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FUNCTIONING OF PRIVATE DENTAL ORGANIZATIONS DURING THE COVID-19 PANDEMIC

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Abstract

The epidemic with SARS CoV-2, known as the acronym COVID - 19, had and still has a lot of impact on the entire health system, i.e., reanimation of the health system and return to a "new normal", starting at the end of 2019. The special impact of this pandemic has been reflected in the work in dental practice. Addressing emergencies and providing emergency dental care were a priority and standard during severe quarantine measures during the pandemic. This topic aims at transversal research of the cross-section of the functioning of dental practice in the private dental sector, which is the leading in the field of treatment of oral health diseases in our country because according to official data in private dental practice, 92% of procedures are performed during the state of emergency and inability to work normally caused by the COVID-19 pandemic. The survey was conducted during the period when most health institutions exited the COVID system from February 23 to March 30, 2022. A 22-question authored survey was sent to dentists across Serbia. The number of dentists who participated was 176. Considering the high risk, most emergency interventions were not carried out, while the economic consequences are minimal and insensitive in most clinics.

Keywords: *COVID-19, dentistry, private dental practices, personal protective equipment, dental environment*

1 INTRODUCTION

The COVID-19 pandemic has impacted healthcare delivery around the world. The World Health Organization declared COVID-19 a global pandemic on March 11, 2020, leading to changes in the functioning of dental organizations around the world. (Marcenes, 2020) COVID-19, caused by Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2), is thought to spread through close contact via respiratory droplets and aerosols. Due to the specific characteristics of dental services, such as the formation of aerosols, the immediate proximity of patients, it is considered that dentistry is the

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branch of medicine that is perhaps most associated with the spread of infection. The risk of a two-way spread of infection between patients and dentists requires additional precautions to mitigate the spread of COVID-19. (Tonkaboni, Amiryade-Iranaq, Ziaei, & Ather, 2021). Guidelines for providing dental treatment during the COVID-19 pandemic differ, and dental practices should work according to regional guidelines. Dentists are at the highest risk of contracting the disease, but they can also be the biggest carriers of the disease, because they have communication with the patient "face-to-face", high exposure to saliva, blood, and other oral fluids of the oral cavity (Checchi, Bellini, Bencivenni, & Consolo, 2021).

This paper aims to examine the impact of COVID-19 on the functioning of private dental practices and to discuss measures to effectively provide dental services during the pandemic. The results of the conducted research will be mitigated by GEP researchers due to the lack of experience in investigating the functioning of private dental practice in our country and will form the basis for future research in this field.

In accordance with the objective of the paper, the following research questions were defined:

Q1 – *What are the key challenges faced by employees during the impact of COVID-19 that can be identified as characteristic of private dental organizations?*

Q2 – *How was the practice and activity of working and managing private dental practices during the COVID-19 pandemic designed?*

2 METHODOLOGY

The original empirical research was conducted in order to test and analyze the research questions raised. A cross-sectional study using designed questionnaires by researchers included dentists working in private practice in the territory of Serbia. The sample includes doctors of dentistry and specialists of private organizations of the Republic of Serbia. The survey was designed in electronic form and included four parts: demographic data of survey participants, management in dental practice during the COVID - 19 pandemic, data on patient admission and knowledge, practice and attitude of dentists towards the COVID – 19 virus, and financial consequences. Demographic data are important due to the diversity of responses in response to the characteristics of the respondents and did not compromise the privacy and ethical sensitivity of the respondents. The questions were closed-ended with the possibility of answering the offered yes and NO answers, except for the last question about the economic consequences on the business where the Likert scale was used.

At the end of the questionnaire, there was room for everyone to give their personal opinion on the topic of the research, while before solving the questionnaire, each respondent was informed that it was aimed at identifying the attitudes of dental professionals and the work of dental practice during the quarantine period due to the COVID-19 pandemic and that the results of the survey would be used exclusively for writing this scientific paper, with the guarantee of anonymity.

Table 1 Demographic data of the respondents

Criteria	Range	No.	%
Age:	20 – 34	83	47.2
	35 – 44	60	34.1
	45 – 54	27	15.3
	54 – 64	6	3.4
Gender	Male	45	25.6
	Female	131	74.4
Qualification	Doctor of General Dentistry	130	73.9
	specialist	46	26.1
Work experience	0.5	68	38.6
	6 – 10	56	31.8
	10+	52	29.5
Region	Belgrade	51	29.0
	Central Serbia	26	14.8
	Western Serbia	20	11.4
	Southern Serbia	22	12.5
	Eastern Serbia	7	4.0
	Vojvodina	47	26.7
	Kosovo and Metohija	3	1.7
Total		176	100.0

Source: Author's research

The total sample consists of 176 respondents, and all private practice dentists who were ready to cooperate were included in the survey. The survey was conducted from 23 February to 30 March 2022. The collected data were entered into the program IBM SPSS (Statistical Package for the

Social Sciences), version 25, and the derived data are presented by descriptive statistics, t-test, correlation, and graphs.

The research also considered the personal experience of the author.

In this research, 176 private dental practitioners took part.

The demographic data of respondents is presented in Table 1.

Table_ 2 Results of the t-test of the subject structure by sex

		Levene's Test for Equality of Variances	t-test for Equality of Means		
		Sig.	t	DF	Sig. (2-tailed)
Qualification	Equal variances assumed	853	0.093	174	926
Work experience	Equal variances assumed	0.259	-1,031	174	304
Age	Equal variances assumed	789	979	174	329
Region	Equal variances assumed	561	472	174	637

Source: Author's research

The demographic data or structure of respondents, which are shown in Table 1, tell us that 136 Doctors of General Dentistry and 46 specialists of different branches of dentistry, from 20 to 34 years of age, with work experience up to 5 years, took part. When it comes to regions, most respondents are from the parts of Belgrade (51) and Vojvodina (47). In Table 2, based on the results of the t-test of the respondent's structure by sex.

