



# Article Romanian Dentists' Perception of Legal Liability Related to COVID-19 Infection during Dental Treatments in Times of the Pandemic Outbreak

Maria Aluaș<sup>1</sup>, Sorana D. Bolboacă<sup>2,\*</sup>, Anca-Ștefania Mesaroș<sup>3</sup> and Patricia Ondine Lucaciu<sup>1</sup>

- <sup>1</sup> Department of Oral Health, Iuliu Hațieganu University of Medicine and Pharmacy, Victor Babeş Str., No. 15, 400012 Cluj-Napoca, Romania
- <sup>2</sup> Department of Medical Informatics and Biostatistics, Iuliu Haţieganu University of Medicine and Pharmacy, Louis Pasteur Str., No. 6, 400349 Cluj-Napoca, Romania
- <sup>3</sup> Department of Prosthetic Dentistry and Dental Materials, Iuliu Hațieganu University of Medicine and Pharmacy, Clinicilor Str., No. 32, 400006 Cluj-Napoca, Romania
- \* Correspondence: sbolboaca@umfcluj.ro

Abstract: Our study aimed to describe and assess the impact of legal aspects on dentists' practices during the COVID-19 pandemic. The objectives were: (a) to explore dentists' and dental managers' knowledge about dental liability during the COVID-19 pandemic; (b) to inquire about the respondents' perceptions of immunity for prejudices resulting from non-urgent dental procedures during the COVID-19 pandemic; and (c) to assess respondents' "good faith" in handling challenges in the pandemic context. We conducted an observational, cross-sectional, exploratory study based on a survey. The target population was represented by active dentists in Romania from 11 March 2020 to 31 January 2022. An email, professional groups on WhatsApp, and Facebook invitation to participate were sent at the end of January 2022. Data were collected using a self-administrated electronic questionnaire. The responses of sixty-one participants, the majority younger than 41 years (82%) and women (77%), were analyzed. Most respondents (72%) appropriately thought that patients could complain about being infected with COVID-19 during their visits for dental treatment. Most respondents agreed that all dental personnel should benefit from legal immunity (72%). The respondents indicated that clinic or office management is responsible for failing to implement/respect the safety measures and protocols specific to the COVID-19 pandemic (83%). Outcomes showed that the respondents are aware of the possibility of being sued and would not be surprised to see COVID-19 raised in litigation, while the state's immunity is expected for all dental care personnel, not only dentists.

Keywords: dental liability; immunity; good faith; coronavirus disease 2019 (COVID-19)

## 1. Introduction

The coronavirus disease 2019 (COVID-19) pandemic periods that were experienced since the first case in 2019 are unprecedented. Everyone, at their level, faced dealing with a "pandemic risk" and no one could claim to have control of it. Dental practitioners have the professional duty to act for the good of their patients, protecting them and their lives. Dental practices represent one of the health sectors where COVID-19 (coronavirus disease 2019) measures were adopted and implemented to prevent infections of patients, healthcare professionals, and the population. The respiratory tract was the main route of human-to-human COVID-19 infection and the Függe micro droplets and core droplets were the main vectors in the transmission of the virus [1–3].

Measures for protecting public health in Romania were adopted on 17 March 2020, by Military Ordinance 1 [4]: lockdown, distancing, isolation, cancelation of public events, the closing of schools, universities, non-essential businesses, etc. On 15 May 2020, the



Citation: Aluaș, M.; Bolboacă, S.D.; Mesaroș, A.-Ș.; Lucaciu, P.O. Romanian Dentists' Perception of Legal Liability Related to COVID-19 Infection during Dental Treatments in Times of the Pandemic Outbreak. *Sustainability* 2022, *14*, 9744. https:// doi.org/10.3390/su14159744

Academic Editor: Shervin Hashemi

Received: 21 June 2022 Accepted: 4 August 2022 Published: 8 August 2022

**Publisher's Note:** MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



**Copyright:** © 2022 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https:// creativecommons.org/licenses/by/ 4.0/). Romanian Health Ministry provided, by Order no. 828/15 May 2020 [5], the measures for organizing and carrying out activities in dental offices and non-COVID healthcare units, during the state of alert. In August 2020, the World Health Organization (WHO) [6] published guidelines for oral health services in the context of COVID-19. The recommended safety measures implemented in oral health included [6–8]: patient screening and triaging, appointment scheduling (scheduling patients at larger intervals in order that they do not meet in the waiting rooms), epidemic infection-prevention and control (creation of systems and adopting common measures to avoid cross-infection and removing magazines, newspapers, toys, and other objects that were for the use of patients or dental personnel), pretreatment patient reception protocols, dispositions for waiting areas (informing the patients not to come accompanied by others, except for the underaged, disabled, or elderly patients), supplemental air ventilation, enhanced protective equipment for personnel, single-use protective equipment for patients, and additional cleaning and disinfection protocols. Guidelines to reduce the biological risk in dental practice were developed and included generic and specific measures (e.g., operative area procedures, protective equipment, and hygiene measures) [9,10].

Dental treatments were restricted to emergency dental care during the first months of the COVID-19 pandemic with postponing of elective dental procedures [11], but later decisions have allowed the reopening of dental clinics and offices in many countries, thus restoring elective care to patients.

#### 1.1. Urgent and Routine Dental Care

Dental professionals were considered at high risk of professional (direct and indirect contact by droplets and aerosols due to their nature of work) COVID-19 infection based on the route of transmission [1,12]. Retrospectively, as compared to other healthcare professionals, the COVID-19 rates were low among dentists (incidence of 5.10/100,000 person-days, 95% confidence interval = 1.86–9.91 per 100,000 person-days in Canada [13], prevalence of 2.6% among U.S.A. dentists [14], and prevalence of 1.9% for dentists and 0.8% for dental assistants in France [15]). A prevalence of hospitalization due to COVID-19 infection of 15.1% and a mortality of 1.5% has been reported for frontline healthcare workers [16]. The majority of the health care professionals infection cases in Iran were nurses (51.3%), and the highest number of infections were in the emergency rooms (30.6%) [17].

