventative measures, routes of transmission and incubation period. There was a lot of variation in knowledge about the survivability of the virus on innate objects. More education campaigns, seminars, and rehabilitation services targeting dentists in Trinidad and Tobago are required.

Keywords: COVID-19; dentists; awareness; knowledge; Trinidad and Tobago



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1. Introduction

In December 2019, the COVID-19 outbreak was observed for the first time in Wuhan, the capital of Hubei province, China [1]. This breakout was declared a pandemic on 30 January 2020 by the World Health Organization [2]. On 12 March, Trinidad and Tobago had its first case of SARS-CoV-2 (COVID-19) infection [3].

Common clinical symptoms include dry cough, fever, muscle pain, exhaustion, and irregular chest scan. Less common symptoms reported are headache, diarrhea, sputum development and hemoptysis [4,5]. Studies have revealed that transmission can occur directly (droplet inhalation, sneezing, and coughing) and by contact transmission (eye, oral and nasal mucous membranes) [6].

Due to the nature of COVID-19 and dentistry, it places both patients and dental health care providers at high risk for contracting the disease. Airborne microorganisms can stay locked in the air for long periods. These microorganisms can be transmitted in the dental setting through inhalation [7], patient materials, contact with oral fluids, or blood [8]. Transmission can also occur through aerosols from an infected person without a mask through talking, coughing, contact with the oral mucosa, nasal fluids and conjunctiva [9,10]. Dental equipment that generates aerosols such as ultrasonic scalers and high-pressure handpieces have also been implicated [11].

Therefore, it is crucial for dental teams to practice preventative measures against COVID-19 by wearing personal protective equipment (PPE), regular handwashing, en-

sureing adequate ventilation and sticking to strict protocols when conducting aerosol-generating procedures [9].

This study aimed to assess the level of awareness, knowledge and attitude regarding COVID-19 among dentists in Trinidad and Tobago.

2. Methods

A cross-sectional survey using a self-administered questionnaire was used to obtain relevant data. This consisted of open-ended and close-ended questions. The survey was conducted after obtaining ethical approval from The University of The West Indies ethics committee (Ref: CREC-SA.0676/01/2020).

A pilot was conducted on 12 dentists. These respondents were not part of the final survey. The performance of this face validity ensured comprehension and clarity of the questions. Adjustments were made to the survey after feedback was obtained from the pilot.

The survey was then emailed to dentists using an anonymous online survey (Survey Planet LLC, Marini Del Ray, CA, USA). A reminder was sent to the dentists via a phone call. The questionnaire consisted of 33 questions. The first part consisted of demographic information (age, sex). The second part assessed knowledge, attitude and awareness of COVID-19.

Data were collected from 9 February to 9 April 2021. The data were analyzed using SPSS 27 (IBM SPSS Statistics for Windows Corp., Armonk, NY, USA). Descriptive statistics were tabulated. Chi-square and Fisher exact tests were performed on the data. When $p < 0.05$, the test results were considered significant.

3. Results

Out of 587 registered dentists in Trinidad and Tobago, responses were received from 192 dentists. This represented a 33% response rate. All questions were answered and therefore included in the analysis.

4. Demographic Results

Almost half, 40.6% ($n = 78$), of the participants, were aged 30–39 years, 20.3% were 40–49 years, 17.2% were 50–59 years and 5.7% were 60 years and over. Males represented 46.4% ($n = 89$), while females represented more than half, 53.6% ($n = 103$) of the representative sample. The highest number of respondents were general dentists (80.7%), while only 19.3% were specialists. Most of the respondents graduated from the local dental school (85.9%). A large number of dentists worked in the private sector (82.8%) and had been practicing dentistry for an average of 11–20 years. The participants' demographic data are found in Table 1.

Table 1. Demographics of participants.

