



Research Article

THE DENTIST'S PERSPECTIVE ON PATIENT SAFETY IN BRAZILIAN DENTAL SERVICES: A GADAMERIAN STUDY

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Abstract: *The objective is to understand patient safety in dental care from the perspective of primary health care dentists in a public health system. This is a Hermeneutic study based on 16 interviews with dentists in the Brazilian public health service. Data systematization and analysis were conducted using Content Analysis, and interpretation was supported by the theoretical framework of philosopher Hans-Georg Gadamer. Three themes emerged: The subjectivities/personal perspectives of dentists in their dental practice within workplaces and their recognition of vulnerability to potential errors; working in a culture of patient safety involves both the material aspects of infrastructure and human compassion; the multiprofessional work and the presence of a physician in the team result in a safer and more welcoming patient environment. In conclusion, for dentists working in the Brazilian public health services, patient safety is involved in a multi-professional support and is also associated with dentist compassion, teamwork, and the presence of a physician in the work environment.*

Keywords: *patient safety, qualitative methods, hermeneutics, dental services*

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1. Introduction

Patient safety in health care is a concept that has been developed over time, addressing issues of minimizing the risk of causing unnecessary harm to patients to an acceptable level. This concept encompasses terms such as harm, adverse events, and incidents. According to the *International Classification for Patient Safety* (ICPS), harm is understood as the impairment of the structure/function of an organ, causing disease, injury, disability, or even death [1,2]. An Adverse Event (AE) and an incident refer to an incident that results in harm to the patient. In this context, harm is the probability of an incident occurring. It is worth noting that all these situations are considered in their physical, social, and psychological aspects [3].

It is estimated that every year, thousands of people fall victim to unnecessary harm caused by public and private health services. AE is not caused intentionally but sometimes occurs due to the complexity of health care and the number of professionals involved [4]. Addressing this issue, the European Committee for Patient Safety (ECPS) has included patient safety as part of all levels of health care, from health promotion to the treatment of complex diseases [5]. In this context, dental care services are included in the global scope of patient safety, respecting all levels of complexity. It is worth noting that Brazil seeks to establish a culture of patient safety through the implementation of the National Patient Safety Program (PNSP), though this program needs to be more widely disseminated among

dental professionals [3,6]. The PNSP has included Primary Health Care (PHC) of the Unified Health System (SUS) as an area for developing strategies and actions to improve patient safety [3]. In Brazil, the dentists working within the SUS in PHC are those practicing community dentistry in public clinics at government Basic Health Units and are responsible for the population's oral health of a specific territory near their workplace [7,8].

In the dental field, it is known that the main AEs occur due to drug interactions, improper patient positioning in the chair, negligence and/or incompetence of the dentist during care, lack of knowledge of facial and/or dental anatomy, inadequate documentation, and poor communication between the dentist and the health team [9]. Often, such situations lead to the loss of dental elements, significant bone loss, aspiration of foreign bodies, infections, hospitalizations, and even death [10].

To avoid damage to oral health and to study patient safety in dentistry in depth, qualitative studies are fundamental and necessary. It is worth highlighting that the knowledge produced by oral health researchers through qualitative research not only achieves scientific responses but also addresses societal needs, committed to ethical and moral standards [11].

Considering the aforementioned assumptions and the limited number of qualitative studies addressing patient safety in dentistry, this study is justified by the need to develop an in-depth scientific foundation for understanding dental patient safety as a relevant public health issue within the routine practice of dentists in the public healthcare system. Understanding this framework can stimulate a culture of dental patient safety, along with the political and social capital related to health. The objective of this study is to understand patient safety in dental care from the perspective of primary health care dentists in a public health system.