Urgent dental care addresses potentially life-threatening manifestations and requires immediate treatment to stop ongoing tissue bleeding and alleviate severe pain or infection and uncontrolled bleeding. It focuses on managing conditions that require immediate attention to relieve either severe pain, infection risk, or both, and pressure on hospital emergency departments. These signs and symptoms should be treated with minimal invasiveness [8].

Routine dental care refers to initial or periodic oral examinations and recalls visits, including standard radiographs, regular dental cleaning and preventive therapies, and orthodontic procedures. Routine dental care procedures include other treatments than those that address acute issues (e.g., pain, infection, trauma), such as extraction of asymptomatic teeth, restorative dentistry, treating asymptomatic carious lesions, and orthodontic and aesthetic dental treatment [8].

Combining the continuation of dental care activity with implementing supplemental safety measures to protect patients and dental professionals can be a challenge for healthcare professionals as they could be held liable in the event of patient COVID-19 contamination.

#### 1.2. Legal Provisions and Immunity

*Legal provisions.* According to the Romanian Health Reform Law [18], Article 653, paragraph. b): malpractice is considered the error in the medical or medic-pharmaceutical act, which generates harm to the patient and involves the civil liability of medical professionals and providers of products and medical services, sanitary, and pharmaceutical products. The healthcare professional is liable for harming the patients due to errors, including negligence, imprudence, and insufficient medical knowledge, within the prevention, diagnosis, or treatment procedures.

Article 654 (2) provides situations of immunity in the case of harm to patients: The healthcare professionals (including dentists) are not liable for harm and prejudices resulting from (a) working conditions, insufficient diagnostic and treatment equipment, nosocomial infections, adverse effects, complications and generally accepted risks of methods of investigation and treatment, hidden defects in sanitary ware, in medical equipment and devices, and in medical substances and sanitary ware they used. (b) When they act in good faith in emergencies, with respect to their competencies.

The "*Good-faith*" (lat. bona fides) is a legal concept used primarily in contracts. According to the Merriam-Webster's Dictionary of Law [19], it means honesty, fairness, and lawfulness of purpose and the absence of any intent to defraud, act maliciously, or take unfair advantage. It has a subjective dimension: erroneous belief generating subjective rights, and an objective dimension: the requirement of loyalty, creating obligations [20].

The Romanian Civil Code [21], article 14, states that any civil or legal person must exercise his/her rights and perform their civil obligations in good faith, under public order and morals. Good faith is presumed until proven otherwise. Good faith usually refers to honesty and depends on the specific context in which it is used.

*Immunity debate context.* The COVID-19 infection has triggered debates regarding immunity from medical negligence claims, especially in the U.S.A. and U.K. and in countries with highly developed liability markets [22–24]. In the U.S.A., many states (at least 23) have adopted regulations that provide healthcare professionals and hospitals with immunity if the act or omission was in "good faith" [24].

## 1.3. Research Focus

The Romanian dentists' perceptions following the listed research question were investigated: Could dentists be liable for negligence *if patients get infected at the dental office/clinic*? According to the litigation principle, *anybody can sue anyone for any reason at any time* [25]. Thus, the expected answer is *yes*, the COVID-19 pandemic does not except dentists from malpractice: medical errors, negligence, and carelessness claims. The dentists' judicial defense depends on the "good-faith" of all dental personnel by respecting the safety measures and protocols.

#### 2. Materials and Methods

## 2.1. Survey Instrument

The authors decided on the items included in "Good faith and legal liability related to non-urgent dental procedures in time of coronavirus disease 2019 outbreak". The first author selected a list of relevant topics to cover, and the other authors independently selected the issues to be included. The final resolution was made by consensus of all authors.

The first draft of the survey was presented and discussed with two distinct groups of early-career dentists through two focus groups applying qualitative research methods. A non-probabilistic convenient sampling method was used, and all residents in orthodontics (45 residents) or dento-alveolar surgery (23 residents) with training in Cluj-Napoca and Bioethics and Medical Malpractice module in January 2022 were invited to participate. The first focus group met on 25 January 2022, with 11 participants. The second focus group met on 28 January 2022, with 14 participants. The facilitator of the session was the first author. The survey content was discussed and the received feedback, comments, and suggestions were included in the final version of the survey (8 questions grouped in three dimensions, see Table 1) to assure the consistency of the content. The questionnaire was written in Romanian since the target population was Romanian dental professionals.

The questionnaire's objectives were:

1. To explore dentists' and managers' knowledge about dental liability related to the COVID-19 pandemic (first dimension, A1–A5 in Table 1);

- 2. To inquire about the respondents' perceptions of immunity to prejudices resulting from non-urgent dental procedures during the COVID-19 pandemic (second dimension, B1 in Table 1);
- 3. To assess respondents' "good faith" in handling challenges in the pandemic context (third dimension, C1 and C2 in Table 1).

Six questions were used to collect the respondents' characteristics: sex, age (years), dental specialty (a. dento-alveolar surgery, b. dental and maxillofacial surgery, c. endodontics, d. orthodontics, e. periodontics, f. prosthodontics, g. pediatric dentistry, h. general dentistry), experience (years), status in the institution (a. dental manager, b. medical manager, c. dentist, d. other (specify)), and Romanian development region where they work.

