KNOWLEDGE, ATTITUDE AND PRACTICE OF DENTISTS TOWARDS COVID-19 IN TWIN CITIES OF PAKISTAN: A CROSS SECTIONAL STUDY

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ABSTRACT

Objective: *To assess the Knowledge, Attitude and Practices of dentists against Covid-19 in the dental hospitals.*

Materials and Methods: *This study was conducted was from 1st July 2020 to 30 December 2020. An online questionnaire using Google Forms was designed to collect the data through WhatsApp groups of general and specialized dentists of Rawalpindi and Islamabad. The inclusion criteria were dentists practicing in Rawalpindi and Islamabad. Exclusion criteria included dentists practicing outside the vicinity of twin cities. Questionnaires were kept anonymous to maintain confidentiality of all information collected in the study.*

Results: *A total of 250 dentists participated in this study out of whom 116 (46.4%) were male and the remaining 134 (53.6%) were Female. Majority of the participants i.e., 149 (59.6%) stated that their self-assessed COVID-19 knowledge score was 4 out of 5. 66(26.4%) participants believed their knowledge was 3 out of 5 while 35 (14%) believed their own self assessed knowledge was 5 out of 5. Most dentists 162 (64.8%) reported that only emergency patients are being treated, followed by 74 (29.6%) who reported that patient treatment frequency has been partially reduced at their workplace.*

Conclusion: *Majority of the dentists have basic knowledge, and they showed a positive attitude regarding the global pandemic.*

Keywords: *Corona Virus, Safety protocols, Dentists*

INTRODUCTION

The pandemic of Corona Virus (Covid-19) emerged in December 2019 in the city of Wuhan, China which was confirmed by the Chinese Center for Disease Control and Prevention. The alarming mortality rate, the escalating reported number of cases and proof of human-to-human transmission has rendered it to be more infectious than severe acute respiratory syndrome coronavirus (SARS-CoV) and Middle East respiratory syndrome coronavirus (MERS-CoV).[1, 2] The coronavirus has the tendency to cause multiple respiratory diseases which can range from mild common cold to fatal pneumonia, organ failure, and in most severe cases-death.[3]

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The route of human-to-human transmission can be direct i.e., via airborne droplets as a result of coughing, sneezing or droplet inhalation. It can also be transmitted indirectly by coming into contact with an infected person or a contaminated surface and by contact with oral, nasal, or eye mucous membranes[4, 5]

These routes of transmission can be a source of concern about a similar route of transmission for COVID-19 in the dental set up [5] where the dentists are in very close proximity to the patient.[6] Ultrasonic scalars, air-water syringes, and air turbine headpieces are some of the tools used in daily dental

practice which can get infected with saliva and blood of the patient. Consequently, production of aerosol and droplets in the dental office can be hazardous to the health of the dentist.[4] COVID positive patients are not supposed to get any dental treatment but during dental emergencies, provision of dental treatment becomes inevitable. Moreover, prolonged incubation period [2] and post infection period makes recognition of existence of COVID-19 a daunting task for the medical professionals. Thus, asymptomatic COVID-19 patients can pose to be a tremendous safety hazard to the dentist Therefore, dentists should have adequate knowledge and awareness to tackle the transmission of the disease.

To control the spread of COVID-19, Centers for Disease Control and Prevention (CDC), the American Dental Association (ADA), and the World Health Organization have postulated guidelines for dental professionals and dental staff.[7, 8] These recommendations include personal protective equipment, hand washing, detailed patients history taking, rubber dam isolation, anti-retraction hand piece, mouth rinsing prior to dental procedures, and disinfection of the dental set up.[6]

Objectives

The aim of this study is to assess the awareness, attitude, and practice of dentists towards COVID-19 in various clinical settings of twin cities of Rawalpindi and Islamabad. This will help them figure out any deficiencies in their knowledge and will increase their awareness for better health education. The best and safest approaches can be made by the dentists to deal with patients during and after the outbreak.