From the results of the t-test of the structure of the respondent according to gender presented in Table 2, we conclude that there is no statistical difference in terms of qualification, work experience, age, and region according to the gender of the respondent.

In Fig. 1, we can see the representation of respondents through work experience and qualifications according to regions.

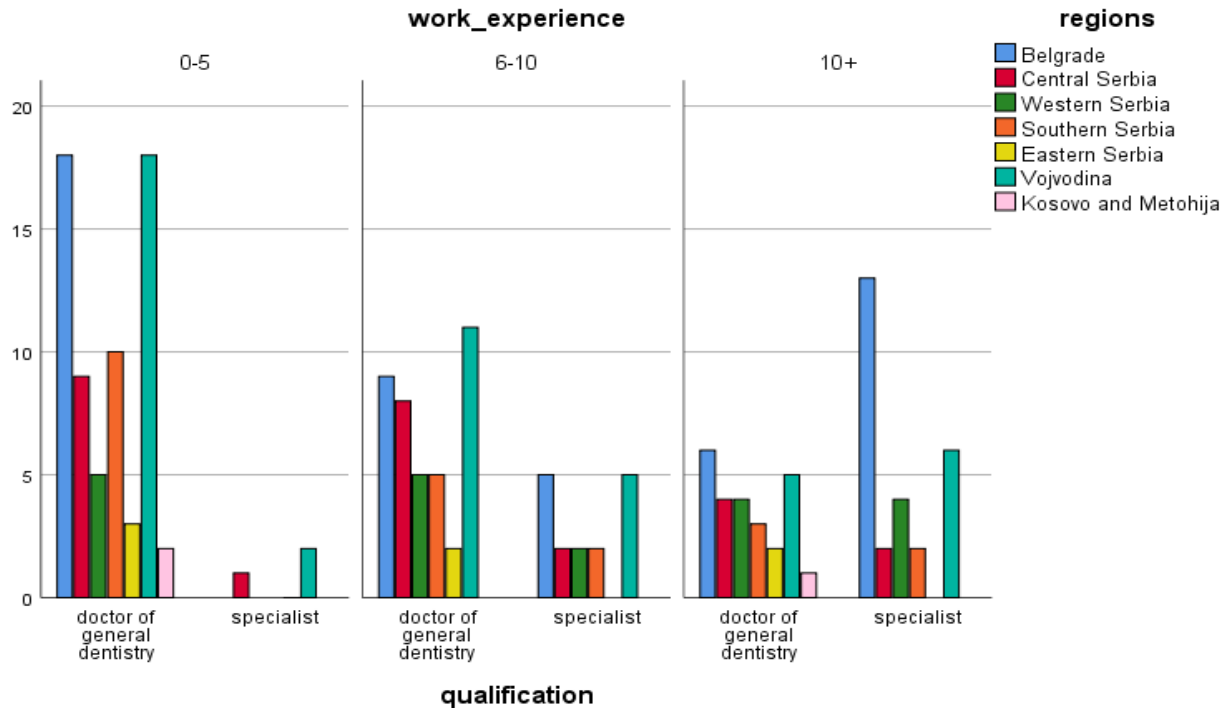

Figure_ 1 Work experience and qualification according to regions

Source: Author's research

Most respondents agreed on the prescribed screening questionnaire and in practice, this was done in 3 ways (fig 2): by telephone (25 respondents), in the office by completing the survey (71 respondents), and in the office by answering the questions orally (80 respondents).

Teledentist services or communication with the patient by telephone developed during the pandemic period, which can be seen in Table 3 or graphically in fig 3 and fig 4. Table 4 shows the correlation between dental practice and qualification management variables. The correlation between the qualification and the claim that the dental practice has a patient screening questionnaire on COVID – 19 has a negative direction and a weak connection, as well as the correlation between the qualification and the claim of possession of isolation in the dental practice for patients with suspicion of COVID – 19, while the correlation between the qualification and the claim of teledentist services before the visit to dentistry has a positive direction and a strong connection. This tells us that teledentist services have a future in the application in the private dental practice of the Republic of Serbia. Statistical significance does not exist.

Table_ 3 Dental Practice Management

	Does your dental practice have a patient screening questionnaire for COVID-19?		Does your dental practice have isolation for patients with suspected COVID-19?		Does your dental practice offer teledentist services to patients before visiting a dentist?	
Answer	yes	no	yes	no	yes	no
Doctor of General Dentistry	71	59	7	123	51	79
Specialist	32	14	4	42	17	29
TOTAL	176		176		176	

Source: Author's research

Table_ 4 Correlation between qualification and variable management of dental practice

		Does your dental practice have a patient screening questionnaire for COVID-19?	Does your dental practice have isolation for patients with suspected COVID-19?	Does your dental practice offer teledentological services to patients before visiting a dentist?
Qualification	Pearson Correlation	-133	060	0.021
	Sig. (2-tailed)	0.078	428	787