Dimension Questions A1.\* In the last two years, have you ever thought that patients might complain about being infected with COVID-19 during their visits for dental treatment? Yes/No A2.\*\* To whom should a person address a complaint regarding a possible COVID-19 infection in a dental office/clinic? (a) College of Dentistry, (b) Public Health Authority, (c) Courts, (d) Dental office/clinic where they have been treated, (e) I do not know, (f) Other institution (specify) A3.\*\* Against whom do you consider they should complain? (a) Against dentists, (b) Against the clinic/office management, (c) Against sanitary knowledge about dental liability and pharmaceutical products providers, (d) I do not know, (e) Other Α. institution (specify) A4.\*\* Who is the most susceptible to be responsible for COVID-19 infection of patients in dentistry? (a) The dentist who performed the dental care, (b) Clinic/Office Administration, (c) Dentist/Office/Clinic Malpractice Insurance, (d) I do not know, (e) Other institution (specify) A5.\* Who should prove that COVID-19 infection is caused at the dental clinic/office visits? (a) The dentist/dental clinic/office management, (b) Medical Malpractice experts, (c) Patients, (d) I do not know, (e) Other institution (specify) B1.\* If the State/Health Ministry would decide in favor of legal immunity during the COVID-19 pandemic, who should benefit? (a) Dentists, B. perception of immunity (b) Clinic/Office management, (c) All dental personnel who work in that clinic/office, (d) I do not know, (e) Other opinions (specify) C1.\*\* In the event of such complaints, the cause could be the failure to implement/respect the safety measures and protocols specific to the pandemic context: (a) Dentists, (b) Clinic/Office management, (c) Patient, (d) I do not know, (e) Other institution (specify) "good faith" in handling COVID-19 challenges C. C2.\*\* Protocols and pandemic-specific safety measures had NOT always been possible because of: (a) Patient flow, (b) Costs/financial pressure on the clinic/office, (c) Patients' reluctance/refusal to follow protocols, (d) I do not know, (e) Other reason (specify)

 Table 1. Dimensions and questions of the applied questionnaire.

\* one possible answer from the list allowed; \*\* more than one possible answer from the list allowed.

2.2. Study Setting and Participants

We conducted an observational, cross-sectional, exploratory study based on a survey. The eligible population was Romanian dental office/clinic dentists who treated patients for routine dental care (active dentists) from 11 March 2020 to 31 January 2022, including managers in their quality of medical services providers. Dental personnel as assistants, technicians, students, administrative assistants, or other employees were excluded from the study.

The survey was electronically transposed on online Google Forms and data were collected anonymously from 1 to 23 February 2022 using a non-probabilistic convenience sampling method. The authors invited the Romanian dental practitioners to participate via

emails, WhatsApp and Facebook professional groups and the persons were encouraged to disseminate the invitation to their peers. The survey started with a brief presentation of the study aim, questions and how to respond, the mean time needed to fill in the survey, and assuring the participants' anonymity regarding data collection. All questions were mandatory to guarantee a lack of incomplete data and the respondent had access to only one question at a time.

#### 2.3. Data Analysis

Microsoft Excel 365 was used to manage, clean, validate, and analyze the collected data. Statistica software (v. 13, StatSoft, Tulsa, OK, USA) was used for data analysis.

Respondents' age and years of experience were reported as median and interquartile ranges (expressed as (Q1–Q3), where Q1 is the 25th percentile and Q3 is the 75th percentile) since raw data proved to be significantly far from the theoretical normal distribution. Qualitative variables were reported as numbers and percentages. A respondent with experience less than or equal to two years was considered an entry career respondent. Sub-groups were compared with the Mann–Whitney test for age and years of experience and Fisher's exact test for the quantitative variable. The comparisons were made considering two-tailed tests at a significance level of 5%.

#### 3. Results

## 3.1. Respondents' Profile

Sixty-one eligible respondents, aged from 26 to over 60 years, participated in this survey. Most respondents were female (Table 2) and 82% were younger than 41 years (50 respondents). Female respondents were younger than male respondents (median (Q1-Q3) = 30 years (27-35.5) vs. 33 years (31-39), *p*-value = 0.0426) and, as a consequence, with less experience (median (Q1-Q3) = 4 years (2-10) vs. 9 years (5.3-18.8), *p*-value = 0.0089). Sixteen respondents (26.2%) were in an entry career frame (up to two years), and most respondents (53 respondents, 86.9%) were from the Romania North-West regions of development.

Table 2. Respondents' demographic characteristics.

Variable		Statistics			
Gender	Female, n (%)	47 (77.0)			
	Median (Q1–Q3)	31.5 (28–37)			
Age, years	Mean (SD)	33.3 (6.5)			
Years of experience	Median (Q1–Q3) Mean (SD)	5 (2–11) 7.9 (7.8)			
Dental specialty Dento-alveolar surgeon Dental and maxillofacial surgeon Endodontics Orthodontics Periodontics Prosthodontics Pediatric dentistry General dentistry	n (%)	10 (16.4) 7 (11.5) 2 (3.3) 11 (18.0) 6 (9.8) 4 (6.6) 7 (11.5) 20 (32.8)			
Status in the institution Administrative manager Medical manager Dentist Other	n (%)	5 (8.2) 8 (13.1) 37 (60.7) 11 (18.0)			

n = absolute frequency; % = relative frequency; Q1 = 25th percentile; Q3 = 75th percentile; SD = standard deviation.

## 3.2. Knowledge about Dental Liability Related to COVID-19 Pandemic

Most respondents appropriately thought that patients could complain about being infected with coronavirus during their visits for dental treatment (Table 3). Excepting *who is the most susceptible to be responsible for COVID-19 infection of patients during routine dental treatment*, the highest percentage of the answers were affirmative (Table 3).