Variable	<i>n</i> = 192	Percent %
Age (years)		
20–29	31	16.1
30–39	78	40.6
40–49	39	20.3
50–59	33	17.2
60+	11	5.7
Gender		
Male	89	46.4
Female	103	53.6
Where did you complete your undergraduate degree?		
University of the West Indies	165	85.9
University located in U.K.	15	7.8
University located in USA	6	3.1
Other	6	3.1

Table 1. *Cont.*

Variable	<i>n</i> = 192	Percent %
Sector employed in		
Private	159	82.8
Public	5	2.6
Both	28	14.6
How long have you been in dental practice (years)?		
1–5	48	25
6–10	33	17.2
11–20	56	29.2
20+	55	28.6
In which region do you work?		
North Trinidad	46	18.5
South Trinidad	74	29.7
Central Trinidad	61	24.5
West Trinidad	23	9.2
East Trinidad	40	16.1
Tobago	5	2
Did you specialize?		
No (General dentist)	155	80.7
Yes (Specialist)	37	19.3

5. Knowledge, Awareness and Attitude Regarding COVID-19

When evaluating the participants' level of awareness of COVID-19, most respondents rated themselves to be above average (see Figure 1).

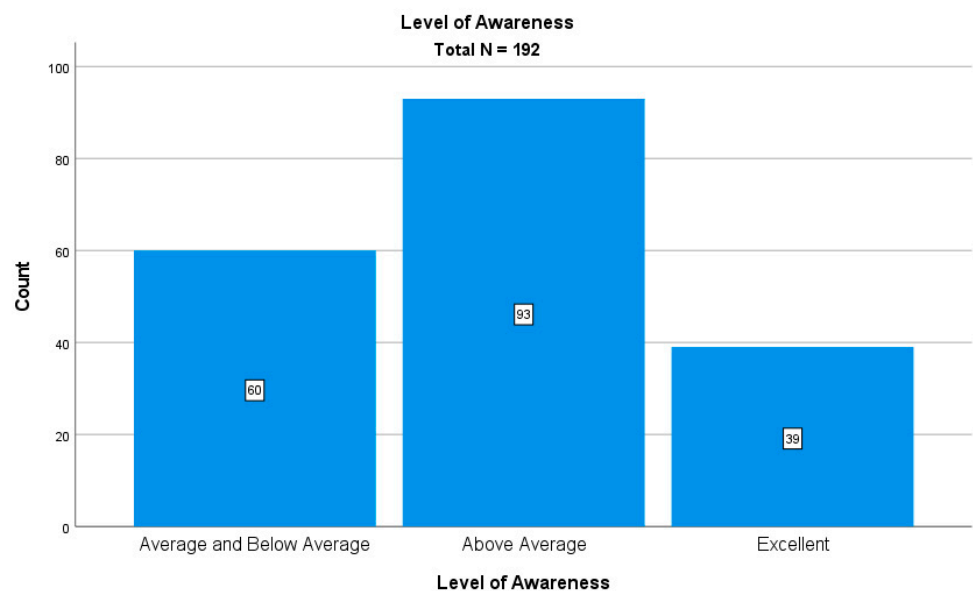


Figure 1. Participants' rating of their level of awareness.

The majority of respondents believed that the incubation period of COVID-19 is 5–14 days, and the virus can survive on an inanimate object for 72 h (Figures 2 and 3).

Regarding the level of awareness, the proportion of participants who attended seminars and rated their knowledge as above average and excellent was 73%. Therefore, those who attended seminars considered themselves more aware than those who did not.

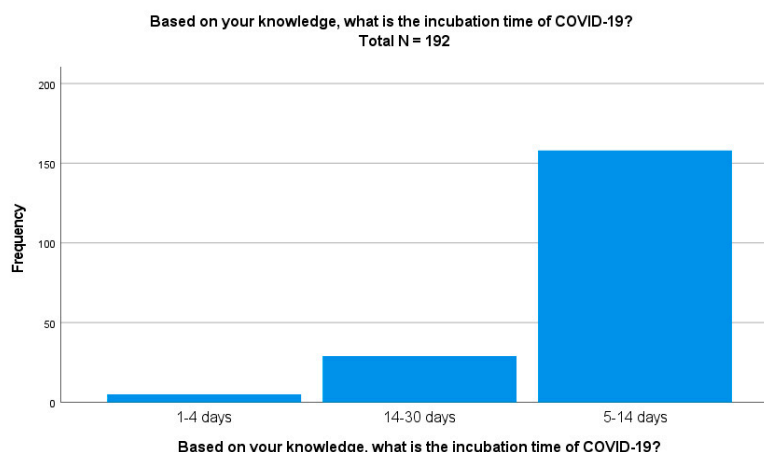


Figure 2. Knowledge based on the incubation period.