MATERIALS AND METHODS

This was a descriptive cross-sectional study and the study population consisted of dentists working in twin cities of Rawalpindi and Islamabad. The time interval in which the survey was conducted was from 1st July 2020 to 30 December 2020. An online questionnaire using Google Forms was designed to collect the data through WhatsApp groups of general and specialized dentists of Rawalpindi and Islamabad. The inclusion criteria were dentists practicing in Rawalpindi and Islamabad. Exclusion criteria included dentists practicing outside the vicinity of twin cities. Questionnaires were kept anonymous to maintain confidentiality of all information collected in the study. Ethical approval was obtained from Ethical Approval Committee of Islamic International Dental Hospital (IIDH) Islamabad.

Study Instrument

The questions in the questionnaire were designed after thorough reviewing of relevant literature and the international guidelines.[6,7-9] This multiple-choice questionnaire consisted of 4 sections: Dentists demographic details, Knowledge, Attitude and Practice. The second section assessed knowledge of the dentists. It comprised of questions regarding clinical symptoms, mode of transmission, place of origin, incubation period, distance considered as close contact, adequate quantity of alcohol in sanitizer. Moreover, source of their knowledge was asked along with their self-assessment of knowledge. The third section investigated the attitude of dentists towards Covid-19. Questions that were asked were their level of confidence to treat a suspected case of Covid, willingness to volunteer in order to raise Covid awareness, willingness to attend Covid awareness sessions and their level of satisfaction with precautionary measures taken by Pakistani Government to tackle corona virus. Lastly, fourth section was about Practice, and it probed about changes made in clinical setup of dentists after emergence of Covid Pandemic. Questions like screening of patients, usage of personal protective equipment, isolation with rubber dam, changes in patient's admission policy, facility changes, and its social and financial effect on lives of the dentists were asked.

The Data obtained by the questionnaire was analyzed using SPSS (IBM Corp) version 22. Descriptive statistical analysis was used to describe items included in the survey. Frequency and percentages of all variables (qualitative and quantitative) were calculated. Qualitative variables are (age, gender, specialty, practice type) and quantitative variables are (self-assessed knowledge, incubation period) were considered.

RESULTS

Participants Characteristics

The demographic details of the participants are summarized in Table 1.

Knowledge of the dentists

The source of information regarding Covid-19

was asked from the dentists. The results are illustrated in the fig1 which shows that majority of the dentists 51 (20.4%) get the information from multiple sources followed by 19(7.6%) dentists who gain information from the websites of official entities e.g., WHO, Ministry of Health. 167 (66.8%) participants had not attended any informational meeting on COVID-19 while 83(33.2%) had attended it. Majority of the participants i.e., 149 (59.6%) stated that their self-assessed COVID-19 knowledge score was 4 out of 5. 66(26.4%) participants believed their knowledge was 3 out of 5 while 35 (14%) believed their own self assessed knowledge was 5 out of 5.

All 250 dentists stated that the origin of COVID-19 was from Wuhan, China (SD 0.0). When asked about the main mode of transmission of virus from human to human, 215 (86%) dentists answered respiratory droplets and that it spreads from contact with contaminated surfaces whereas 35 (14%) gave the wrong answer. 86 (34.4%) stated that it is not air-borne whereas remaining 164(65.6%) stated it is air borne. 218 (87.2%) said that it can spread via asymptomatic patient while, 32 (12.8%) did not think so.