Source: Author's research

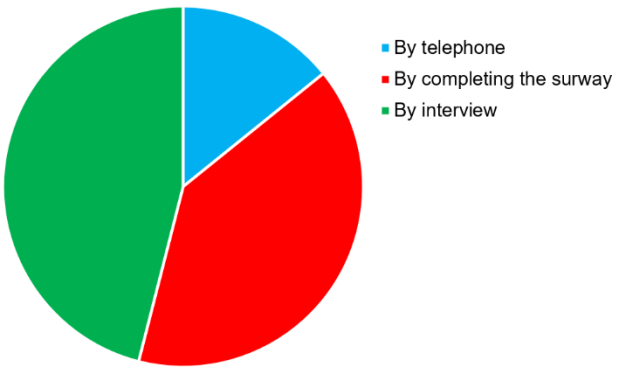

Figure 2 Completing the screening questionnaire
Source: Author's research

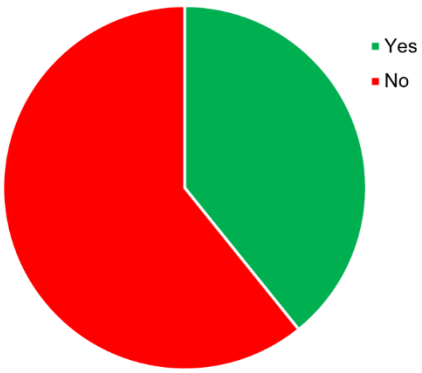

Figure 3 Application of teledentistry in dental practice
Source: Author's research

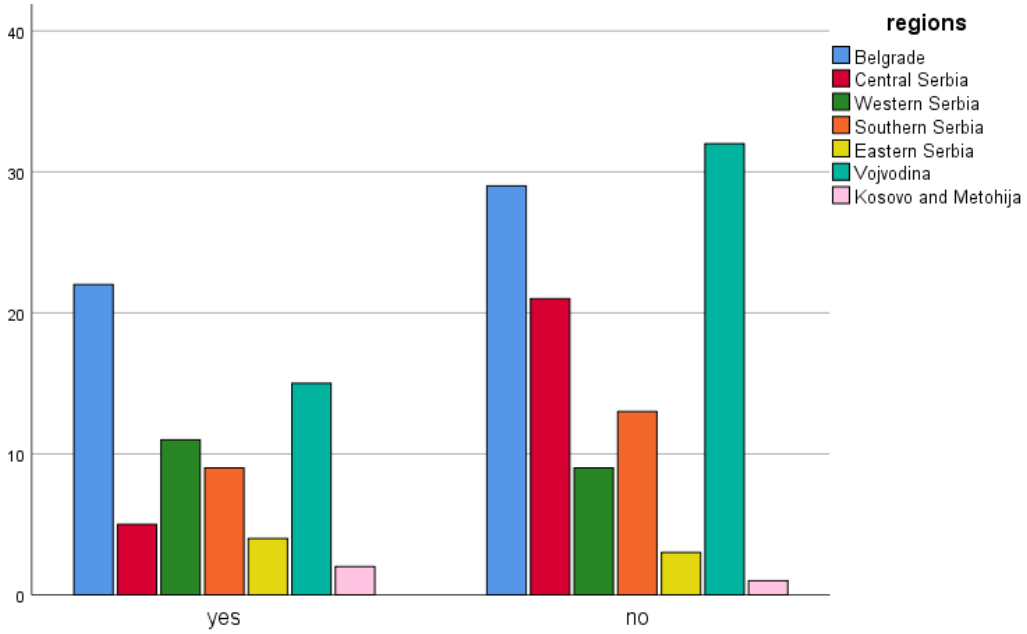

Figure_ 4 Application of teledentistry in dental practice according to regions

Source: Author's research

The protocol of patient admission was also defined by the competent institutions and applied in practice. Table 5 is a breakdown of the survey results by the number of respondents, Table 6 shows the application of the patient admission flow according to the qualification of the respondents, while Table 7 is a breakdown of the parametric t-test of patient admission according to the qualifications of the respondents, which shows that there is no statistically significant difference, except for the statement on whether patients must wash/disinfect their hands before entering the waiting room, where there is a significant statistical difference (observed first order sign, second column, sig = 0.001).

In the dental practice, the services were provided only by a doctor of dentistry or a specialist, without other medical staff, except for more complex dental procedures.

Admission of patients on arrival at the dental practice is shown graphically in Figure 5 where they can see the data on the application of the protocols prescribed by the relevant institutions and the extent to which our dentists respected this. The most practiced was wearing a protective mask in the waiting area on the face, even 88.6% of the "physical" distancing in the waiting area was also applied by 81.8% of dentists who were torn out.

Table_ 5 Admission of patients

Question	Answer	No.	%
Is the patient's body temperature measurement mandatory at admission before the dental procedure?	yes no	57 119	32.4 67.6
Is it mandatory for the patient to use an antiseptic for mouthwash before a dental procedure?	yes no	70 106	39.8 60.2
Do patients have to wear a face mask in the waiting area?	yes no	156 20	88.6 11.4
Do patients have to wash/disinfect their hands before entering the waiting room?	yes no	111 65	63.1 36.9
Do patients practice wearing protective gloves?	yes no	1 175	0.6 99.4
Is physical distancing practiced in the waiting zone?	yes no	114 32	81.8 18.2
TOTAL		176	100.0

Source: Author's research

Table_ 6 Admission of patients according to qualification

Question	Qualification	N	Mean	Std. Deviation	Std. Error Mean
Is the patient's body temperature measurement mandatory at admission before the dental procedure?	Doctor of General Dentistry	130	1.69	463	0.041
	Specialist	46	1.63	488	0.072
Is it mandatory for the patient to use an antiseptic for mouthwash before a dental procedure?	Doctor of General Dentistry	130	1.62	486	0.043
	Specialist	46	1.54	0.504	0.074
Do patients have to wear a face mask in the waiting area?	Doctor of General Dentistry	130	1.12	0.321	0.028
	Specialist	46	1.11	315	0.046
Do patients have to wash/disinfect their hands before entering the waiting room?	Doctor of General Dentistry	130	1.40	492	0.043
	Specialist	46	1.28	455	0.067
Do patients practice wearing protective gloves?	Doctor of General Dentistry	130	1.99	0.088	0.008
	Specialist	46	2.00	0.000	0.000
Is physical distancing practiced in the waiting zone?	Doctor of General Dentistry	130	1.19	396	0.035
	Specialist	46	1.15	0.363	0.054