**Table 3.** Respondents' perceptions of dental liability related to dental practice during the COVID-19 pandemic.

Question	Answer Options	n (%)
A 1	Yes	44 (72.1)
AI	No	17 (27.9)
	(a) College of Dentistry	19 (31.1)
	(b) County Public Health Directorate	41 (67.2)
۸2	(c) Courts	2 (3.3)
AL	(d) Dental office/clinic where they have been treated	30 (49.2)
	(e) I do not know	2 (3.3)
	(f) Other institution	3 (4.9)
	(a) Against dentist	19 (31.1)
	(b) Against the clinic/office management	43 (70.5)
A3	(c) Against sanitary and pharmaceutical products providers	7 (11.5)
	(d) I do not know	6 (9.8)
	(e) Other institution	0 (0.0)
	(a) The dentist who performed the dental care	30 (49.2)
	(b) Clinic/office Administration	34 (55.7)
A4	(c) Dentist/Office/Clinic Malpractice Insurance	8 (13.1)
	(d) I do not know	12 (19.7)
	(e) Other institution	0 (0.0)
	(a) The dentist/dental clinic/office management	6 (9.8)
	(b) Medical Malpractice experts	25 (41.0)
A5	(c) Patients	36 (59.0)
	(d) I do not know	4 (6.6)
	(e) Other institution	2 (3.3) *

n = number of respondents; \* Public Health Directorate.

Female (34/47, 72.3%) and male (10/14, 71.4%) respondents similarly considered that patients could complain about being infected with COVID-19 virus during their visits for dental treatment (A1, *p*-value > 0.9999, Fisher's exact test). Even a smaller percentage of entry career respondents agreed that a patient could complain about being infected with coronavirus during their visits for dental treatment, the difference as compared to no entry career respondents only reached a tendency toward statistical significance (11/16, 68.8% vs. 33/45, 73.3%; Fisher's exact test *p*-value = 0.096).

#### 3.3. Perception of Immunity

The majority of respondents (37/61, Table 4) consider that all dental personnel who work in that clinic/office, not only dentists, should benefit from legal immunity during the COVID-19 pandemic. This answer was given by all respondents, regardless of entry career or not (Figure 1). Furthermore, a smaller percentage of entry career respondents indicate that dentists should benefit from legal immunity, showing a tendency toward statistical significance (Figure 1).

## 3.4. "Good Faith" in Handling COVID-19 Challenges

The majority of respondents (51/61) indicate that clinic or office management is responsible for the failure to implement/respect the safety measures and protocols specific to the COVID-19 pandemic (Table 5). The costs/financial pressure on the clinic/office have

been identified as the leading factors for the failure of protocols and implementation of pandemic-specific safety measures (Table 5).

Question	Answer Options	n (%)
B1	(a) Dentists (b) Clinic/Office management (c) All dental personnel who work in that clinic/office (d) I do not know	21 (34.4) 18 (29.5) 37 (60.7) 5 (8.2)





Figure 1. Perception regarding immunity for dental office/clinic professionals by career level.

Tab	le 5.	Res	pond	lents'	perce	ptions	of n	easons	s for	inap	pro	priate	hand	lling	of sa	fet	y m	easu	res	and	pro	toco	ls
-----	-------	-----	------	--------	-------	--------	------	--------	-------	------	-----	--------	------	-------	-------	-----	-----	------	-----	-----	-----	------	----

Question	Answer Options	n (%)
	(a) Dentists	35 (57.4)
C1	(b) Clinic/Office management	51 (83.6)
	(c) Patient	27 (44.3)
	(d) I do not know	1 (1.6)
	(e) Other institution	2 (3.3)
	(a) Patient flow	21 (34.4)
	(b) Costs/financial pressure on the clinic/office	35 (57.4)
C2	(c) Patients' reluctance/refusal to follow protocols	29 (47.5)
	(d) I do not know	7 (11.5)
	(e) Other reason	3 (4.9) *

\* Discontinuity in providing adequate protection materials; the office/clinic's structure; lack of personnel; underestimation of risks; indifference.

## 4. Discussion

The results of this exploratory study provide some insights regarding the respondents' perceptions of the possibility of facing complaints regarding COVID-19 infections during visits to dental offices.

#### 4.1. Dental Liability Related to the COVID-19 Pandemic

The results showed that most respondents have thought about the following possible scenario (Table 3): being sued for malpractice related to the dental procedure and COVID-19 infection.

The possibility of proving that patients have been infected during dental office/clinic visits is a debated point. Respondents consider that the association between patients' visits to the dentist and the COVID-19 infection is likely very hard to prove. Respondents' comments on the open question were: "being a respiratory infection, people can get contaminated everywhere", or "they could be contaminated in the bus, how can patients prove the source of contamination?". Tanaka et al. [26] reported no COVID-19 clusters as nosocomial infections in dental clinics in Japan, with no transmission from dental staff to patients or vice versa. Similarly, in a study conducted in Italy, Nardone et al. [27] reported no cases of occupational COVID-19 among dentists and dental assistants. The COVID-19 infection path in dental clinics could be from staff to patient, patient to staff, and patient to patient, but no study proved any transmission in dental clinics. Recommendations regarding the transmission measures had been formulated and applied [28,29] but knowing and following the protocols is a matter of personal choice [30], as some patients recognize that they went to a dental clinic with a possible (self-evaluation) COVID-19 infection (7/37 [31]).

According to the Center for Diseases and Control and Prevention website [32], COVID-19 is spread in three main ways: "breathing in the air when close to an infected person who is exhaling small droplets and particles that contain the virus; having these small droplets and particles that contain virus land on the eyes, nose, or mouth, especially through splashes and sprays like a cough or sneeze; touching eyes, nose, or mouth with hands that have the virus on them". However, COVID-19 was also found in saliva [33] and all dental treatments and procedures sometimes lead to spraying saliva particles into the air, thus increasing the possibility of contamination [34]. In addition, as most dental instruments are made from metal and polymers, the virus was suspected of contaminating and persisting on instruments' surfaces in the earliest COVID-19 pandemic [35]. The virus could be transmitted from one person to another if the instruments were not adequately sterilized [33]. Still, it is known that the virus is not viable on surfaces [36,37]. The variety of COVID-19 transmission makes it difficult to determine when and how a person has been exposed to the virus.