2. Method

Hermeneutic study with interpretative chains constructed through the fusion of horizons, grounded in the philosophy of Hans-Georg Gadamer. This method was chosen as it enables the integration/fusion of dentists' perceptions of the research object with the researcher's interpretative analysis. This hermeneutic fusion facilitates a comprehensive and in-depth scientific understanding of dental patient safety. Grounded in hermeneutical philosophy, this approach allows for the interpretation of texts (transcriptions of dentists' speeches) by situating them within the real-world context in which dental care is delivered in the public health system. This study had its protocol and methodological rigor published [12] and was approved by the Ethics Committee at the Federal University of Rio Grande do Sul, and the Municipal Local Ethics Committee (5.720.834), on October 25th, 2022, and followed accreditation criteria for qualitative research [13].

Participants of this study were dentists working in the SUS, specifically in PHC in Porto Alegre city in the southern region of Brazil. Data production began with the construction of an interview script guided by Gadamerian philosophical hermeneutics, aiming to identify pre-established concepts, traditions, and experiences regarding patient safety in dental care. The script included guiding questions with conversation-triggering content such as the complexity of dental care, lived experiences involving possible accidents/adverse events, needs for patient safety during dental care, and the daily work of the dentist in primary health care in public service. The interview script is a questionnaire developed by the researchers and authors of the manuscript with the following questions: Do you think your daily work is complex? Please tell me something that you have experienced involving possible accidents/adverse events during your professional life. What do you think is necessary for patient safety during dental care? Tell me about your daily work as a dentist in primary health care in public service. Discussing dental patient safety with these participants revealed preconceived ideas and information from the interviewees. These insights are essential for the researcher to seek understanding clues [14].

Data collection was performed between September and December 2023, through semi-structured interviews. The interviews were conducted remotely using a web conference platform by a woman, a dentist, and a researcher (Ph.D), on pre-scheduled days according to participant availability. The interviewees did not previously know the interviewer. They were initially contacted by email, and 3 declined the participation. In case of agreement to participate, the consent was sent by email and digitally assigned.

The interviews were audio-recorded and subsequently transcribed denaturalized according to transcription norms for Brazilian Portuguese [15]. Two initial interviews were conducted for language pre-testing, script adaptation, and initial researcher contact with the field. These interviews were not used for analysis.

Participants of this study were dentists working in the SUS, specifically in the PHC in Porto Alegre city in the southern region of Brazil. There were 52 dentists eligible for the study. Sampling was determined by thematic saturation of data, which is an intentional qualitative sampling strategy. The total and final number of interviewees (n=16) was reached based on pragmatic considerations and data saturation [16-18]. This intentional homogeneous sample followed pragmatic inclusion criteria. Inclusion criteria were dentists working exclusively for SUS, with some dental specialty; more than 5 years post-graduation; more than 5 years working in PHC within the SUS in the municipality under study; and having experienced some accident or adverse event in their professional practice. The interviewees were invited randomly from a list of participants fitting the inclusion criteria.

Interviews were concluded upon theoretical saturation of the codes [19]. With a homogeneous sample, it is known that conducting 11 to 12 interviews achieves deep data saturation [19]. The interviews were sequentially coded. Upon completing the coding of one interview, another was coded. When the content of new interviews was represented by existing codes, the data were saturated. Following this perspective, two interviews were added after reaching saturation, as generally, two additional interviews beyond saturation do not add substantial new content to the collected data and thus ensure reliability in the chosen saturation technique [19]. In the fourteenth interview, all content was distributed among already established codes. The fifteenth and sixteenth interviews confirmed saturation, where all content was again distributed among previous codes.

With all content coded and saturated, data was systematized using Content Analysis [20] in the thematic categorization mode with the assistance of OpenLogos software. In this process, registration units were identified and analyzed for their core meanings, constructing thematic categories. Throughout this process, data were interpreted following a semiotic flow [21] with theoretical and hermeneutic support from the German philosopher Hans-Georg Gadamer [14]. To ensure internal validity and consistency, this study employed strategies such as expert members checking, reflexive analysis between the researchers, consensual external members' interpretation validity, and codification by qualitative software, thereby strengthening the trustworthiness of the findings.