Source: Author's research

Table_ 7 The t-test results according to qualification, admission of variable patients

Question		Levene's Test for Equality of Variances	t-test for Equality of Means		
		Sig.	t	DF	Sig. (2-tailed)
Is the patient's body temperature measurement mandatory at admission before the dental procedure?	Equal variances assumed	164	768	174	444
Is it mandatory for the patient to use an antiseptic for mouthwash before a dental procedure?	Equal variances assumed	145	945	174	0.346
Do patients have to wear a face mask in the waiting area?	Equal variances assumed	806	0.122	174	0.903
Do patients have to wash/disinfect their hands before entering the waiting room?	Equal variances assumed	0.001	1,418	174	158
Do patients practice wearing protective gloves?	Equal variances assumed	233	594	174	553
Is physical distancing practiced in the waiting zone?	Equal variances assumed	0.214	604	174	547

Source: Author's research

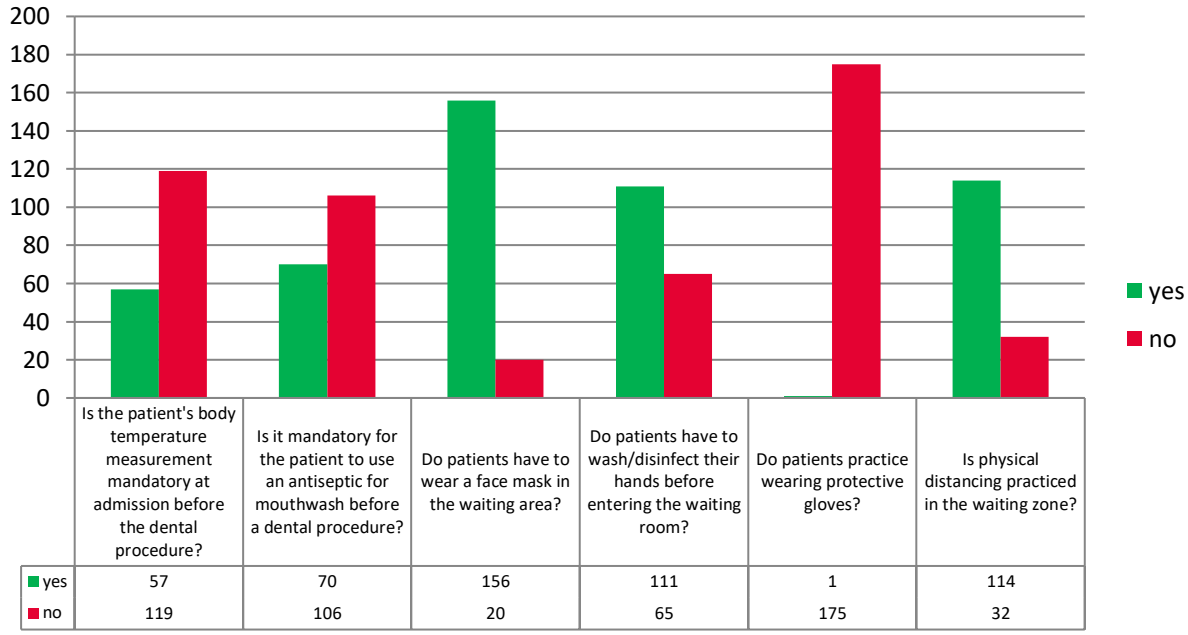

Figure_ 5 Graphical representation of the admission of patients on arrival at the dental organization
Source: Author's research

It was important to follow all the latest news on the spread of the pandemic and to be updated with the guidelines of the Ministry of Health and other competent institutions in the fight against the COVID–19 viruses. This was done by most dentists, but what the research showed (Table 8) is that the majority did not use ONLINE resources, which certainly made it difficult to get them informed during the pandemic, but did not hinder them from having adequate information (77.3% of respondents were up to date with the latest news, while 71% were updated with the guidelines of the Ministry of Health, the Dental Chamber, the Institute of Public Health " Dr. Milan Jovanovic – Batut" and other competent institutions).

Table_ 8 Knowledge, practice, and attitude of dental professionals

Question	Answer	No.	%
Are you up to date with the latest information on the spread of COVID-19?	yes no	136 40	77.3 22.7
Are you up to date with the latest healthcare ONLINE resources for COVID-19?	yes no	75 101	42.6 57.4
Are you up to date with the current guidelines of the Ministry of Health, the Dental Chamber, and other competent institutions in the fight against COVID - 19?	yes no	125 51	71.0 29.0
Before the COVID-19 pandemic, were you familiar with the "Infection Transmission Based Precautions" in dental procedures?	yes no	155 21	88.1 11.9
Has your infection control routine changed after the COVID-19 quarantine period?	yes no	109 67	61.9 38.1
TOTAL		176	100.0

Source: Author's research

By Figure 5 and 6, we can compare the dentists whose infection control routine changed after the quarantine period, 109 of whom, 63 of whom agreed that the N-95 mask should be worn as a new precaution in dental practices. This can also be a consequence of the inability to find a protective mask during the pandemic part and personal impression and the most effective measure of protection against microparticles.

Tables 9 and 10 are dedicated to the research question regarding the wearing of the N-95 mask as a new precaution. Out of 176 respondents, 92 responded negatively to this claim and believe that there should be no new precautionary measure for wearing the N-95 mask, also probably due to the inability to find them on the market. The results of the t-test according to the infection control routine after the quarantine period in the claim that N-95 masks are used as a new precautionary measure have no statistical difference.