Regarding the incubation period, 126 (50.4%) dentists stated the right answer (7-14days). However, 124 (49.6%) dentists gave the wrong answer. 247 (98.8%) participants considered being within 6 feet of a patient with COVID-19 for a prolonged period as close contact which is the right answer. When asked about symptoms, 197 (78.8%) dentists stated correctly that stuffy nose, runny nose and sneezing are not associated with COVID-19. 195 (78%) dentists knew that the correct concentration range of alcohol which should be present in a sanitizer to be effective against Corona, according to CDC is 60-95%.225 (95%) participants correctly knew that vaccine against Covid has not yet been made (till 31st December 2020)

Attitude of dentists

Most of the dentists, 121 (48.4%) were very scared of getting infected with COVID from a patient or coworker, 109 (43.6%) were little bit scared. Only 20 (8%) were not scared at all. 138(55.2%) dentists were little bit confident about treating suspected case of Covid. Only 23(9.2%) were very confident.218 (87.2%) dentists believed that it is possible to spread awareness by dentists. 210 (84%) reported that they would volunteer in spreading awareness against Corona, if provided with an opportunity. 217 (86.8%) were interested in attending training sessions to handle any untoward Covid situation. About17 (6.8%) dentists were not sure and 16(6.4%) were not interested. 143 (57.2%) dentists were little bit satisfied with the measures of Pakistani Government to this pandemic.67 (26.8%) were not satisfied at all followed by 40 (16%) dentists who were very satisfied.

Practice

The patients who were screened before entering the dental (setting) facility were 190 (76%). The dentists were asked about the personal protective

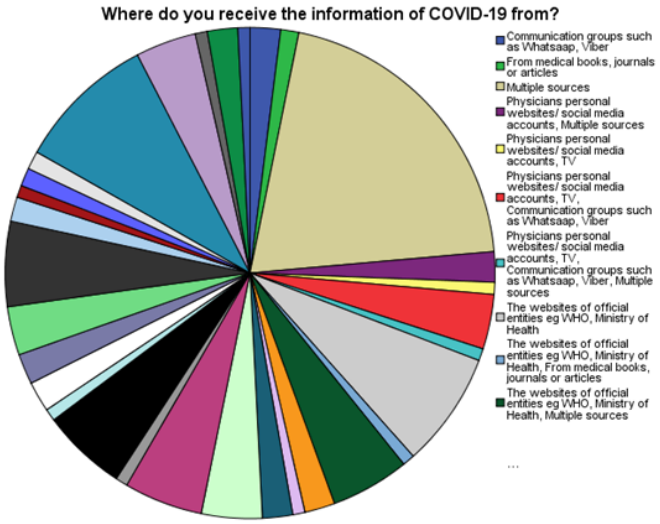

Fig 1: showing the source of information regarding COVID

Table 1: The characteristics of 250 dentists enrolled in our study

Gender	Frequency	Percent
Male	116	46.4
Female	134	53.6
Age		
<30 years	232	92.8
30-40 years	18	7.2
Speciality		
Endodontist	21	8.4
GP	185	74.0
Oral diagnosis/ radiology specialist	5	2.0
Orthodontist	7	2.8
Prosthodontist	32	12.8
Practice Type		
Military sector	15	6.0
Private hospital/ clinic	167	66.8
Public hospital	39	15.6
Teaching hospital	29	11.6

Table 2: Personal Protective measures adopted by the dentist in their professional life against COVID-19