2.1. Interpretive theoretical framework

This study is grounded in the philosophical hermeneutics of Hans-Georg Gadamer. Understanding is an inseparable action from the experience individuals have concerning the phenomenon to be interpreted. By looking at the experience of a lived reality, one arrives at the truth of that fact, thereby realizing Hermeneutics [14]. In this context, the researchers and authors of this study are dentists who have also experienced dental accidents and adverse events in their professional lives, similar to the study participants. Thus, the fusion of horizons [14] for understanding dental patient safety occurred naturally. By understanding the horizon of the interviewees' perceptions and merging it with the researchers' perceptive horizon, comprehension emerges as something the researcher proposes interpretatively.

Language is a means to understand a research object. It is in language embodied in dialogue, for example, that the speculative and investigative characteristics of a subject seeking the meaning of an object in their reality are presented [14]. In this theoretical assumption, some important aspects for understanding something through the communication of truth are highlighted. One aspect is the historical consciousness of the moment when seeking to understand something. In other words, understanding something is always immersed in the current time and the lived history. It is in the relationship between time and living that understanding is found. Understanding is something lived in the temporality of facts [14,22,23].

Another important concept brought to this theoretical framework is the issue of preconceptions presented in conversations and dialogues between humans. In the preconception of something, there is always an immediacy in seeking to understand the world. A concept about something is pre-established, and only then is the temporality of the situation observed. Adding to these aspects, the historicity of lived facts and the value of tradition and posture of the one verbalizing the truth are necessary to be observed by the interpreter in understanding texts (transcriptions). Thus, it is up to the interpreter to understand what is preconceived and then unveil the understanding with the temporality of historical facts/experiences that permeate the lived and reported situation [14].

Another important aspect is living the game. The game is the mutual participation of people communicating and building something that will represent the comprehensive truth of what is literally in this interpretative game [14]. For this study, the game is the quest to understand dental patient safety through multiple voices. This game is embodied in methods, interviews, and interpretations.

The fusion of horizons is fundamental for understanding. The fusion of horizons in a hermeneutic circle [24] is a comprehensive perception of the world that emerges internally in everyone. It is open to changes as it depends on the current time and the time when new experiences will be experienced [14]. The research participants bring their perceptive horizons that unite with the interpreter's perceptive horizon. This fusion of horizons is embodied in data interpretation and brings understanding to light.

These concepts and assumptions underpin Hans-Georg Gadamer's philosophical hermeneutics and essentially guide possible understandings of truth, always in motion over time, from which various interpretations can emerge. In this study, therefore, the interpretation comes from dentists and researchers who, in their professional practices, have experienced the object under study. Thus, this study is a Gadamerian approach to understanding dental patient safety.

3. Results

Even completing a hermeneutic circle of interpretation, observing the lived contexts and preconceptions brought by the participants, we know that the understanding constructed in this study relates to the present historical moment where there is a consolidated public system in Brazil and a growing social force for the effective inclusion of oral health in this public service. Besides this aspect, the fusion of horizons between the interviewees' statements and the researchers' interpretation is part of the game to understand the study's theme [14]. Therefore, in this interpretative proposal, it is essential to present the contexts, participants, and themes constructed within this hermeneutic circle. It is worth noting that, like other health fields such as Nursing, the Gadamerian perspective guides qualitative studies involving hermeneutic philosophy and health practices [25].

3.1. Contexts and participants

To build an understanding of something, it is necessary to know the participants who bring their perceptions about the reality of the phenomenon and the study setting [14]. The participants of this study are dentists, mostly women (9 women and 7 men), aged between 27 and 41 years, all with over 5 years of experience in PHC and community oral health, and more than 5 years post-graduation. All

participants work as general practitioners and have a specialty in either Community Dentistry or Public Health. All have experienced some dental accidents or adverse events in their professional lives. All freely agreed to participate in the study. This fact shows their interest in the subject, demonstrating a proactive attitude towards building fundamental scientific knowledge for dental patients. These participants already show social concern and an ethical profile towards their patients.