Table_ 9 Wearing a mask marked N-95 in dental practice as a new precautionary measure

Question		Do you think the N-95 mask should be routinely worn in the dentist's office as a new precaution?		
		yes	no	
Has your infection control routine changed after the COVID-19 quarantine period?	yes	63	46	
	no	21	46	
TOTAL		84	92	176

Source: Author's research

Table_ 10 The t-test results: Routine of infection control

Question		Levene's Test for Equality of Variances		The t-test for Equality of Means	
		Sig.	t	DF	Sig. (2-tailed)
Has your infection control routine changed after the COVID-19 quarantine period?	Equal variances assumed	0.000	-3,510	174	0.001

Source: Author's research

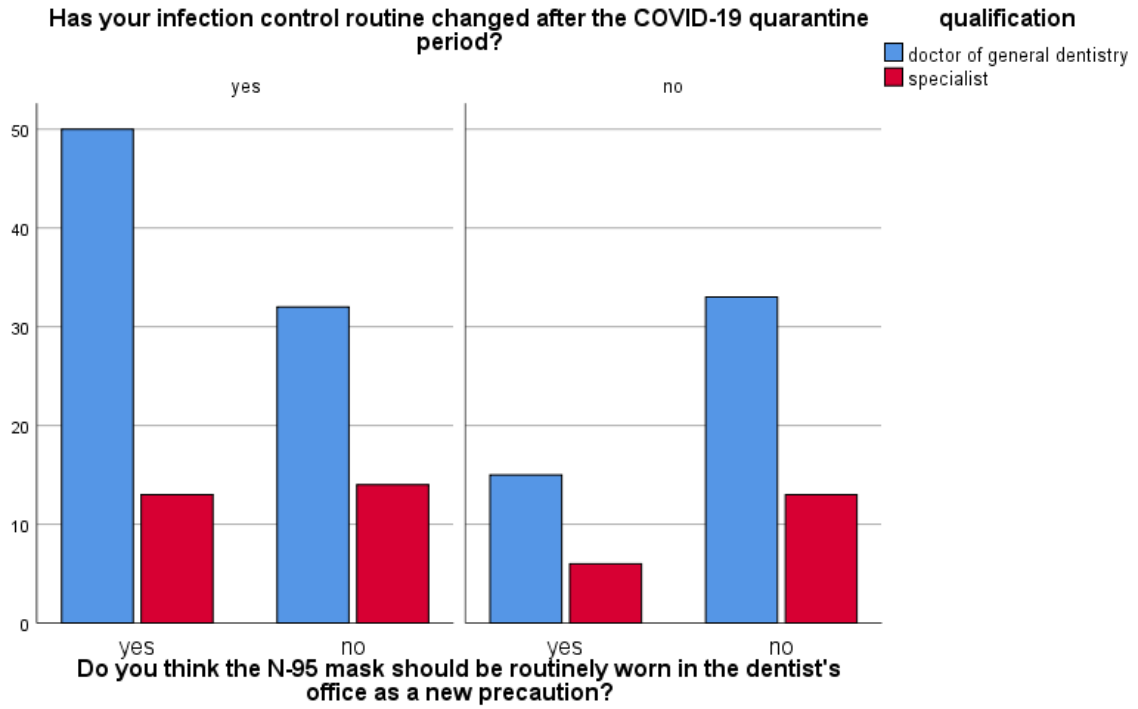

Figure 6 Wearing a mask marked N-95 in dental practice as a new precautionary measure according to qualification

Source: Author's research

Table 11 and Figure 7 show that the digital skills and abilities of dentists and practical applications are not at an enviable level because ONLINE resources for COVID – 19 and online information were not practiced by 57.4% of respondents. Figure 8 can confirm this, where we can see the application of teledentist services in dental practice compared to the age of the dentist.

Table 11 Are you up to date with the latest healthcare ONLINE resources for COVID-19?

Question		Age:			
		20 – 34	35-44	45 – 54	55-64
Are you up to date with the latest healthcare ONLINE resources for COVID-19?	yes	38	22	12	3
	no	45	38	15	3
TOTAL	176	83	60	27	6