Most respondents (Table 3) indicated that in the case of a complaint, the patient must demonstrate that the COVID-19 infection occurred at the dental office. This perception is in accordance with the law principles. The burden of proof is on the plaintiff (from the maxim *probatio incumbit ei qui dicit non ei qui negat*, namely, "who asserts must prove") [38,39]. Thus, the plaintiff (the patient, the patient's family, or a legal guardian) must support the complaint by a "preponderance of the evidence" and must use medical experts to do so [25]. Article 249 of the Romanian Civil Procedure Code [40] stipulates that "the one who makes a claim must prove it ( ... )". Article 250 of the same law, states "the proof of a legal act or fact can be made by written documents, witnesses, presumptions, confession of one of the parties, made on its own initiative or obtained during interrogation, by expertise, material evidences, by on-site investigation ( ... )".

In a nutshell, the association between dental office visits and COVID-19 infection is not easily proved. The patient has the legal frame and the right to make any complaint against the dentist or the dental clinic for being contaminated with COVID-19 during the dental procedures but must bring proofs supporting the claims.

#### 4.2. COVID-19 Pandemic and Immunity

The respondents consider that they might be given immunity in the case of proven negligence during the COVID-19 lockdown when it turns out that patients have been infected at the dental office. However, the dentist must be up to date and implement valid best scientific evidence in daily practice. The dentist would be liable when negligence is demonstrated [41].

Most of our respondents, especially entry career ones (Figure 1), feel that all dental personnel should be exempted from legal liability. One-third of respondents (Table 4, Figure 1) believe that only dentists should be exempted. Romania did not adopt special regulations on granting immunity to any healthcare professionals for malpractice claims related to the COVID-19 pandemic. In the sense of Article 654 (2) of the Health Reform Law [18], situations of immunity in case of harm to patients are:

- (a) working conditions, insufficient diagnostic and treatment equipment, nosocomial infections, adverse effects, complications, and generally accepted risks of methods of investigation and treatment, hidden defects in sanitary ware, in medical equipment and devices, in medical substances and sanitary ware they used.
- (b) when they act in good faith in emergencies, respecting their competencies.

New regulations were adopted in the U.S.A. and U.K. to provide legal protection for healthcare workers during the COVID-19 pandemic [24]. Some states in the U.S.A. (Connecticut, Kentucky, and Illinois) provide immunity from civil liability but not criminal liability [42]. Reasons for exemption include but are not limited to the scarce resources during the COVID-19 pandemic [43] and the enormous personal and professional sacrifices made by healthcare professionals [44]. Some voices [7,42,44,45] criticize these new legal provisions, leading to "*lax safety standards*" in endangering public health. Furthermore, the legal system already has broad protection for healthcare professionals who act in good faith [42], "*immunity being unnecessary*" and possibly of being "*unfair to patients*" [44]. The immunity given to health professionals related to negligence claims would likely breach the European Convention on Human Rights, Article 6 (*Right to a fair trial*) [45].

Deery agreed that "a dentist has a duty to be up to date and to practice based on the best evidence" and recommends the use of "standard operating procedures based on the best evidence and preferably national guidelines" and adequate training of all staff "in their application" [41]. In the case of the adoption of standard operating procedures, "the dentist only needs to record deviations from the standard operating procedures and the reason for this deviation" [41].

## 4.3. "Good Faith" in Handling COVID-19 Challenges

More than half of our respondents (Table 5) believe that the scarce resources (in terms of high costs of material), patients who did not follow the instructions and protocols, and the flow of patients at the dental offices could be possible causes for contamination of patients with COVID-19 at the dental offices. Compliance with patient screening, appointment planning, recommended systems (waiting room, access for staff and patients), and safety measures (e.g., wearing a mask, hands sanitization, staff protective equipment, operational sequences, rooms disinfection) [46–50] have not always been possible due to the management of the office. The respondents wrote additional information regarding the emergency period in 2020 when they had difficulties with providers (Table 3). Similar situations and comments were also reported by dental personnel in the U.S.A., who were considered to become frustrated because the managing dentist thought "COVID-19 is a joke" and "wears the same mask for weeks" [51]. The above situations illustrate the difficulties and concerns of dental professionals during the COVID-19 pandemic. Guidelines were adopted in 2021 and 2022 by the Colleges of Dentists recommending that dentists inform their staff about the new office policies and procedures [52] and to communicate with patients before their visits (by emails, messages, social media posts) and during their appointments, as well as after appointments [53]. At the time when the paper was written, the situation significantly changed due to the dynamics of infections, the implementation of rules, protocols and guidelines, and vaccinations, but also to the awareness of all parties, professionals and patients.

#### 4.4. Study's Strengths and Limitations

To the best of our knowledge, this is the first study investigating dentists' perceptions regarding legal liability related to dental treatments during the COVID-19 outbreak. In

spite of the implementation of safety measures, the central point in this study highlights the dentists' stress and concerns raised by possible complaints related to dental treatments and COVID-19 infection. The reported results had relevance to current dental practice. The possibility of being sued by patients concerning COVID-19 infection at the dental office is realistic. Although the general perception of our respondents is that a patient cannot prove the COVID-19 infection occurred at the dental office, the proof, such as other patient testimonies, is accepted by the law, and the dentists must be aware of it. The immunity or the exoneration of liability of all dental personnel for all dental procedures during the COVID-19 pandemic is criticized because it could violate the patient's right to a fair trial.

A rigorous and systematic method has been applied, but some limitations must be highlighted. The exploratory study had advantages and disadvantages. While it is the first step of a study, it is low cost (small sample, flexible, qualitative) and a guide for future research, the results are inconclusive and non-representative. The non-probabilistic sampling method, the conduction of the study in one country, the self-reported data, and the number of respondents limit the results' representativeness and generalizability. Selfreported data are linked to several potential biases (such as selective memory, attribution, exaggeration, mood, etc.) and cannot be independently verified. A test-retest validation of the questionnaire could reduce some potential biases. Similar responses are expected when filling the same survey twice at different times in the case of low/no bias. The results reported in this study strictly reflect the respondents' perceptions and generalizability is not recommended. Investigating a representative sample by Romanian development regions identified that using a probabilistic sampling method would reflect country reality more appropriately, and the report results sustain the appropriateness of moving research forward. Furthermore, it provides the input data to calculate the sample size and ensure appropriate statistical power.

