Reflections on the care of special needs patients in the face of the COVID-19 pandemic

Azevedo*, Marina Sousa; Oliveira, Rosiane Pereira de; Schardosim, Lisandrea Rocha; Costa, José Ricardo Sousa; Figueiredo, Márcia Cançado; Potrich, Mariana Vianna; Condessa, Aline Macarevich

*Department of Social and Preventive Dentistry, Federal University of Pelotas, Pelotas/RS, Brazil

Abstract The worldwide spread and the high virulence of COVID-19 led to a pandemic since March 2020, as it affects more than 220 countries by the end of July 2020, wherein these numbers increase daily. This unprecedented situation has resulted in a significant impact on health and dental care, in both private and public sectors, affecting the hospital and community-based special care dentistry services around the world.

Disclaimer
The following text is a preprint. To be included in EmeRI, the depositing journal evaluated it preliminarily and deemed its scientific contribution sufficient for it to be accepted for peer review. It may or may not be approved for final publication.

The responsibility for the content and publication of the preprint rests entirely and exclusively on its authors. Therefore, neither the depositing journal, nor the Brazilian Association of Scientific Editors, nor the Brazilian Institute of Information in Science and Technology, nor the United Nations Educational, Scientific and Cultural Organization, nor any person linked to any of these institutions endorse it or answer for any consequences of its use, whatever the purpose is or has been.

This work is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License.
Dear Editor,

In 2019, the virus of the new severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), also called coronavirus disease or COVID-19, was initially detected in Wuhan, China. It is known that this virus has a high and sustained transmissibility among people and, therefore, it spread to a number of countries and was considered in March 2020 a pandemic by the World Health Organization. Thus, it has become one of the most significant challenges for the health professionals.1,2

Dental professionals are among the professionals with the highest risk of contagion according to a study that considered the physical proximity required in each profession and the level of exposure to other diseases and infections.3 Thus, dental care presents a high risk for the spread of the new coronavirus, due to the high viral load presents in the upper airways, the need for close contact with the patient and the great possibility of exposure to saliva and blood, providing an even greater risk by creation of aerosols inherent to some procedures.4

With the arrival of this new technological-scientific challenge, the biosafety protocols are being revised, the dental teams need to be constantly updated due to the frequent changes regarding orientations and care. In addition, there are no official documents and determinations on how dental care will be performed in the future. Currently, the recommendation to the dentist is to postpone the procedure, unless it is clinically urgent or an emergency.4

Dentistry for special needs patients

Dentistry for Special Needs Patients is one of the specialties recognized by the Federal Council of Dentistry.5 The special needs patient (SNP) in dentistry comprehends any user who has one or more limitations, temporary or permanent, any mental, physical, sensory, emotional, growth or medical impairment, that avoids the patient from being exposed to a conventional dental situation.6 It is important to emphasize the difference between people with disabilities and SNP in dentistry. Not all people with disabilities fall under the SNP specialty, as patients with a physical disability, for example, they can receive conventional dental care. Likewise, patients with systemic impairment and without disabilities may have a special need for dental care and be classified as a SNP.
It is recognized that for an adequate dental care to special needs patients (SNPs), dental practices must be guided by the welcome, the desensitization of the patient and the creation of bounds between the patient and the family.\textsuperscript{7}

The care of SNP involves particularities. It is necessary to reduce fears and anxieties for dental care to happen. Behavioral management techniques are very effective, however, to be accepted, they need the creation of bonds, through the establishment of a trustful relationship, and thus, like any relationship, it requires time and regularity to be built, which means that this process usually requires some appointments and many patients need a routine during the appointment to feel safe.

It is known that a negative dental experience can lead to the patient's lack of cooperation, in later appointments, or even abandonment of treatment. In view of the COVID-19 pandemic, new and dynamic guidelines are emerging regarding the prevention and control measures that should be adopted during dental care for the entire population.\textsuperscript{8} Right now, in order to respect the guidelines regarding urgency and emergency dental care, and all requirements to prevent contamination, changes in the dental routine are being necessary.\textsuperscript{9,10} No matter how much dentists try to familiarize the patient with the “new” dental environment, a new way of seeing the professional with all his dressing and the absence of physical contact, will be a great challenge for the care of SNP.

**Current challenges for the care of special needs patients**

Although some states have already regulated the appointments for elective procedures by health services, some points about the assistance of SNP need to be better discussed. The first point to be considered is that many SNP are at the risk group, which means that, they are people in conditions or with factors that put them at higher risk for developing the severe illness, as well as leading them to death.