The study setting is the dental service in PHC within the SUS. The SUS is a public health system in Brazil with over 30 years of existence, focusing on social inclusion, comprehensiveness, and continuity of health care for Brazilians [26]. Primary and some specialized dental services are offered free of charge to the population. Primary services provided by the study participants take place in Basic Health Units, where multiprofessional teams, including doctors and nurses, work together [26]. Brazil needs to further integrate the oral health of Brazilians into the primary care services offered by the SUS [27]. The study participants advocate for greater inclusion of dentistry in primary health care within their public service workplaces. Public policies regarding the conditions of the workplace and the encouragement of safety protocols and culture are fundamental. Patient safety must be a priority for any public or private health system in any country [28].

Each interview lasted an average of 37 minutes. For writing this article, the interviews were translated into English and then back-translated to ensure linguistic reliability, considering the interviewees were Brazilian and spoke Portuguese. From the collected information, 27 codes were constructed, from which three thematic categories emerged. In this hermeneutic study, these categories provide an understanding of dental patient safety in primary health care within public health services.

As result the three thematic categories were: The subjectivities/personal perspectives of dentists in their dental practice within workplaces; Working in a culture of patient safety involves both the material aspects of infrastructure and human compassion; The multiprofessional work and the presence of a physician in the team result in a safer and more welcoming patient environment

4. Discussion

Results will be discussed in sequence, following the themes that emerged during the analytical interpretive Gadamerian hermeneutical process. A textual narrative, mixing excerpts from the texts, illustrating the perceptions of the interviewed dentists, and the researchers' interpretation, is presented in this discussion of the results.

Theme 1: The subjectivities/personal perspectives of dentists in their dental practice within workplaces and their recognition of vulnerability to potential errors

Different workplaces provide different possibilities for practicing dentistry safely. The uniqueness of each professional, their workplaces, and different human subjectivity/personal perspective in professional practice guide different perceptions of dental patient safety. Subjectivity is something internal to individuals, built by the world they live in. It is the particular way each individual sees and perceives the world. This process is permeated by the individual's history and life events [22].

The particular way a dentist views their workplace, in their daily reality, reflects the perception that patient safety is associated with good interpersonal relationships at work. These relationships generate a safe environment for patient care and foster mutual trust and support in case of dental events and incidents in the clinic. Good professional relationships are necessary to create a safe environment for the patient. This fact can be understood as different judgments among health professionals with the same goal of caring for people's health [22].

“Yes, I believe that in large institutions (like the SUS), you end up having greater security. Of course, this depends on a series of factors such as interpersonal relationships and

availability, right? But since the issue of responsibility comes before anything else, I think it's about collegiality. We end up supporting each other in a healthy workplace.” Man, 6 years working in PHC within SUS

People's speech carries latent information about the world around them [14,22]. It is noticeable, for these community health dentists, that professionals working collectively in these workplaces are available to assist their colleagues. This fact creates safety in the workplace. This safety in the workplace leads to patient care safety and the sharing of experiences among professionals. This fact provides greater qualification for dentists on how to act in adverse situations related to possible dental accidents.

In the following sentences, should “:::” or “+++” be used, or what can we use instead of these repeated signs? If it is necessary, leave in that way.

“Yes, it is really good to have the opportunity to discuss the case with those in the place (health unit) where I work. It is::: very good to have this support to be able to debate and help the patient in the best possible way, like the situation I mentioned to you earlier” Woman, 6 years working in PHC within SUS

Bringing the subjectivity of dental practice to discuss patient safety, we look at the uniqueness of each dentist and their workplace in primary health care. It is unanimous among participants that calm planning of the procedure is fundamental to patient safety. Thus, it is understood that the professional needs adequate time and tools to plan the dental procedure to avoid errors and possible harm to the patient. Organization and prior planning of actions are fundamental to patient safety [28,29].

In the following sentences, should “:::” or “+++” be used, or what can we use instead of these repeated signs? If it is necessary, leave in that way.