	Frequency	Percent
Hand washing	3	1.2
N95 Mask	2	.8
N95 Mask, Gloves, Goggles/ Face Shield, Disposable Gown, hand sanitizing	5	2.0
N95 Mask, Gloves, Goggles/ Face Shield, Disposable Gown, hand washing	17	6.8
N95 Mask, Gloves, Goggles/ Face Shield, Disposable Gown, hand washing, hand sanitizing	41	16.4
N95 Mask, Gloves, Goggles/ Face Shield, hand washing	2	.8
Surgical Mask	5	2.0
Surgical Mask, hand washing	10	4.0
Surgical Mask, hand washing, hand sanitizing	5	2.0
Surgical Mask, Gloves, Disposable Gown, hand washing, hand sanitizing	2	.8
Surgical Mask, Gloves, hand sanitizing	2	.8
Surgical Mask, Gloves, hand washing, hand sanitizing	5	2.0
Surgical Mask, Gloves, Goggles/ Face Shield, Disposable Gown, hand washing	5	2.0
Surgical Mask, Gloves, Goggles/ Face Shield, Disposable Gown, hand washing, hand sanitizing	20	8.0
Surgical Mask, Gloves, Goggles/ Face Shield, hand washing, hand sanitizing	5	2.0
Surgical Mask, N95 Mask, Gloves, Disposable Gown, hand washing, hand sanitizing	10	4.0
Surgical Mask, N95 Mask, Gloves, Goggles/ Face Shield, Disposable Gown, hand sanitizing	5	2.0
Surgical Mask, N95 Mask, Gloves, Goggles/ Face Shield, Disposable Gown, hand washing	2	.8
Surgical Mask, N95 Mask, Gloves, Goggles/ Face Shield, Disposable Gown, hand washing, hand sanitizing	92	36.8
Surgical Mask, N95 Mask, Gloves, Goggles/ Face Shield, hand washing, hand sanitizing	12	4.8
Total	250	100.0

Table 2: Personal Protective measures adopted by the dentist in their professional life against COVID-19

	Frequency	Percent
Hand washing	3	1.2
N95 Mask	2	.8
N95 Mask, Gloves, Goggles/ Face Shield, Disposable Gown, hand sanitizing	5	2.0
N95 Mask, Gloves, Goggles/ Face Shield, Disposable Gown, hand washing	17	6.8
N95 Mask, Gloves, Goggles/ Face Shield, Disposable Gown, hand washing, hand sanitizing	41	16.4
N95 Mask, Gloves, Goggles/ Face Shield, hand washing	2	.8
Surgical Mask	5	2.0
Surgical Mask, hand washing	10	4.0
Surgical Mask, hand washing, hand sanitizing	5	2.0
Surgical Mask, Gloves, Disposable Gown, hand washing, hand sanitizing	2	.8
Surgical Mask, Gloves, hand sanitizing	2	.8
Surgical Mask, Gloves, hand washing, hand sanitizing	5	2.0
Surgical Mask, Gloves, Goggles/ Face Shield, Disposable Gown, hand washing	5	2.0
Surgical Mask, Gloves, Goggles/ Face Shield, Disposable Gown, hand washing, hand sanitizing	20	8.0
Surgical Mask, Gloves, Goggles/ Face Shield, hand washing, hand sanitizing	5	2.0
Surgical Mask, N95 Mask, Gloves, Disposable Gown, hand washing, hand sanitizing	10	4.0
Surgical Mask, N95 Mask, Gloves, Goggles/ Face Shield, Disposable Gown, hand sanitizing	5	2.0
Surgical Mask, N95 Mask, Gloves, Goggles/ Face Shield, Disposable Gown, hand washing	2	.8
Surgical Mask, N95 Mask, Gloves, Goggles/ Face Shield, Disposable Gown, hand washing, hand sanitizing	92	36.8
Surgical Mask, N95 Mask, Gloves, Goggles/ Face Shield, hand washing, hand sanitizing	12	4.8
Total	250	100.0