Among these conditions, we can mention people with heart diseases, hematological diseases, metabolic disorders, neurological and developmental disorders that can compromise respiratory function or increase the risk of aspiration, such as cognitive dysfunction, cerebral palsy, Down syndrome, among others.\textsuperscript{11} In addition, many patients need their family members to perform their daily care. Thus, providing dental care that can be postponed is putting these patients, as well as their family members/caregivers at risky situations of contamination without preserving their safety and integrity.

Because, it must be foreseen that, in addition to dental care, which in itself already provides a high risk of contamination, there is still the need to move these patients and their caregivers from home to the dental office, putting them on exposure of more sources of contamination. The most limited cases, which need to be seen at the Dental Specialty Centers (DSCs) in the public network, will have an even greater displacement, since these services are usually located in central regions of the cities. Therefore, if there are no conditions to receive care at their neighborhood's Public Health Care Centers (PHCs), it is very likely that many patients will need collective public transportation to arrive at the DSCs.

Another factor to be considered is that many patients require the presence of a companion during dental care, either to mediate communication between the patient and the dentist or to help with protective stabilization, or even to feel safe and allow the dental treatment. This also puts the family member on unnecessary exposure and still in need of providing personal protective equipment, known to be so scarce nowadays.

In the population’s imagination, we know that the dentist’s image is always seen as a negative representation, being associated with fear and pain. One of the main barriers reported by SNP’s caregivers to seek dental care is the fear of the dentist.\textsuperscript{12} So, another challenge will be in relation to behavior management. It is important to use integrated care techniques with a general approach, but individualized, for each patient. Consequently, behavior management is seen as both art as well as a science, which invariably depends on building a relationship. There is no single application of the techniques created to assist the SNP, but there is a continuous, detailed method that aims to develop and nurture the relationship between the patient, the professional and the family, which will build trust in order to relieve fear and anxiety.\textsuperscript{13} When it comes to urgency care, every approach is even more complex, as there is often no time to build this relationship.
Regarding the management of the anxiety and fear of the SNP, it is understood that the information provided to parents and / or caregivers can contribute to the success of the first contact between the professional and the patient. Nowadays, technological tools can be excellent facilitators. Assistive technology is a range of low- and high-tech resources and services that enhance or provide skills in different contexts, allowing, for example, expanding the forms of communication.\textsuperscript{14} The use of these resources, some of which are already present in our daily lives, such as the internet, videos or specific websites, can be effective solutions to introduce parents / caregivers and patients to the dental practice that is being adopted in times of pandemic. Prior contact through videos can serve as an educational tool to help them to be prepared for the different approach.

According to studies carried out with children, the technological video tool, made children report less anxiety when they watched a video, before the appointment, that showed a child being attended and leaving the appointment happy. Thus, using videos, made in the dental office itself, for SNPs to assist before the appointment, can be beneficial for the patient to become familiar with the new personal protective equipment, which are necessary in this period of facing the coronavirus, as well as the new approach that limits emotional physical contact, such as hugs and kisses, so common and so present in the dentist’s daily routine who attend SNPs.

In this context, it will be even more necessary to abandon the old paradigm that places the people with a special need in a position of disability, and believe in their potential, sometimes underestimated by their caregivers and professionals. Although we can infer from the fact that the patients do not understand, it is essentially necessary to clarify the situation, and offer an opportunity to overcome it, believe in their potential and capabilities is also an important step in the inclusive perspective. It is necessary to overcome prejudices and the impact that a diagnosis has socially, then it will enable the SNP to produce different strategies and resources to deal with the existing and emerging demands of social contexts.\textsuperscript{15} Hugs and kisses are ways of establishing and expressing subjective contents such as affection, care and welcome. However, these feelings do not dependent only of those demonstration forms, as they are constructs socially learned, so our challenge is to build new ways of achieving them.

It is known that mental health at work has been a field of investigation and practice that takes into account the interaction between the subjective aspects of the professional and aspects related to the work environment, as responsible for the arrival of psychic illnesses.\textsuperscript{16} Stressful situations at the work environment can lead to the occurrence of Burnout Syndrome, which is when the professionals feel that their own resources are lost or inadequate for the demands of their work. This is a process that can happen when facing the challenges of dental care in the context of the pandemic.

The Mental health was affected due to the pandemic, especially among health professionals. Changes related to their work, due to the fear of being contaminated or to contaminate their patients, concerns about their health and their relatives health are reported by professionals.\textsuperscript{17} Thus, it should be taken into consideration that the dentist is also anxious and stressed, because of the issues mentioned, as well as for not knowing for sure how the patient will react to the new clothing and the way the appointment will be.