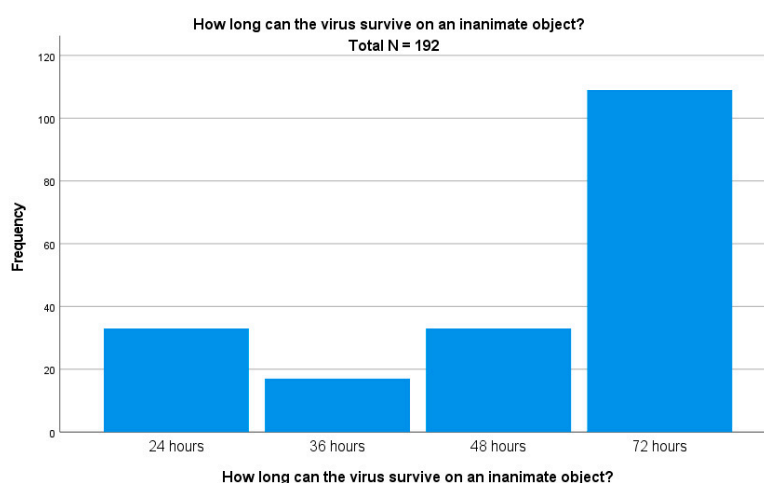


Figure 3. Knowledge based on survival on an inanimate object.

Of the participants who rated themselves above average, 69.9% attended seminars. Noteworthy is that only one participant gave themselves a rating of below average. This respondent also reported that they did not attend any seminars and stated that the COVID-19 is not caused by a dangerous virus. Moreover, 30.8% of respondents who assessed their level of awareness as excellent did not attend seminars on COVID-19. Additionally, 7.7% of participants who regarded their level of awareness as excellent did not agree that a dangerous virus causes COVID-19. Of the respondents who believed they had an above-average or excellent level of awareness, 69.6% correctly identified the incubation period of 5–14 days.

Regarding common signs and symptoms of COVID-19 virus infection, 91.1% ($n = 179$) of participants identified fever, 79.7% ($n = 153$) a dry cough and 66.7% ($n = 128$) tiredness. The responses for the remaining signs and symptoms were 66.7% ($n = 128$) for sore throat, 18.8% ($n = 36$) for sneezing, 5.7% ($n = 11$) conjunctivitis and 4.7% ($n = 9$) skin rash.

Fever was the only sign and symptom where there was a difference in knowledge between a general dentist and a specialist $p < 0.05$ (Table 2).

The majority of respondents (98.4%, $n = 189$) believed that respiratory droplets (sneezing and coughing), 82.3% ($n = 158$) surface contact, and 67.7% ($n = 130$) airborne, were routes of transmission. A minority of respondents also indicated blood 14.6% ($n = 28$), sexual transmission 6.8% ($n = 13$) and food 4.7% ($n = 9$) as routes of transmission. There were no significant differences between the knowledge of dentists and specialists with routes of transmission (Table 2).

Table 2. Chi-square and Fisher exact test results for knowledge and awareness of COVID-19 by the dental profession, $p < 0.05$.

Variable	Dentist (<i>n</i> = 155)	Specialist (<i>n</i> = 37)	Total (<i>n</i> = 192)	<i>p</i>
Q.3. Most common symptoms of COVID-19 virus infection				
Fever	144 (92.9%)	31 (83.8%)	175 (91.1%)	0.022
Dry cough	124 (80%)	29 (78.4%)	153 (79.7%)	0.439
Conjunctivitis	10 (6.5%)	1 (2.7%)	11 (5.7%)	0.871
Rash on skin	6 (3.9%)	3 (8.1%)	9 (4.7%)	0.157
Sneezing	32 (20.6%)	4 (10.8%)	36 (18.8%)	0.878
Sore throat	88 (56.8%)	17 (45.9%)	105 (54.7%)	0.341
Tiredness	107 (69%)	21 (56.8%)	128 (66.7%)	0.397
Q.4. What are the routes of transmission for COVID-19 infection?				
Food	7 (4.5%)	2 (5.4%)	9 (4.7%)	0.510
Sexual Transmission	10 (6.45%)	3 (8.1%)	13 (6.8%)	0.404
Airborne	107 (69%)	23 (62.1%)	130 (67.7%)	0.36
Surface contact	126 (81.3%)	29 (78.4%)	158 (82.3%)	0.783
Blood	23 (14.8%)	5 (13.5%)	28 (14.6%)	0.627
Q.5 What are the preventative measures associated with COVID-19 transmission?				
Water as a disinfectant	5 (3.22%)	2 (5.4%)	7 (3.6%)	0.274
Aerosols	40 (25.8%)	13 (35.1%)	53 (27.6%)	0.289
Exposure to sunlight	37 (23.9%)	9 (24.3%)	46 (24.0%)	0.547
Gargling saltwater	4 (2.6%)	2 (5.4%)	6 (3.1%)	0.177
Alcohol consumption	1 (0.6%)	1 (2.7%)	2 (1.0%)	0.231
Inhaling disinfectant	0	1 (2.7%)	1 (0.5%)	0.120
Q.6 Is your dental practice treating all cases or only emergency cases at the moment				
All cases	151	35	186 (96.9%)	0.11
Emergency only	4	2	6 (3.1%)	0.846