“Many times we have to say no to the patient! and::: say::: I will study your case and you can return::: then I will provide your treatment plan or treatment option (+++). And then, I believe that by calmly following protocols, we can minimize risks::: we work with lives, right?” Woman, 15 years working in PHC within SUS

Proper planning is associated with a professional attitude that includes appropriate clinical and ethical conduct to build the best way to care for the patient with accurate information [30]. This is the reality of these participants, as they live in the same historical moment of the SUS, where patient safety protocols are guided by the National Patient Safety Program [3]. Following this national program, operationally, there is concern about reviewing patient records, discussing cases with other professionals, observing previous allergic reactions, among other planning behaviors. Moreover, it is interesting to note that these professionals, concerned with safety and ethics, express the need for better training to ensure their patients' safety. It is important to highlight that primary care professionals claim the need for knowledge about patient safety and require ongoing education initiatives. These are important aspects of patient safety [31].

In the following sentences, should “:::” or “+++” be used, or what can we use instead of these repeated signs? If it is necessary, leave in that way.

“So I think::: I think::: that to avoid and improve this (patient harm), training is essential (+++), and ongoing education is always necessary.” Woman, 11 years working in PHC within SUS

“And I think that these (trainings) are very important to have, and I believe that this cannot be neglected because, after all, no one is immune to accidents happening”. Man, 7 years working in PHC within SUS

Training on dental patient safety is frequently cited as a necessity. The need for training demonstrates a focus on patient safety [32]. Knowing the topic leads to this safety and creates an ethical interaction between the dentist and the patient [30].

In the hermeneutic circle's process of understanding dental patient safety, an important aspect associated with the need for training on the topic is the perception of vulnerability. Vulnerability is understood as a feeling of helplessness and the recognition that a dentist can make mistakes and compromise patient safety. This recognition, that a professional can commit errors, enhances the prevention of these errors through the pursuit of training on patient safety. Thus, recounting an event, in this case, an experience with patient harm, is something alive and operative in the act of understanding [22]. In other words, vulnerability is understood as something alive in the reported event.

In the following sentences, should “:::” or “+++” be used, or what can we use instead of these repeated signs? If it is necessary, leave in that way.

“There was this incident I told you about with the lady who had acute pulmonary edema, that she OMITTED that::: that::: I asked her (the patient) if she was taking any medications... eh::: she said: Yes, I took. And::: I believed::: And actually, she had not taken all the medications that day, she hadn't taken the medications. Yes, it happened. The reason she had pulmonary edema occurred. Actually, it was my mistake to believe her.” Woman, 6 years working in PHC at SUS

“I think it was more of a technical error on my part. Perhaps underestimating the anatomical position of the tooth, right? I hadn't observed that it was so close to the maxillary sinus, so intimately connected”. Man, 7 years working in PHC at SUS

“Because everyone (dentists) is subject to accidents(+). It's just that... well, we are human and things happen”. Woman, 11 years working in PHC at SUS

We understand, then, that a dentist who acknowledges their vulnerability to making mistakes but strives to stay well-informed, ethical, concerned, trained, updated, and well-guiding in their patient will provide a safer environment for their patient during dental care in the health center.

Theme 2: Working in a culture of patient safety involves both the material aspects of infrastructure and human compassion

The infrastructure of the workplace is also highlighted as necessary for understanding dental patient safety. A dentist working in an environment where the infrastructure supports comprehensive and multiprofessional care will result in patient safety. A satisfactory workplace infrastructure, according to the workers' perception, is fundamental to patient safety in primary care [31,33]. In addition to this aspect, the presence and access to adequate equipment and tools for treatment have a positive impact on the conditions and safety of the workplace for patient safety [34,35]. Good working conditions are important aspects of understanding dental patient safety:

In the following sentences, should “:::” or “+++” be used, or what can we use instead of these repeated signs? If it is necessary, leave in that way.