#### 5. Conclusions

Outcomes show that the respondents are aware of the possibility of being sued and are not very surprised to see COVID-19 raised in litigation. The most discussed item was related to proving that COVID-19 infection happened at the dental office, not elsewhere. The respondents tended to consider the state's immunity and implication for all dental care personnel and not only for dentists. Differences between early and advanced career respondents highlight the need for specific training, especially for early career dentists.

Author Contributions: Conceptualization, M.A. and P.O.L.; methodology, M.A., A.-Ş.M., P.O.L. and S.D.B.; validation, S.D.B. and M.A.; formal analysis, S.D.B.; investigation, P.O.L. and A.-Ş.M.; data curation, S.D.B. and M.A.; writing—original draft preparation, M.A. and S.D.B.; writing—review and editing, P.O.L., A.-Ş.M. and S.D.B.; visualization, S.D.B.; supervision, P.O.L.; study administration, M.A.; funding acquisition, P.O.L. All authors have read and agreed to the published version of the manuscript.

**Funding:** This work was supported by a grant of the Ministry of Research, Innovation and Digitization, CNCS-UEFISCDI, PNCDI III project (PN-III-P1-1.1-TE-2021-0531).

**Institutional Review Board Statement:** Participants' written informed consent was not required for their participation in this study, according to the national legal framework and institutional requirements.

**Informed Consent Statement:** Written informed consent from participants was not required for their participation in this study, according to the national legal framework and the institutional requirements.

**Data Availability Statement:** The raw answers of the participants are summarized in the manuscript and could be made available upon request by the authors without undue reservation.

Conflicts of Interest: The authors declare no conflict of interest.

## Abbreviations

%	percentage
CI	confidence interval
COVID-19	coronavirus disease 2019
e.g.	example
n	absolute frequency
no.	number
Q	quartile (Q1 is the first quartile, Q3 is the third quartile)
SD	standard deviation
U.K.	United Kingdom
U.S.A.	United States of America
WHO	World Health Organization

#### References

- 1. Peng, X.; Xu, X.; Li, Y.; Cheng, L.; Zhou, X.; Ren, B. Transmission routes of 2019-nCoV and controls in dental practice. *Int. J. Oral Sci.* 2020, 12, 9. [CrossRef] [PubMed]
- Wax, R.S.; Christian, M.D. Practical recommendations for critical care and anesthesiology teams caring for novel coronavirus (2019-nCoV) patients. *Can. J. Anesth.* 2020, 67, 568–576. [CrossRef] [PubMed]
- Guo, Y.-R.; Cao, Q.-D.; Hong, Z.-S.; Tan, Y.-Y.; Chen, S.-D.; Jin, H.-J.; Tan, K.-S.; Wang, D.-Y.; Yan, Y. The origin, transmission and clinical therapies on coronavirus disease 2019 (COVID-19) outbreak—An update on the status. *Mil. Med. Res.* 2020, 7, 11. [CrossRef]
- Military Ordinance 1 from March 17, 2020, on First Aid Measures Concerning Overcrowding and the Cross-Border Movement of Goods] [In Romanian]. Official Monitor 219/18 March 2020. Available online: https://legislatie.just.ro/Public/DetaliiDocument/ 223888 (accessed on 15 March 2022).
- Ministry of Health Order no. 828/May 15, 2020, on Measures to Organize and Carry out the Activity at Dental Offices and Non-COVID Health Units, during the Alert State] [in Romanian]. Official Monitor no. 437/25 May 2020. Available online: https://legislatie.just.ro/Public/DetaliiDocument/225830 (accessed on 15 March 2022).
- World Health Organization (WHO). Considerations for the Provision of Essential Oral Health Services in the Context of COVID-19. Interim Guidance. 3 August 2020. Available online: https://www.who.int/publications/i/item/who-2019-nCoV-oral-health-20 20.1 (accessed on 15 February 2022).
- Elzein, R.; Bader, B.; Rammal, A.; Husseini, H.; Jassar, H.; Al-Haidary, M.; Saadeh, M.; Ayoub, F. Legal liability facing COVID-19 in dentistry: Between malpractice and preventive recommendations. *J. Forensic Leg. Med.* 2021, 78, 102123. [CrossRef]
- 8. American Dental Association (ADA). What Constitutes a Dental Emergency? Available online: https://www.fachc.org/assets/ ADA\_COVID19\_Dental\_Emergency\_DDS.pdf (accessed on 15 February 2022).
- 9. Lo Giudice, R. The Severe Acute Respiratory Syndrome Coronavirus-2 (SARS CoV-2) in Dentistry. Management of Biological Risk in Dental Practice. *Int. J. Environ. Res. Public Health* **2020**, *17*, 3067. [CrossRef]
- Jiang, C.M.; Duangthip, D.; Auychai, P.; Chiba, M.; Folayan, M.O.; Hamama, H.H.H.; Kamnoedboon, P.; Lyons, K.; Matangkasombut, O.; Mathu-Muju, K.R.; et al. Changes in Oral Health Policies and Guidelines During the COVID-19 Pandemic. *Front. Oral. Health* 2021, 2, 668444. [CrossRef]
- Deana, N.F.; Seiffert, A.; Aravena-Rivas, Y.; Alonso-Coello, P.; Muñoz-Millán, P.; Espinoza-Espinoza, G.; Pineda, P.; Zaror, C. Recommendations for Safe Dental Care: A Systematic Review of Clinical Practice Guidelines in the First Year of the COVID-19 Pandemic. *Int. J. Environ. Res. Public Health* 2021, 18, 10059. [CrossRef] [PubMed]
- 12. Benahmed, A.G.; Gasmi, A.; Anzar, W.; Arshad, M.; Bjørklund, G. Improving safety in dental practices during the COVID-19 pandemic. *Health Technol.* 2022, 12, 205–214. [CrossRef] [PubMed]
- Madathil, S.; Siqueira, W.L.; Marin, L.M.; Sanaulla, F.B.; Faraj, N.; Quiñonez, C.R.; McNally, M.; Glogauer, M.; Allison, P. The incidence of COVID-19 among dentists practicing in the community in Canada. A prospective cohort study over a 6-month period. J. Am. Dent. Assoc. 2022, 153, 450–459.e1. [CrossRef]
- Araujo, M.W.; Estrich, C.G.; Mikkelsen, M.; Morrissey, R.; Harrison, B.; Geisinger, M.L.; Ioannidou, E.; Vujicic, M. COVID-2019 among dentists in the United States: A 6-month longitudinal report of accumulative prevalence and incidence. *J. Am. Dent. Assoc.* 2021, 152, 425–433. [CrossRef]
- Jungo, S.; Moreau, N.; Mazevet, M.E.; Ejeil, A.-L.; Biosse Duplan, M.; Salmon, B.; Smail-Faugeron, V. Prevalence and risk indicators of first-wave COVID-19 among oral health-care workers: A French epidemiological survey. *PLoS ONE* 2021, 16, e0246586. [CrossRef] [PubMed]
- 16. Gholami, M.; Fawad, I.; Shadan, S.; Rowaiee, R.; Ghanem, H.; Hassan Khamis, A.; Ho, S.B. COVID-19 and healthcare workers: A systematic review and meta-analysis. *Int. J. Infect. Dis.* **2021**, *104*, 335–346. [CrossRef] [PubMed]
- 17. Sabetian, G.; Moghadami, M.; Hashemizadeh Fard Haghighi, L.; Shahriarirad, R.; Fallahi, M.J.; Asmarian, N.; Moeini, Y.S. COVID-19 infection among healthcare workers: A cross-sectional study in southwest Iran. *Virol. J.* **2021**, *18*, 58. [CrossRef]