The use of hand sanitizer to prevent the transmission of COVID-19 was identified by 99.5% ($n = 191$) of respondents. Other methods from highest to lowest include social distancing, 99% ($n = 190$), personal protective equipment (wearing of masks 98.4% ($n = 189$), wearing of gloves while in practice, 66.7% ($n = 128$), aerosols, 27.6% ($n = 53$), exposure to sunlight, 24% ($n = 46$), water as a disinfectant, 3.6% ($n = 7$), gargling of saltwater, 3.1% ($n = 6$), alcohol consumption, 1% ($n = 2$) and inhaling disinfectant, 0.5% ($n = 1$). Only 3.1% ($n = 6$) indicated they had limited their practice to emergency cases only. Table 2 summarizes the awareness of routes of transmission, common symptoms and methods to prevent COVID-19 transmission.

The majority of the respondents ($n = 180$, 93.8%) believed that the implemented protocols were effective. A total of 69.3% ($n = 133$) of respondents reported suspending their practice at the beginning of the pandemic, and the difference between the genders was statistically significant, $p < 0.05$.

The number of aerosol-generating procedures was reduced by 44.8% of respondents. More females than males reported feeling anxious (66.7% $n = 66$) and fearful (79.2% $n = 19$); this was statistically significant $p < 0.05$. More males felt prepared (58.9% $n = 53$) and indifferent (16.9% $n = 15$), and this was statistically significant ($p < 0.05$).

More than half, 56.3% ($n = 108$), of participants were worried about patient safety, 77.15% ($n = 148$) about family safety and 59.9% ($n = 115$) their personal safety. Only 42.2% ($n = 81$) were worried about employment and their income (Table 3).

Table 3. Chi-square and Fisher exact test results for attitude towards COVID-19 by gender, $p < 0.05$.