“And::: yes, it is indeed a matter of patient safety because we have high-quality dental materials, we work with excellent materials in the health unit So, this is just an example I am giving you of how we have good materials and professionals” Woman, 11 years working in PHC at SUS

“For example, resources like blood tests::: are quite easy to obtain here::: and help us avoid errors or harm to a particular patient during dental care.” Woman, 15 years working in PHC at SUS

High-quality dental materials and the ability to request general health exams, such as blood tests, are essential because they characterize appropriate working conditions that prevent potential accidents and adverse events in dental care. All perceptions about workplace conditions and materials are based on the participants' previous experiences. It should be noted that prior experiences condition our interpretations and behaviors regarding the phenomenon [14,22]. Experiences like the one cited below may prompt the dentist to avoid new accidents with dental materials during a procedure.

In the following sentences, should “:::” or “+++” be used, or what can we use instead of these repeated signs? If it is necessary, leave in that way.

“I::: once had a fracture of a nerve extractor that... in fact, had been in use for some time... it was of good quality, and I used it thinking it was still in good condition. I was able to see the tip and managed to think, and resolve... but since then, I no longer use::: I no longer reuse (++). Not anymore”. Woman, 11 years working in PHC within SUS

By observing the impact of infrastructure on dental treatment and patient safety, we identify the need to establish a culture of safety in the workplace. Culture is something that develops through traditions and behaviors repeated over time [14,22]. Health professionals who share the same values, attitudes, perceptions, and competencies develop behavior patterns to ensure patient safety in their workplace [35]. Below, we present an important excerpt on the perception of safety culture. The concept of medication illustrates a context where a safety culture results in proper prescriptions, avoiding adverse events for the patient.

In the following sentences, should “:::” or “+++” be used, or what can we use instead of these repeated signs? If it is necessary, leave in that way.

“There (++) are::: other factors that are more about workflow. There is, for example, a correct prescription. The safety related to medication safety, the patient safety culture related to medication safety, which is something very important... I think for the overall safety of people::: to receive the correct prescription, to receive the correct guidance on how to use that medication.” Man, 7 years working in PHC at SUS

Aspects such as the constant updating of prescriptions and monitoring the medications used by the patient are decisive for maintaining the safety culture in PHC, as well as the presence of appropriate medical and dental records[35].

In the following sentences, should “:::” or “+++” be used, or what can we use instead of these repeated signs? If it is necessary, leave in that way.

“So we::: we also look at the medical record to ensure the procedure we are going to perform, right? Ensuring this aspect... having an updated and correctly filled out medical record.” Man, 12 years working in PHC at SUS

Effective communication is a crucial element of a patient safety culture [33]. It is known that the patient record is an important communication tool in workplaces, and communication is fundamental to understanding human health [22]. Communication through a work tool, such as a medical record, or direct communication with the patient, is essential for understanding the health practices of the person under the health professional's care. Understanding the person being treated guides better and safer decisions as it involves scientific knowledge and human consciousness in care practices [22].

Considering human consciousness, it is necessary to highlight human compassion in health care. Often, personal barriers and a lack of compassion hinder changes in the workplace and consequently a safety culture. The lack of compassion is an impediment to openly discussing patient safety [36]. Being a health professional aware of the comprehensiveness of human care means that compassion becomes a present element in the patient safety culture in workplace. The overall evaluation of the patient is fundamental in the patient safety culture in primary health care [29,37]. The participants of this study view patient safety from a comprehensive care and compassion perspective.

“Usually, the thing I tend to ask during the anamnesis and then avoid (++) ... potential problems. to avoid certain types of medication, depending on the patient's medical history.... and also, I always like to know about the family situation... if they live in the territory (near) the health unit... looking at that person as a whole.” Woman, 15 years working in PHC at SUS.