Table 3: Following measures dentists apply for their patients against Covid-19

	Frequency	Percent
Before procedure, patients asked to rinse mouth with mouthwash containing 1 percent hydrogen peroxide	16	6.4
Before procedure, patients asked to rinse mouth with a mouthwash containing 1 percent hydrogen peroxide, avoid performing aerosol generating procedures	15	6.0
Before any procedure, patients asked to rinse mouth with a mouthwash containing 1 percent hydrogen peroxide, avoid performing aerosol generating procedures, I apply the 14-day waiting rule for potentially infected patients	8	3.2
Application of rubber dam	5	2.0
Application of rubber dam, before procedure, patients asked to rinse mouth with a mouthwash containing 1 percent hydrogen peroxide	5	2.0
Application of rubber dam, before procedure, patients asked to rinse mouth with a mouthwash containing 1 percent hydrogen peroxide, I apply the 14 day waiting rule for potentially infected patients	2	.8
Application of rubber dam, Before procedure, patients asked to rinse mouth with a mouthwash containing 1 percent hydrogen peroxide, avoid performing aerosol generating procedures	8	3.2
Application of rubber dam, before procedure, patients asked to rinse mouth with a mouthwash containing 1 percent hydrogen peroxide, avoid performing aerosol generating procedures, I apply the 14-day waiting rule for potentially infected patients	27	10.8
Application of rubber dam, avoid performing aerosol generating procedures	13	5.2
Application of rubber dam, avoid performing aerosol generating procedures, I apply the 14-day waiting rule for potentially infected patients	7	2.8

I apply the 14-day waiting rule for potentially infected patients	9	3.6
avoid performing aerosol generating procedures	74	29.6
Avoid aerosol generating procedures, I apply the 14-day waiting rule for potentially infected patients avoid performing aerosol	48	19.2
None	13	5.2
Total	250	100.0

Table 4: Following facility changes observed in the dentists Clinic/ hospital

	Frequency	Percent
Installation of physical barriers at reception	**13**	**5.2**
Installation of physical barriers at reception, minimizing the number of persons waiting in the waiting room.	3	1.2
Installation of physical barriers at reception, Placement of chairs in the waiting room at least six feet apart, minimizing the number of persons waiting in the waiting room.	5	2.0
Minimizing the number of persons waiting in the waiting room.	7	2.8
None	5	2.0
Placement of chairs in the waiting room at least six feet apart, minimizing the number of persons waiting in the waiting room.	14	5.6
Placement of visual alerts	14	5.6
Placement of visual alerts, Installation of physical barriers at reception	2	.8
Placement of visual alerts, Installation of physical barriers at reception, minimizing the number of persons waiting in the waiting room.	21	8.4
Placement of visual alerts, Installation of physical barriers at reception, Placement of chairs in the waiting room at least six feet apart	15	6.0
Placement of visual alerts, Installation of physical barriers at reception, Placement of chairs in the waiting room at least six feet apart, minimizing the number of persons waiting in the waiting room.	15	6.0
Placement of visual alerts, minimizing the number of persons waiting in the waiting room.	12	4.8
Placement of visual alert., Placement of chairs in the waiting room at least six feet apart	3	1.2
Placement of visual alerts., Provision of sanitizer, Installation of physical barriers at reception	3	1.2
Placement of visual alerts, Provision of sanitizer. Installation of physical barriers at reception, minimizing the number of persons waiting in the waiting room.	13	5.2
Placement of visual alerts. Provision of sanitizer, Installation of physical barriers at reception, Placement of chairs in the waiting room at least six feet apart, minimizing the number of persons waiting in the waiting room.	53	21.2
Placement of visual alerts, Provision of sanitizer, minimizing the number of persons waiting in the waiting room.	10	4.0
Placement of visual alerts, Provision of sanitizer, Placement of chairs in the waiting room at least six feet apart	3	1.2
Provision of sanitizer	11	4.4
Provision of sanitizer. Installation of physical barriers at reception, Placement of chairs in the waiting room at least six feet apart, minimizing the number of persons waiting in the waiting room.	18	7.2
Provision of sanitizer, minimizing the number of persons waiting in the waiting room.	5	2.0
Provision of sanitizer, Placement of chairs in the waiting room at least six feet apart, minimizes the number of persons waiting in the waiting room.	5	2.0
Total	250	100.0

equipment being used in their workplace. The results are illustrated in table 2. Their response when asked about the measures applied to the patients against COVID can be seen in Table 3. Most dentists 162 (64.8%) reported that only emergency patients are being treated, followed by 74 (29.6%) who reported that patient treatment frequency has been partially reduced at their workplace. 11 (4.4%) said that no changes have been made and 3 (1.2%) reported that no patient is being treated at their workplace. The results of the facility changes are being observed in their respective Clinic/ hospital are summarized in Table 4. 242 (96.8%) believed that Covid has affected their social life whereas 159 (63.6%) believed it has affected them financially.