Variable		Male (<i>n</i> = 89)	Female (<i>n</i> = 103)	Total (<i>n</i> = 192)	<i>p</i>
Q.7 Do you think the preventative measures implemented are effective?	Yes	84 (46.7%)	96 (53.3%)	180 (93.8%)	0.552
	No	7 (58.3%)	5 (41.7%)	12 (6.3%)	
Q.8 Did you suspend your practice at any time during the COVID-19 outbreak?	Yes	52 (39.1%)	81 (60.9%)	133 (69.3%)	0.020
	No	37 (62.7%)	22 (37.3%)	59 (30.7%)	
Q.9 Has the number of aerosol-generating procedures been reduced since the onset of the pandemic at your dental practice?	Yes	37 (43%)	49 (57%)	86 (44.8%)	0.404
	No	52 (49.1%)	54 (50.9%)	106 (55.2%)	
Q.10 Is there enough PPE and disinfectant supplies available?	Yes	61 (46.6%)	70 (53.4%)	131 (68.2%)	0.932
	No	28 (45.9%)	33 (54.1%)	61 (31.8%)	
Q.11 Select the options which describe how you felt working during the pandemic.					
Feeling fearful	Yes	5 (20.8%)	19 (79.2%)	24 (12.5%)	0.008
	No	84 (50%)	84 (50%)	168 (87.5%)	
Willing to help	Yes	35 (39.3%)	27 (43.5%)	62 (32.3%)	0.064
	No	54 (60.1%)	76 (58.5%)	130 (67.7%)	
Feeling indifferent	Yes	15 (71.4%)	6 (28.6%)	21 (10.9%)	0.015
	No	74 (43.3%)	97 (56.7%)	171 (89.1%)	
Feeling anxious	Yes	33 (33.3%)	66 (66.7%)	99 (51.6%)	<0.001
	No	56 (60.2%)	37 (39.8%)	93 (48.4%)	
Feeling prepared	Yes	53 (58.9%)	37 (41.1%)	90 (46.9%)	0.001
	No	36 (35.3%)	66 (64.7%)	102 (53.1%)	
Feeling reluctant	Yes	5 (20.8%)	19 (79.2%)	24 (12.5%)	0.007
	No	84 (50%)	84 (50%)	168 (87.5%)	
Q.12 How do you feel about the protocols being implemented?					
They aid in the control of the spread of the virus	Yes	80 (47.1%)	90 (52.9%)	170 (88.5%)	0.586
	No	9 (40.9%)	13 (59.1%)	22 (11.5%)	
Not enough is being done	Yes	13 (59.1%)	9 (40.9%)	22 (11.5%)	0.654
	No	76 (44.7%)	94 (55.3%)	170 (88.5%)	
Q.13 What are you most worried about?					
Patient safety	Yes	51 (47.2%)	57 (52.8%)	108 (56.2%)	0.784
	No	38 (45.2%)	46 (54.8%)	84 (43.8%)	
Family safety	Yes	67 (45.3%)	81 (54.7%)	148 (77.1%)	0.581
	No	22 (50%)	22 (50%)	44 (22.9%)	
Personal safety	Yes	55 (47.8%)	60 (52.1%)	115 (59.9%)	0.617
	No	34 (44.1%)	43 (55.8%)	77 (40.1%)	
Employment and income	Yes	38 (46.9%)	43 (53.1%)	81 (42.2%)	0.894
	No	51 (45.9%)	60 (54.1%)	111 (57.8%)	
Nothing	Yes	8 (100%)	0	8 (4.2%)	0.002
	No	81 (44%)	103 (56%)	184 (95.8%)	

6. Discussion

It was essential to conduct this study, because the Centre for Disease Control (CDC) labelled dentists as high risk for SARS-CoV-2 virus exposure; this was attributed to the SARS-CoV-2 virus being identified in infected patients' saliva, and further research concluded that the SARS-CoV-2 virus could also be transmitted by saliva directly or indirectly [12,13]. In addition, dentists and their patients are usually in close proximity to facilitate dental treatment. The World Health Organization prescribed maintaining an inter-personal distance of 6 feet (1.83 m) from each other to minimize the risk. However, new research concluded that virus transmission can occur over a distance of 2 m from an infected person [14]. The COVID-19 pandemic has placed all dental and health professionals at risk. Thus, dentists must be more cautious against the infectious disease spread.

This study was a representative sample, since it consisted of 192 dentists from all areas of Trinidad and Tobago. This represented an even distribution of the workforce around the

country. The gender distribution was also representative. In the local dental workforce, according to the Trinidad and Tobago Dental Council, males comprise 43.8% ($n = 257$) and females represent 56.2% ($n = 330$) of the local workforce. In this study, males represented 46.4% ($n = 89$), while females represented 53.6% ($n = 103$). The study sample, therefore, had a similar distribution to the local workforce.

The study was conducted when Trinidad and Tobago was undergoing their second wave of the COVID-19 infection. This cross-sectional survey assessed the degree of knowledge, awareness and the attitude of dentists on the Caribbean Island. The majority of participants believed that their knowledge of the COVID-19 virus was above average to excellent, and most reported attending seminars on COVID-19. In order to control the spread of this virus, education about the virus is essential; therefore, we should continue to encourage dentists to attend seminars, workshops and online courses to update their knowledge on this novel coronavirus. New research is being published weekly as the world seeks information in our fight against this deadly virus. Over 4.3 million deaths have been recorded, and the mortality rate is 2% [15]. Hence, there is a need for dentists to remain vigilant in obtaining knowledge about the COVID-19. All dentists in Trinidad and Tobago who reported their knowledge as below average also stated that SARS-CoV-2 was not a dangerous virus.