Source: Author's research

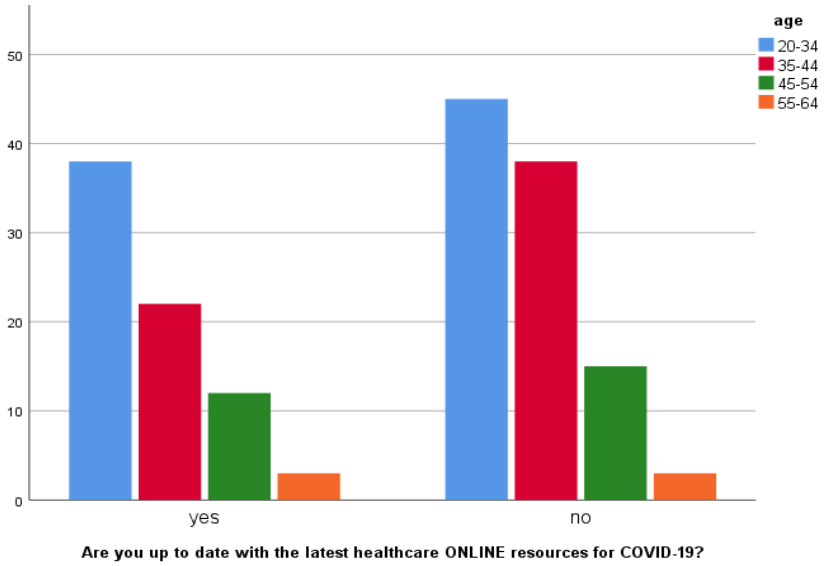

Figure 7 Informing through online resources

Source: Author's research

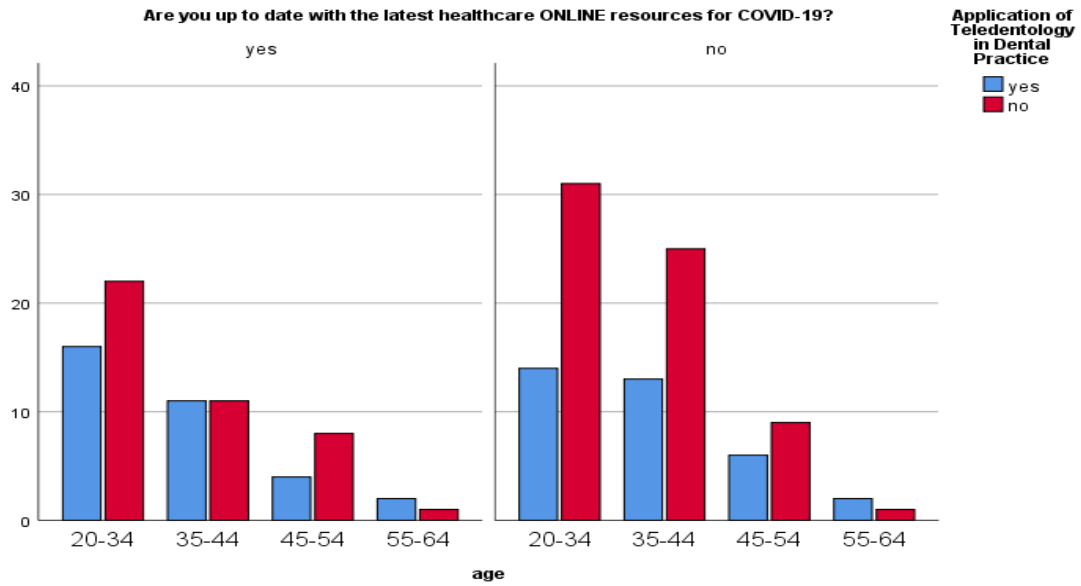

Figure_ 8 Informing through ONLINE resources and applying teledentistry according to the age of the respondents

Source: Author's research

Dental practices did not have significant economic consequences, as almost all dental practices operated according to the established scope of work, as shown in Figure 9. The answer to this question is given according to the audited financial statements and profit and loss accounts of dental practices for the mentioned pandemic period.

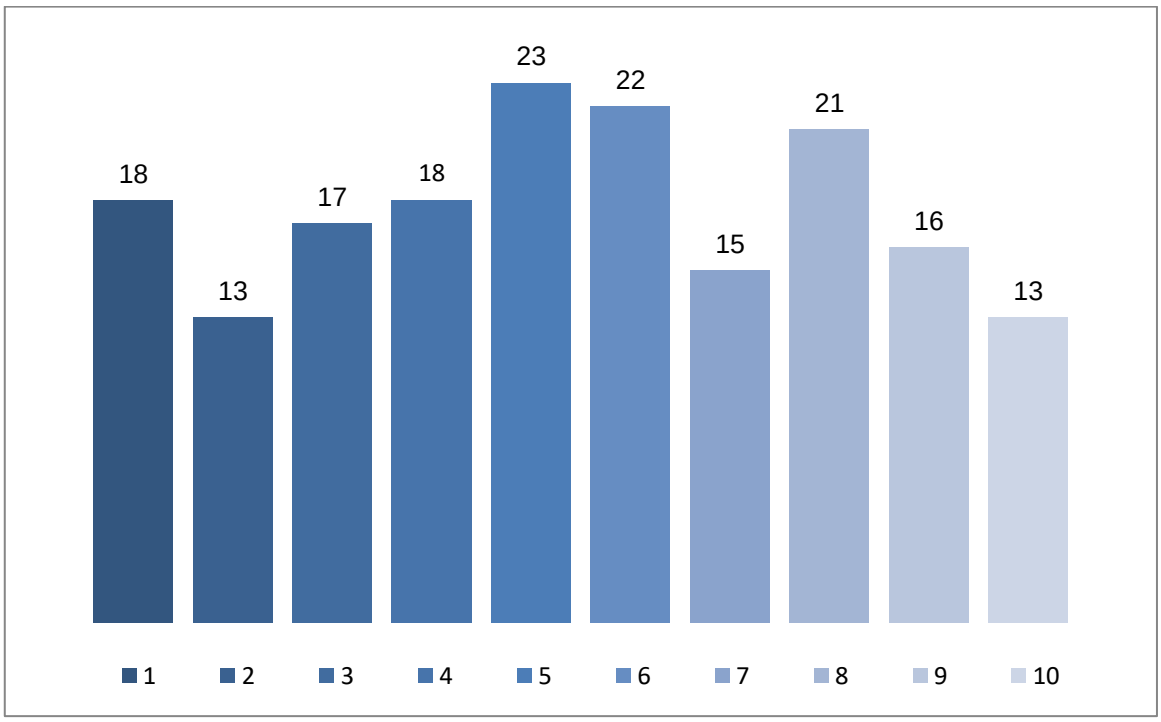

Figure 9 The scale of presentation of economic consequences on the business of dental practice (1 – low economic consequences, 10 - high economic consequences)

Source: Author's research

3 DISCUSSION

In Serbia, according to the official data of the Statistical Office of the Republic of Serbia, dental practice is performed in 90% of cases in private dental offices. Therefore, the owners of dental practice are also managers, so they have a more difficult task: primary treatment of patients, and secondary the organization of dental practice. Such an increased number of dental services in private practice is a major problem in the state sector due to the retention of human capital.