This comprehensiveness of care, concerned with the human perspective of those receiving dental care, even if not a technical issue, is part of the culture of PHC dentists. This aspect reflects in the improved quality of care resulting from this patient safety culture. Compassion directly affects the quality of care and patient safety [38]. A compassionate health professional has a deeper and more concerned view of the patient's entirety. Moreover, a compassionate professional is more meticulous, which ensures lower risks and harm to the patient [38].

Compassionate professionals, like the participants in this study, have greater skills for making human connections. Thus, a culture of dental patient safety in PHC permeates from the workplace infrastructure to compassion in health care. These aspects contribute to building a patient safety culture in the workplace.

Theme 3: The multiprofessional work and the presence of a physician in the team result in a safer and more welcoming patient environment

From the perspective of the subjectivities of each of these compassionate and ethical health professionals living in a culture of patient safety, the horizon of the dentists' perceptions merges with the researchers' interpretative horizon in understanding the need to work together as a team. Teamwork must be encouraged in primary care. Often, these professionals (doctors, nurses, pharmacists, psychologists, and dentists, among others) perform their work in isolation, not developing professional interaction and collaborative health practices [4].

Even though in many health systems dentists work in isolation, a fundamental aspect highlighted by the participating dentists in this study is quite the opposite. Real multiprofessional work reflects in the safety of the patient in dental care. Belonging to a multiprofessional health team is very important for the dentist [39]. This perception of patient safety brought by professionals aligns with the horizon experienced by the interpreters of this study [14].

“There are screening and welcoming methods that:::, in my view, are adequate. We are (++) a team that is in sync. So, before the patient undergoes dental care, they also go::: through a welcoming process by the team. This results in more safety and prevention of avoidable harm.” Man, 16 years working in PHC within SUS

“Hum::: I think that by working and belonging to a team where we (++) have various professionals (++) , a multiprofessional team. Isn't it? (+++) You have access to the doctor, the nurse... You can consult the doctor immediately regarding medications... in short, about the safety of that dental patient::: everything.” Woman, 15 years working in PHC at SUS.

Patient safety in dentistry is enhanced by knowledge of the organization of the service and the organization of teamwork [40]. The presence of and belonging to a multiprofessional team results in safer actions in dental practice and patient treatment. The Gadamerian perspective allows us to associate teamwork with an environment of patient safety culture [14,22]. Thus, it is important to highlight that dental patient safety is also built through team leadership, multiprofessional support, effective communication between professionals, team, and patient, and patient-centered care [40,41,42].

From the importance of the multiprofessional team in dental patient safety, we understand that the presence of a doctor is fundamental for dental patient safety in primary care. In Brazil, traditionally, the figure of the doctor plays a legitimizing role in the team's decision-making about a patient's treatment, which is linguistically evident [43]. In a Gadamerian reading of patient safety, tradition must be brought into the study scenario. Thus, all current understanding occurs from a horizon interconnected with the past, envisioning a future. This is the character of tradition itself, where the various ways of looking at the world are made up of the past, present, and future [14].

In this process, the socially constructed image over time of the physician is one of a savior, a sovereign decision-maker, and a great advisor [44]. This universal and perennial prestige traditionally carried by this professional category [45] is not directly perceived and reported by these professionals. Here, we do not aim to discuss this social image of the physician but rather to present how it is traditionally perceived by the study participants as positive for dental patient safety, seen as a partnership within the team. It is important to reiterate that in this study, we understand that these are multiprofessional teams living in a culture of patient safety. Thus, dentists working in a multiprofessional team perceive the doctor's role as crucial for dental patient safety. The presence of the doctor in the workplace brings an atmosphere of mutual trust and safety [39].