Overall knowledge about the preventative measures and use of personal protective equipment, routes of transmission and incubation period of the SARS-CoV-2 virus was consistent across the dental profession. COVID-19 transmission has been reported through droplets, human contact and airborne transmission [16].

There was significant disagreement among dental professionals regarding the question of COVID-19 virus survivability on inanimate objects. However, this difference was not statistically significant. The survivability of the virus on inanimate objects was believed to be 24–48 h by 43.3% of respondents. This was probably due to conflicting times published for different surfaces [6]. Therefore, the dental working environment needs to be adequately disinfected, as there can be many different types of surfaces.

Only a small number (17.7%, $n = 34$) of participants had poor knowledge about the COVID-19 virus incubation period. This was in contrast to dentists in Jordan, where only 36.1% of dentists reported that the incubation period was 1–14 days [17].

Knowledge of transmission routes was generally good. However, a small percentage believed that transmission could occur through food (1.7%). Most respondents believed that the common modes of transmission of COVID-19 were respiratory droplets, surface contact and airborne viral particles.

Knowledge on preventative measures was also good, except for a few who incorrectly reported water as a disinfectant ($n = 7$) and inhaling disinfectant ($n = 1$) as preventative measures. This positive response was probably due to community-based education programs, social media, seminars and the government introducing laws about wearing face masks, social distancing and hand hygiene as preventive strategies to prevent infection with the COVID-19 virus. In contrast, in the Telangana state of India, a high level of knowledge was exhibited by only 29.9% of dentists [18].

Whereas symptomatic COVID-19 patients are the primary transmission source, new research indicates that asymptomatic patients and patients in the incubation period are also carriers of the SARS-CoV-2 virus [19]. This is due to some COVID-19 positive patients not exhibiting any common signs and symptoms and thus being oblivious to their status. Inevitably, some dentists will be unaware that they are treating COVID-19-positive patients [20].

The majority of participants (69.3%) suspended their practice during the pandemic. This was similar to findings in Switzerland (69.9%) and Poland (71.2%), where dentists also reduced their dental practice activity due to the pandemic [21,22]. It was found that at the beginning of the COVID-19 pandemic, 38% fewer patients visited the dental office. This suggests that COVID-19 impacted dentists and dental patients' behavior [23].

A total of 44.8% of participants reduced the number of aerosol-generating procedures, which indicated a certain level of trepidation. This is similar to dentists in Turkey, where 49.95% avoided aerosol-generating procedures [24]. It is well documented that aerosol-generating procedures can spread bacteria and viruses (including the COVID-19 virus) to people in dental clinics, including staff [9]. In addition, research conducted by Wax et al. 2020 [25] indicated that the COVID-19 virus may become airborne by aerosols produced during medical treatments. Routine dental treatments produce aerosols which increase the risk for contracting COVID-19 for both dental staff and patients [2].

Candeiro (2021) reported that Brazilian dentists demonstrated a good knowledge of COVID-19's main symptoms [26]. Similarly, in this study, participants identified fever, dry cough and tiredness as the common symptoms of COVID-19. This indicates that dentists in Trinidad and Tobago also have good knowledge. Of note is that almost every establishment and business in our country installed temperature checks and hand sanitizer use.

A total of 59.9% of respondents reported they were worried about their personal safety, and 77.1% reported being worried about family safety. This showed that dentists were more concerned for their families than themselves. Getting infected with COVID-19 and transmitting it to their family is a typical concern of dentists. As documented in Wuhan, China, out of 138 hospitalized COVID-19 patients, 29% were members of a health care team [4].

More females reported feeling anxious and fearful. This was consistent with findings in a study in Italy [27]. This can be attributed to cultural, social and biological factors that affect women's mental health [28].

Insufficient PPE was reported by 31.8% of respondents; this was slightly higher than in a report of Turkish dentists, where 21.85% reported a shortage of PPE [24]. Unfortunately, this is due to the worldwide demand for PPE during this pandemic.

To prevent COVID-19 infection, some respondents reported alcohol consumption and gargling with saltwater. This demonstrates a deficit in knowledge among some dentists and the need for more campaigns and seminars to increase health care providers' knowledge.