- Law no. 95/2006 on Health Reform] [in Romanian] First Version Published in the Official Monitor no. 372/2006. Available online: https://legislatie.just.ro/Public/DetaliiDocument/80870 (accessed on 5 March 2022).
- Merriam-Webster's Dictionary of Law ©1996. Merriam-Webster, Incorporated. Published under License with Merriam-Webster, Incorporated. Available online: https://dictionary.findlaw.com/definition/good-faith.html (accessed on 15 March 2022).
- 20. Zolynski, C. La bonne foi en droit d'auteur. Cah. Droit. Sci. Technol. 2015, 5, 307–309. [CrossRef]
- 21. Law NO. 287/2009—Civil Law Act. First Version Published in the Official Monitor NO. 511/2009. Available online: https://legislatie.just.ro/Public/DetaliiDocument/162242 (accessed on 15 March 2022).
- American Medical Association. Liability Protections for Health Care Professionals during COVID-19 (2020). Available online: https://www.ama-assn.org/practice-management/sustainability/liability-protections-health-care-professionals-duringcovid-19 (accessed on 20 March 2022).
- Duignan, K.; Bradbury, C. COVID-19 and medical negligence litigation: Immunity for healthcare professionals? *Med. Leg. J.* 2020, 88 (Suppl. 1), 31–34. [CrossRef] [PubMed]
- Malla, C.; Anderson, A. Indemnity for Healthcare Professionals in Respect of COVID-19 Claims: A Global Perspective. Available online: https://kennedyslaw.com/thought-leadership/article/indemnity-for-healthcare-professionals-in-respect-of-covid-19 -claims-a-global-perspective/ (accessed on 15 March 2022).
- 25. Choctaw, W.T. Avoiding Medical Malpractice: A Physician's Guide to the Law; Springer: New York, NY, USA, 2008; pp. 63–73.
- Tanaka, H.; Kurita, H.; Shibuya, Y.; Chikazu, D.; Iino, M.; Hoshi, K.; Kobayashi, W.; Yokoo, S.; Kawano, K.; Mitsudo, K.; et al. COVID-19 transmission in dental and oral/maxillofacial surgical practice during pandemic: Questionnaire survey in 51 university hospitals in Japan. J. Hosp. Infect. 2022, 125, 21–27. [CrossRef]
- 27. Nardone, M.; Cordone, A.; Petti, S. Occupational COVID-19 risk to dental staff working in a public dental unit in the outbreak epicenter. *Oral Dis.* **2022**, *28* (Suppl. 1), 878–890. [CrossRef]
- Kathree, B.A.; Khan, S.B.; Ahmed, R.; Maart, R.; Layloo, N.; Asia-Michaels, W. COVID-19 and its impact in the dental setting: A scoping review. PLoS ONE 2020, 15, e0244352. [CrossRef]
- Estrich, C.G.; Gurenlian, J.R.; Battrell, A.; Lynch, A.; Mikkelsenm, M.; Morrissey, R.W.; Vujicic, M.; Araujo, M.W.B. Infection Prevention and Control Practices of Dental Hygienists in the United States During the COVID-19 Pandemic: A longitudinal study. J. Dent. Hyg. 2022, 96, 17–26.
- Basheer, S.N.; Vinothkumar, T.S.; Albar, N.H.M.; Karobari, M.I.; Renugalakshmi, A.; Bokhari, A.; Peeran, S.W.; Peeran, S.A.; Alhadri, L.M.; Tadakamadla, S.K. Knowledge of COVID-19 Infection Guidelines among the Dental Health Care Professionals of Jazan Region, Saudi Arabia. *Int. J. Environ. Res. Public Health* 2022, 19, 2034. [CrossRef]
- Thurzo, A.; Urbanová, W.; Waczulíková, I.; Kurilová, V.; Mriňáková, B.; Kosnáčová, H.; Gális, B.; Varga, I.; Matajs, M.; Novák, B. Dental Care and Education Facing Highly Transmissible SARS-CoV-2 Variants: Prospective Biosafety Setting: Prospective, Single-Arm, Single-Center Study. Int. J. Environ. Res. Public Health 2022, 19, 7693. [CrossRef] [PubMed]
- Centers for Diseases Control and Prevention. Available online: https://www.cdc.gov/coronavirus/2019-ncov/prevent-gettingsick/how-covid-spreads.html (accessed on 15 March 2022).
- 33. Banakar, M.; Bagheri Lankarani, K.; Jafarpour, D.; Moayedi, S.; Banakar, M.H.; MohammadSadeghi, A. COVID-19 transmission risk and protective protocols in dentistry: A systematic review. *BMC Oral Health* **2020**, *20*, 275. [CrossRef] [PubMed]
- Spagnuolo, G.; De Vito, D.; Rengo, S.; Tatullo, M. COVID-19 Outbreak: An Overview on Dentistry. Int. J. Environ. Res. Public Health 2020, 17, 2094. [CrossRef] [PubMed]
- 35. Kampf, G.; Todt, D.; Pfaender, S.; Steinmann, E. Persistence of coronaviruses on inanimate surfaces and their inactivation with biocidal agents. *J. Hosp. Infect.* 2020, 104, 246–251. [CrossRef] [PubMed]
- Gonçalves, J.; da Silva, P.G.; Reis, L.; Nascimento, M.S.J.; Koritnik, T.; Paragi, M.; Mesquita, J.R. Surface contamination with SARS-CoV-2: A systematic review. *Sci. Total Environ.* 2021, 798, 149231. [CrossRef]
- Glinert, I.; Ben-Shmuel, A.; Szwartcwort-Cohen, M.; Beth-din, A.; Laskar, O.; Barlev-Gross, M.; Melamed, S.; Arbell, N.; Levy, H.; Horowitz, N.A.; et al. Revisiting SARS-CoV-2 environmental contamination by patients with COVID-19: The Omicron variant does not differ from previous strains. *J. Infect. Dis. Med.* 2022, *118*, 211–213. [CrossRef]
- Statute of the International Court of Justice. Available online: https://legal.un.org/avl/pdf/ha/sicj/icj\_statute\_e.pdf (accessed on 15 March 2022).
- Romanian High Court of Cassation and Justice. Civil Section. Decision 1927/2014. Available online: https://www.iccj.ro/ (accessed on 15 March 2022).
- 40. Law no. 134/2010 revised [Civil Procedure Code] [in Romanian]. Official Monitor no. 247/2015. Available online: https://legislatie.just.ro/Public/DetaliiDocumentAfis/140265 (accessed on 27 February 2022).
- 41. Deery, C. The legal position of delivering dental care in a time of COVID-19. Evid. -Based Dent. 2021, 22, 84. [CrossRef]
- Klitzman, R.L. Legal Immunity for Physicians During the COVID-19 Pandemic: Needs to Address Legal and Ethical Challenges. Chest 2020, 158, 1343–1345. [CrossRef]
- 43. Teo, W.; Brenner, L.H.; Bal, B.S. Medicolegal Sidebar: Legal Immunity for Healthcare Workers During COVID-19. *Clin. Orthop. Relat. Res.* **2020**, 478, 2218–2220. [CrossRef]
- 44. Tomkins, C.; Purshouse, C.; Heywood, R.; Miola, J.; Cave, E.; Devaney, S. Should doctors tackling COVID-19 be immune from negligence liability claims? *BMJ* 2020, *370*, m2487. [CrossRef]
- 45. Griffith, R. Duty, indemnity and immunity during the COVID-19 pandemic. Br. J. Nurs. 2020, 29, 537–538. [CrossRef] [PubMed]