The available data suggest that the virus cannot be controlled despite all the applied guidelines and protocols that have been prescribed, which we can observe during the review of world research. The demographic data from research in Saudi Arabia indicate that about 40% of respondents are also 20 to 34 years of age, while 60% are men, unlike us, where women are a more dominant category of respondents. Respondents to both surveys are mostly from work experience of up to 5 years. In Saudi Arabia, we come across data that there is a dominant region of over 40% of respondents, whereas in our country from the city of Belgrade, but not in such a huge number - only 29% of respondents, from which the majority of specialists who have more than 10 years of working experience come from (Al-Khalifa, et al., 2020). The screening questionnaire was prescribed by the competent institutions. It was necessary to determine whether the patient was in a contingent with an infected person in the last 30 days or suspected of COVID-19 infection. If the patient was sick with COVID-19, it was necessary to confirm this with proper documentation((Izzeti, Nisi, Graziani, & Gabriele, 2020). Although the recommendation was that the screening questionnaire should be completed on the spot, which was done by the majority of respondents to this survey in writing or in writing, while at least one dentist did so by telephone, in spite of it being the best option since it could have been established during the interview and prior to the arrival of a patient whether he/she had been in contact with an infected person or a person with

suspected infection for the previous 30 days. Paper materials could have been a source of contamination and made it difficult to sanitize the room. At the same time, all printed promotional material was removed from the waiting room. (Kochhar, Bhasin, Kochhar, Dadlani, Thakkar, & Singh, 2020) Due to the lack of rooms in most dental practices, there was no special room to isolate patients with suspected COVID-19, but the infection was prevented by one unescorted patient coming and the staff was minimized. When it comes to Europe, the screening program of patients upon arrival at the dental clinic was mostly respected by Switzerland, with application in about 70% of dental organizations, which is compared to our research, i.e. research in Germany where 55.7% and Austria 55.6%. (Wolf, Zeyer, & Campus, 2020).

Patients with the COVID-19 virus, if they have a dental problem should first see, through telephone consultation, whether the intervention can be postponed. It is often necessary to administer analgesics or antibiotics (Kengne Talla, Levin, Glogauer, Cable, & Allison, 2020). If the therapy does not work within a certain period, the patient needs a dental examination and intervention. If an intervention was required, it was sought to perform intervention with disposable instruments, as well as the use of cofferdam during operation and maximum prevention of aerosol formation. Preferably cover the nose of the patient unless it caused an inconvenience.

The application of teledentistry, i.e., communication with patients by telephone or some other form of communication through the network, developed in dental practice during the pandemic. (Kengne Talla, Levin, Glogauer, Cable, & Allison, 2020). In Saudi Arabia, researchers came to the data that as many as 43% of their respondents applied this in their dental practice (Al-Khalifa, et al., 2020), while in our country it is the most crowded in the city of Belgrade, if we look at regions, and in practice, as many as 61.4% of respondents. Telemedicine was also applied in Austria (16.7%), Germany (2.6%), and Switzerland (12.6%). Data were collected during the first pandemic lockdown. (Wolf, Zeyer, & Campus, 2020)

Isolation for patients with suspected infection was enabled in 6.3% of respondents, while in Saudi Arabia this number is significantly higher at 43% (Al-Khalifa, et al., 2020). This tells us that they were more cautious and thoughtful, but also had larger spaces and possibilities. Regarding research in Europe (Wolf, Zeyer, & Campus, 2020), with no significant difference, about 5% of respondents treated patients with suspected (or confirmed) infection with the application of all prescribed personal protection measures for medical staff.

Upon arrival, there was a disinfectant (hydroalcoholic solution) in front of the dental office, thus disinfecting the shoes, in order to reduce contamination and the introduction of viral particles into the office (Izzeti, Nisi, Graziani, & Gabriele, 2020). Then, put the jacket and other items in the indicated place, followed by hand disinfection. It was not practiced in the practice to be more than one patient during the intervention, but when this was the case, they were distributed 2 meters apart (81.8%).

In Saudi Arabia, researchers came to the data that only 77% of respondents adhered to physical distancing, which in this case brings us to an advantage in this segment of research, as more carefully, when it comes to direct physical contact. (Al-Khalifa, et al., 2020)

In Austria, protective measures integrated into the daily routine during the first closure regarding physical distancing were applied in as many as 93.5% of dental organizations. This prevention measure was most respected in Switzerland (98% of dental organizations). (Wolf, Zeyer, & Campus, 2020)

At admission in 67.6%, the body temperature before a dental procedure was not measured, while in Saudi Arabia this was the case at 92% (Al-Khalifa, et al., 2020), Austria at 32.3%, Germany at 9.5%, and Switzerland at 43.7% of dental organizations. (Wolf, Zeyer, & Campus, 2020)

Before the intervention, the patient was covered with a sterile compress, which was also used repeatedly and sterilized in a similar manner to masks, according to the established standards prescribed before the epidemic.

It was desirable for patients to organically rinse the oral cavity with appropriate mouthwash prior to each intervention, but this was also not applied in

60.2% of cases, which is the same as in the study with which we compare our results.

The reason for this is proof that oral flushing does not prevent the transmission and further spread of the virus, because the virus spreads through the entire respiratory tract. When it came to wearing a protective mask in the waiting zone, as many as 88.6% of respondents practiced wearing a protective mask, which is significantly higher than in Saudi Arabia, where this number was 68% of respondents (Al-Khalifa, et al., 2020). In Switzerland, which was the leader in the implementation of prevention measures in Europe, this number was very low, so the wearing of protective masks in the waiting room was applied only in 34% of dental organizations, and Austria was the leader with as many as 94% of dental organizations that applied this prevention measure. (Wolf, Zeyer, & Campus, 2020)

Hand disinfection was carried out with a disinfectant spray, by applying the disinfectant to the palm of the hand, and in order for it to be well done (Izzeti, Nisi, Graziani, & Gabriele, 2020), it is necessary that the hands are rubbed against the palm of the hand on both sides and cross-fingered, until the disinfectant is dried, which is a confirmation of the action of the same and well performed disinfection.