This highlights that there is a need for rehabilitation services and courses for dentists to be able to function in their clinics. There is a need to have refresher courses for practicing dentists on new and improved infection control strategies. For example, hand hygiene, the donning and doffing of adequate additional PPE, the sterilization of instruments and devices, the disinfection of workplaces, workflow patterns and the re-configuration of their clinic layouts.

The Dental Council can appoint taskforces to develop protocols and appropriate courses for dental practitioners [29].

Several guidelines have been published to assist dentists by the Centers for Disease Control and Prevention (CDC) in the US. [30] and the National Health Service (NHS) in the UK [31]. Current literature on precautions and recommendations for providing dental care during the current pandemic is readily available online; these could be disseminated to dentists in Trinidad and Tobago via online platforms and webinars.

For example, the American Dental Association (ADA) has released recommendations for dentists returning to work:

- Implement a pre-appointment screening process via text, telephone, or email to ensure that patients with symptoms consistent with COVID-19—or recent exposure to infected individuals—do not travel to the dental office;
- Provide and require the proper use of a face mask;
- Check patients' temperature (<100.4 °F) with a thermometer;
- Extend time between patients, as necessary, to allow for the proper cleaning and decontamination of examination rooms;
- Have preparation strategies for the physical office and staff to prepare the environment and familiarize the staff with new policies and procedures to reduce the risk of transmission of SARS-CoV-2;

- Staff protection strategies may include recommendations for in-office clothing (emphasizing that clinical attire should only be worn in the dental practice, and not back to staff members' homes or other community settings);
- Limit the number of patients in the waiting room simultaneously, as part of social distancing.

One author has also suggested that dentists lessen their work hours to reduce virus spread [32].

The COVID-19 pandemic and the resultant lockdown practices worldwide have created a stressful environment globally. Such stressful situations have been shown to lead to poor oral health [33,34]. Dentists should consider developing online platforms to provide information on the prevention of oral diseases, such as oral hygiene and diet advice.

In addition, digitalized dental services can be implemented with qualified dentists being available online to provide reliable oral health care solutions in an accessible, affordable and appropriate manner. Tele-dentistry is "a combination of telecommunications and dentistry, involving the exchange of clinical information and images over remote distances for dental consultation and treatment planning" [35]. Tele-dentistry such as real-time video consultations can determine if a patient's oral health needs can be handled remotely [36]. During the pandemic, these remote dental consultations should be considered for non-emergency patients [37].

Dentists in the United Kingdom felt that their stress and anxiety levels had increased since the pandemic [38]. This corroborates with data in Trinidad and Tobago of increased levels of anxiety among dentists. One author's solution to alleviate the anxiety of dentists is to delay non-emergency treatment until the end of the pandemic [39]. This may not be practical for all dentists.

Psychological support services should be offered to the dental professionals in Trinidad and Tobago to help them cope with increased stress, anxiety and burnout.

The United Kingdom has arranged for the following to help their dentists [40]:

- The Mental Dental Facebook group;
- A confidential helpline;
- The Dentists' Health Support Trust, providing specialized mental health services;
- Counselling for mental health and wellbeing support.

The dental council of Trinidad can attempt to recreate some of these services for our local dentists struggling with anxiety.

7. Limitations

Due to the severity of different waves of the virus, the government initiated lockdowns, curfews and a state of emergency at different times. Thus, the validity of the responses may only be for a single point in time. In addition, factors such as religion and ethnicity were not assessed in this survey. Detailed demographics of dentists during this pandemic are necessary. The limited period for collection and the cross-sectional nature could result in a sampling error, which would affect the accuracy of results.

This survey was on a convenience sample, and therefore, the results may not be generalized to all dentists in this country. There may have been under or overrepresentation of some groups of dentists. Some dentists could be biased, which may be the underlying reason for them choosing not to participate.

The difference between dentists using recommended PPE and those that do not could not be proven. Due to the anonymity of this survey, future studies will not be able to contact the same participants.

8. Conclusions

- Awareness was consistent regarding preventative measures, routes of transmission and the incubation period for the SARS-CoV-2 virus;

- A lot of variation in responses existed in regard to the survivability of the virus and methods to prevent transmission;
- More female dentists felt anxious and fearful during the pandemic;
- Campaigns and seminars are required to educate dental professionals on COVID-19;
- Rehabilitation services and courses should be offered to allow dentists to function in their clinics in Trinidad and Tobago.

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