- 46. Centers for Disease Control and Prevention. Infection Prevention & Control in Dental Settings. Available online: https://www.cdc.gov/oralhealth/infectioncontrol/index.html (accessed on 10 June 2022).
- 47. European Center for Disease Prevention and Control. COVID-19 Infection Prevention and Control Measures for Primary Care, Including General Practitioner Practices, Dental Clinics and Pharmacy Settings: First Update. Available online: https://www. ecdc.europa.eu/en/publications-data/covid-19-infection-prevention-and-control-primary-care (accessed on 8 June 2022).
- COVID-19: Infection Prevention and Control Dental Appendix (Guidance Withdrawn on 27 May 2022). Available online: https://www.gov.uk/government/publications/wuhan-novel-coronavirus-infection-prevention-and-control/covid-19 -infection-prevention-and-control-dental-appendix (accessed on 10 June 2022).
- 49. Infection Prevention and Control & Oral Health Care during the COVID-19 Pandemic. Available online: https://www.cdsbc.org/ Documents/covid-19/COVID-19-IPAC-Oral-Health-Care-Dec-2021.pdf (accessed on 10 June 2022).
- Amato, A.; Caggiano, M.; Amato, M.; Moccia, G.; Capunzo, M.; De Caro, F. Infection Control in Dental Practice During the COVID-19 Pandemic. Int. J. Environ. Res. Public Health 2020, 17, 4769. [CrossRef] [PubMed]
- Chance, I.R.; Strange, M. What to do When Dentist Thinks COVID is a 'Joke'. Available online: https://www.dentistryiq.com/ dentistry/article/14187100/what-to-do-when-dentist-thinks-covid-is-a-joke (accessed on 27 February 2022).
- Royal College of Dental Surgeons of Ontario, COVID-19: Managing Infection Risks during in-Person Dental Care, Updated September 2021. Available online: https://www.rcdso.org/en-ca/rcdso-members/2019-novel-coronavirus/covid-19-managing-infection-risks-during-in-person-care (accessed on 8 June 2022).
- 53. California Dental Association, Patient Communication and Management, March 2022. Available online: https://www.cda.org/ Home/Resource-Library/Resources/category/patients/patient-communication-and-management (accessed on 8 June 2022).