The wearing of protective gloves in patients was practiced or observed by only one dental practice. In the case of protective gloves, there were no problems with the demand on the market and they were used only once, as before the pandemic.

During the pandemic, it was difficult to find adequate equipment on the market for purchase, so employees resolved the shortcomings incidentally, i.e., at a given moment, all in the service of protection against the virus transmission and preservation of health both of themselves and patients.

When it comes to adequate personal protective equipment, we have already stated that there was a problem in finding the equipment on the market. After disinfecting the hands, a special sterilized uniform and cap were put on. The uniform and cap are made of cotton material and therefore were not subject to single use, but their disinfection was mandatory after each patient according to a special procedure. Also included in the non-disposable uniform is a visor – a face shield. Dentists could also use safety glasses, but for those who wear glasses due to poor vision, this was not possible. The visor protects the face from touching and transferring microparticles and potential infection.

The precautions represented a higher level of infection control, which was supposed to prevent its further development and transmission through aerosols, blood drops, etc. In each country, they were prescribed by the relevant institution. What we came to conclude during the research was that the protocol of the Institute of Public Health "Dr. Milan Jovanovic Batut" General Prevention Measures for Dental Practices (Opšte mere prevencije za ordinacije dentalne medicine, 2020.) was mostly followed by 88% of respondents, as well as in Saudi Arabia (Al-Khalifa, et al., 2020).

Protective masks were almost impossible to find during the pandemic. It was desirable to wear masks marked: N-95, because they were the most effective protection against microparticles, due to a lack of market, and they were used several times, which was confirmed and approved by the Center for Disease Control and Prevention. The decontamination procedure was carried out in an autoclave with dry heat or dry hot air. The masks thus sterilized could be used two to three more times. This type of sterilization did not harm the material from which the mask was made, and the mask provided complete protection in the next use. In world surveys, 72% of respondents had the same procedures and felt that the mask N-95 should be part of the daily personal protective equipment of the dentist, regardless of whether it was a state of emergency.

When it comes to monitoring ONLINE resources for COVID – 19, that is, information through the Internet network and data collection, more than half of the respondents stated that they did not follow, 57.4% of them, which, we must admit, is a large number, since this was one of the main forms of information during the pandemic that happened to the entire world. The problem with this part can be the age of the respondents, that is, the difference between millennials and millennials – a way of growing up in different social circumstances. Younger generations who have known information systems since early childhood and have communication skills are easier to adapt and create a new form of communication in the

future. From research in practice, it has been shown that premillennials do not show interest in mastering new technologies, although the use of the information system in healthcare requires a level of knowledge similar to "surfing" on the Internet, while millennials – generations of the new age - help them master the use of the system or help them enter data. We can also link this segment to the application of tele- dental services in dental practice. The goal of the introduction of the information system should be electronic communication and connectivity that enables mutual communication between those involved in the patient's treatment with the patient himself, with insight into all materials, reports, medicines, and administrative processes with home monitoring. (Lukas, Xu, Yu, & Gao, 2020)

After each patient, all surfaces were cleaned and disinfected – stool and work surfaces in the office, but before that, disposable equipment was disposed of in a special place for contaminants and material and then removed, while reusable equipment was also disposed of in a special place and prepared for sterilization to be used adequately during the next procedure.

At the beginning of the pandemic, everything that was not necessary was removed from the worktops, i.e. the worktops contained only what was necessary for the current performance of the service. The surfaces were first cleaned and then disinfected with spray disinfectants. When we were able to use disinfectant wipes, we used the same principle: the first one was to clean and the second one was to disinfect the surface.

The breaks between the two patients were 30 minutes, in order to ooze the room. The floors have been cleaned several times a day. All instruments used to treat the patient are sterilized according to standard protocols. The prosthetic works, before being sent to dental technicians for production, were disinfected with a disinfectant with chlorine in its contents. No economic impact on business was observed anywhere. A study in Liechtenstein (Wolf, Zeyer, & Campus, 2020) came up with data that less than 2% had economic consequences on business.

4 RESTRICTIONS AND POLICIES

One of the primary limitations of this research is the insufficient sample size and number of participants. It should be noted that the research was carried out before the health system was completely out of COVID – 19 regimens. What may be guidelines for future research are possible modification and correction of the survey according to the period in which the new research will be done and adaptation to the current system by which health care works, as well as the motivation of dentists to be part of scientific research practice through education on the importance of these data for further work, development, and improvement of the entire dental practice, but also readiness if another type of emergency similar to COVID – 19 occurs.

5 CONCLUSION

The first person at risk of covid-19 infection is the dentist himself. The COVID-19 pandemic will not stop anytime soon, and the social system will not recover, but it will be necessary to get used to the new functioning and performing dental procedures in a slightly different environment. With the development of vaccines and medicines, it is necessary to follow the protocols and regulations for dental care prescribed by the competent institutions in the country and based on that manage personal protective equipment, dental resignations and devices and surrounding premises.

Nothing was changed in the performance of the (surgical) procedure alone. The exceprion is that now they are done under special circumstances and with additional caution. Protective equipement is used, so the transmission and spread of viruses is prevented.

In the future, a greater development of teleledontological services is expected, but the first step is to apply digitalization in dental practice, educate employees and then further develop other segments at all ages.

In accordance with the aim of the research and the questions asked, we can conclude that the most practicable use was wearing a face mask in the waiting zone, while wearing protective gloves by patients was completely discriminatory.

More money was spent on disinfectants, medical equipment, and disposable materials, but the economic consequences on dental practice were minimal.

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