DISCUSSION

Covid-19 is considered as a global health pandemic. It is need of the hour for the dentists and the dental team to have adequate awareness and positive attitude towards infection control precautions. Our study will help them figure out any deficiencies in their knowledge and will increase their awareness for better health education. Similar studies have been conducted at the start of the pandemic in different populations like Saudi Arabia[2] , Jordan[9], Indonesia[10], Lebanon[11] and Brazil.[12]

This study provides a glimpse of the level of awareness, attitude and perception of Pakistani dentists regarding Covid-19 working in twin cities of Islamabad and Rawalpindi. It was conducted during the second wave of Covid-19. Majority of the participants (92.8%) were less than 30 years of age. These results were consistent with the result obtained by other studies [12], [13]. Güzide Pelin SEZGIN justifies this by stating that the younger age group is more willing to take surveys via social media and to take part in online survey studies[12] Most of the participants taking part in this study worked in the private sector as in other studies.[9, 12]

In our study, only 33.2% participants had attended any informational meeting or clinical training on COVID-19 in contrast to the study conducted in Saudi Arabia, where only 25% of respondents had attended informational meeting or lectures on COVID-19 [2]. The reason of this low percentage may be due to the fact that this study was conducted when the Corona was at its peak and lockdown had been implemented throughout the twin cities. However, these findings indicate the need for taking more educational measures on the part of the government to improve the level of knowledge of the dentists. At the same time, satisfactory level of knowledge among the respondents indicate that they were getting information from other sources e.g., Internet including social media. Accessibility of these sources all the time means it has an added advantage of providing public awareness among the masses.[14]. However, these sources can also be a cause of spreading misinformation and rumors. [15] In our study, When asked about the source of their information regarding Covid-19, majority of the dentists (20.4%) responded that they get the information from multiple sources including websites of official entities e.g. WHO, Ministry of Health, Physicians personal websites/ social media accounts, TV, events such as seminars and meetings and Communication groups such as WhatsApp. In another study conducted in Brazil, Participants received information mostly from the Ministry of Health and Turkish Dental Association, followed by the internet and social media.[13] Similarly; Bahagawathula et al. reported that most of the respondents got information about COVID-19 from state sources and social media.[13] However, Kamate et al. reported that the primary sources of information were internet and social, media.[16]

Studies have shown that the incubation period of COVID-19 is up to 14 days.[17] The significance of having the knowledge of correct incubation period cannot be sidelined owing to the fact that it dictates the safe period to treat the suspected patients.[15] In our study, more than half of the dentists gave the right answer (50.4%). In contrast to a study conducted in Saudi Arabia where only 43.9% knew the correct incubation period for the virus.[2] Moreover, the results of the study conducted on Jordanian dentists about the SARSCoV-2 virus highlighted that only 36.1% identified the correct incubation period [9]. Our results were closest to a study among HCW in UAE which showed that the right incubation period was recognized by only 52% of the dentists [13].Majority of the dentists (86%) in our study correctly recognized the correct mode of transmission of the virus from human to human and identified that it is air borne (65.6%) and can spread via asymptomatic patient. (87.2%). 86% dentists answered correctly that it spreads via respiratory droplets and contact with contaminated surfaces .78.8% of the dentists were