“So, before starting a medication, I would talk to the doctor who was doing the follow-up, and we discussed the case to CONFIRM if it would be appropriate and important for the patient to use it. So, it is very good, it avoids problems for the patient.” Man, 10 years working in PHC within SUS

“I was just recently talking with my husband (+++), and we ended up feeling safer in a health unit. Because it's::: like I was telling you... If you have a patient who has an adverse reaction to anesthesia, even if it's rare, I know there will be a nursing technician (+++), a doctor who will know how to help me administer adrenaline, for example!!” Woman, 5 years working in PHC at SUS

In understanding dental patient safety, the presence of the doctor in the team makes both the patient and the dentist feel more secure about potential adverse events requiring quick medical

intervention, which the dentist may not be qualified to provide. It is believed that the presence of the doctor in the team represents an atmosphere of patient safety and mutual support among professionals [39]. Therefore, we believe that dental patient safety is related to the presence of the doctor in the health unit team, as it enhances patient safety during dental care. The doctor assists in case discussions and decision-making by dentists regarding their care practices to prevent adverse events and potential harm to the patient.

We can still understand the dental patient's safety by recognizing that the patient must feel safe in the environment where they seek care, as well as with the professional who attends to them. For safety, the patient must feel secure, welcomed in the health unit, and thus trust the professional and be satisfied with the received care [39].

“The purpose is to feel cared for as well:: welcomed, you know? (+++) because it's a sequence of times we see the person and we will see the person many times during the year either in the office, or outside, or in the reception area, we will see each other on the street, doing home visits:: This creates a lot of patient security with the team... and with a whole team that provides comprehensive care for this person Man, 12 years working in PHC AT SUS

“First, when I receive the patient:: I do a very thorough anamnesis and I also care about the patient:: we need to create a welcoming environment... so this patient... they will be able to talk and report if they have any health problems:: allergies:: anyway (+) sometimes even fear of the dentist we discover (light laugh)” Woman, 11 years working in PHC at SUS

We observe that, in the perception of these dentists, the primary care philosophy positively and directly impacts dental patient safety. Primary health care provided with insecurity or inefficiency can increase the occurrence of preventable harm and lead to unnecessary use of hospital and specialized resources [9]. However, as observed in this study, welcoming, bonding, continuous care, and listening are fundamental to properly attending to a patient [31,46,47]. The patient feeling safe and confident with the care they receive characterizes a partnership with the health professional. This partnership builds appropriate treatment where the patient feels secure with the care [22].

Completing this interpretative hermeneutic circle, we revisit the issue of compassion. Compassionate professionals create better therapeutic partnerships with their patients, which leads to lower health risks, preventing harm and improving the quality of care provided [38]. Furthermore, patients believe and follow what compassionate professionals advise. Thus, by believing, the patient feels more secure with the treatment [38]. We observe here that compassion permeates teamwork, culture, and traditions in workplaces, as well as the professional's attitude in ensuring safe care, preventing harm, and mitigating health risks for dental patients.

5. Conclusions

In conclusion, for dentists working in the Brazilian public health services, patient safety is involved in a multi-professional support and is also associated with dentist compassion, teamwork, and the presence of a physician in the work environment. This study has some limitations. All interviews were conducted remotely using online digital communication tools. This method of interviewing might have made it difficult to establish rapport. Moreover, this study presents an interpretative proposal that cannot be generalized to the perception of dental patient safety in all public health services. It is specific to the Southern Brazilian context. As a recommendation, future in-depth qualitative studies should be

conducted in diverse Brazilian and international contexts to develop a comprehensive understanding of dental patient safety and inform and guide clinical practice.

Ethical statement

Ethics Committee approval number of this study is 5.711.630 by the Ethics Committee at the Federal University of Rio Grande do Sul, and 5.720.834 by the Municipal Local Ethics Committee (October 25, 2022).

Conflict of interest:

The authors declared no potential conflicts of interest concerning the research, authorship, and/or publication of this article.

Authors' Contributions:

All authors mentioned in this paper have significantly contributed to the research in all steps. L.G.L.O: Conceptualization, Methodology, data collection, Formal analysis, Writing, and original draft preparation. A.F.B.: Conceptualization, Methodology, data collection, Formal analysis, Writing, and original draft preparation. All authors read and approved of the final manuscript.

Generative AI statement:

The author(s) declare that no Gen AI was used in the creation of this manuscript.

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