able to differentiate between symptoms of Covid and common cold. Likewise, the study conducted on Jordanian, Saudi Arabian and Brazilian dentists respectively also displayed adequate knowledge regarding the main symptoms of covid[2, 9, 12]. This is essential in recognizing the suspected Covid positive patients and controlling the spread of the virus [15]. When the data collection period of our study ended, no cure or vaccine had been developed. 225 (95%) participants correctly knew that vaccine against Covid has not yet been made (till December 2020). Our results are consistent with the study conducted in Saudi Arab where almost half of the dentists reported that there is no need for special treatment for Covid positive patients.[2]In our study, only 8% of the dentists were not scared of getting infected with COVID from a patient or a co-worker and only 9.2% were very confident about treating a suspected case of Covid 19. In contrast to our results, a study conducted in Jordan, majority of the dentists (58.2%) knew whom to contact in a situation of an unprotected exposure to a known or suspected COVID-19 patient, and 75.8% knew what to do if they had signs or symptoms of a suspected COVID-19 infection.[2] Other than that the attitude of the dentists was positive as majority believed that it is possible to spread awareness by dentists and whooping 84% reported that they would volunteer in spreading awareness against Corona, if provided with an opportunity. Moreover, majority was interested in attending training sessions to handle any untoward Covid situation. Similarly, in the study conducted in Jordan, the vast majority (97.8%) of dentists realized the significance of educating others about COVID-19 in order to stop the spread of the disease. [9]

For the prevention of COVID-19, all the patients should be screened as a routine procedure. This includes checking their temperature, inquiry about the health status and history of recent travel.In our study, 76% reported that patients are being screened before entering the dental facility which can be considered as a positive sign for combating Covid 19.Using personal protective equipment including Surgical Mask, N95 Mask, Gloves, Goggles/ Face Shield, Disposable Gown in the dental set up is very essential[2]. In our study, the majority 36.8% of the dentists used Surgical Mask, N95 Mask, Gloves, Goggles/ Face Shield, Disposable Gown, did hand washing hand sanitizing. In contrast, in a study conducted in Saudi Arab 93% respondents reported that changing both gloves and masks between patients is very important. Moreover, 86% of the dentists perceived using protective equipment by dentists as important. [2]Regarding the special protective measures applied to the patients against. In a study conducted in Brazil, almost all of the dentists reported that, before dental procedures, patients should be gargled and majority preferred chlorhexidine mouthwash[12]. However, the study of Ahmed et al. depicts that despite their knowledge, most of the dentists did not ask patients to rinse the mouth with an antibacterial mouthwash before commencement of dental treatment.[18]
According to the study conducted in Brazil, majority of the dentist said that only emergency dental procedures should be performed. The majority reported that they would perform an emergency intervention when acute pulpitis was present but will complete the canal treatment only after the pandemic.[12] These findings were consistent to results of our study.

Regarding the facility changes being observed in the dental set up, the majority of the dentists (21.2%) in our study included Placement of visual alerts., Provision of sanitizer, Installation of physical barriers at reception, Placement of chairs in the waiting room at least six feet apart, minimizing the number of persons waiting in the waiting room. In another study, Ruba M Mustafa argued that 21.7% respondents did not find it necessary to ask patients to sit far from each other, wear masks in the waiting room, or wash hands before getting in the dental chair to combat the spread of the disease.[2]

LIMITATIONS

The limitations of our study were small sample size because of short period of data collection. Moreover, the target population was the dentists working only in twin cities, excluding the rest of the population of Pakistan. Due to quarantine at that point of time, the online survey was the only choice we had for data collection which could have entailed to sampling errors. Additionally, in our study we could only demonstrate the relationship between our results obtained and other studies without displaying cause-effect relationships because it is a cross sectional study. Furthermore, the self-reporting nature and the recall ability of the respondents during completing this survey can lead to errors. It is advised to conduct more studies like this in future using larger

sample size encompassing entire Pakistan.

CONCLUSIONS

Adequate knowledge, a positive attitude and a thorough research on safety protocols are necessary for a successful management of any pandemic. Based on our study, we concluded that majority of the dentists have basic knowledge, and they showed a positive attitude regarding the global pandemic, and majority of them were afraid of getting infected too. In order to relief this fear, usage of advanced PPEs and thorough infection control measures must be taken.

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