It is also possible that communication, an essential tool in the bonding process and in behavioral management strategies, may be impaired, because the sender’s (dentist) facial expression and body language may not be consistent with the security and trust message that is intended to be send. The professional runs the risk of not being able to send the message he wants, because emotional aspects influence cognitive processes, changing his ability to use technical knowledge properly. In addition, it is worth noting that emotional aspects are often emitted in a nonverbal communication, through involuntary physical somatizations, such as tremors, sweating, blurry vision, which can affect the dentist’s clinical skills. Therefore, mental health care actions for professionals are essential to face this moment.

At this point, we can realize that the big challenge is to determine how the approach to care will be done, taking into account the biosafety, both for patients and family members, as well as for oral health professionals, establishing a trustful and faithful relationship and also avoiding a negative dental experience for SNP.\textsuperscript{18,19} Technological tools are also expanding access and health care for the population. Teleconsultation, for example, became an important tool used and expanded during the pandemic by several areas of health.
agencies have widely warned people to avoid going to clinics, without first looking for a “telemedicine” channel, to clear up doubts and check the real need to go to an emergency room.\textsuperscript{20}

The growing use of these technologies brings new perspectives for dentistry. Tele dentistry was described as a tool of interaction and communication coming from telemedicine to exchange data and information about health and to provide health services in situations where there is a need to transpose geographic, temporal, social and cultural barriers, but there is still no consensus signed.\textsuperscript{21}

While the medicine regulates telemedicine for the period of the pandemic, expanding its activities, optimizing health care, protecting doctors and patients who can interact without the need of physical contact, the Federal Council of Dentistry, through resolution No.226/2020,\textsuperscript{22} which provides the practice of remote dentistry, if on the one hand seeks to protect dentistry from the degradation and misconduct of professionals, on the other hand it hinders the oral health care of patients in this critical period, since it prohibit the practice of remote dentistry, mediated by technologies, for the purposes of consultation, diagnosis, prescription and preparation of a dental treatment plan. However, it allows the exchange of information and opinions between dental surgeons about patients, in order to provide better assistance, as well as telemonitoring between appointments of patients undergoing treatment. It also admits, as long as the state of calamity lasts, the tele orientation carried out by a dental surgeon with the sole and exclusive objective of identify, through applying a preclinical questionnaire, the best time for the realization of the face-to-face appointment.\textsuperscript{22}

Finding ways to maintain the bond and the control of patients’ oral health, even at a distance, should be a measure to be considered for the SNP and does not seem to violate the Council’s resolution. Interventions that incorporate the family and caregivers as protagonists of the treatments have been showing great efficacy and gaining a privileged place in the care of SNP. Family-centered care models indicate that, more than any technique or professional, the family is the one that promotes the most effective results.\textsuperscript{23} Thus, psychoeducational strategies, which address the needs of families, will be good resources for dental care in this context. It will be important to guide the family to understand that regular care at home can prevent more invasive procedures. Thus, encouraging patients and their caregivers to maintain oral hygiene properly, a healthy diet and to follow the guidelines given by their dentists before the pandemic is a way to maintain SNP’s oral health and avoid unnecessary dental interventions.

During the face-to-face dental treatment of SNPs, in some cases, protective physical stabilization should be used in order to protect the patient and the team during the dental procedure. These advanced behavior management techniques allow, in some cases, to perform procedures on little or uncooperative patients with greater safety.\textsuperscript{13} The techniques applied in the daily routine have some flaws when faced with greater biosafety demand, and can severely expose all people involved in the health-disease system. The fact that some SNPs are attended mostly with the help of family members and other health professionals, due to the possible need for stabilization, puts more individuals at risk of contamination by the virus, so it is necessary to carefully evaluate the need for intervention and, if it is really essential, it is necessary to take all the current biosafety measures,\textsuperscript{10} always considering risks and benefits and looking for minimal intervention dentistry.

It should also be mentioned that during the COVID-19 pandemic, some experts are not recommending, even for urgent situations, dental procedures under sedation / inhalation with nitrous oxide/oxygen and under medication sedation, due to the potential risk, among other reasons, of needing life support measures that involve manipulation of the airways and use of the hospital network,\textsuperscript{24} although this is not a consensus.\textsuperscript{25}

It is necessary to think that there will be emergency dental situations in patients for whom outpatient care is very difficult. Not just in relation to possible accidents, but also due to a greater risk of contamination. The first option should be a medication support, trying to resolve the condition of pain or edema, without requiring clinical intervention during the pandemic. In cases that the drug support is not sufficient, clinical intervention will be necessary, and it will be difficult to perform the procedure in absolute isolation, the main barrier to contain the aerosol. In these situations, dental care under general anesthesia with techniques that resolve the problem and that avoid others short-term interventions, is perhaps the best alternative, whether this alternative exists. Although the authors are not aware of any guidance from Brazilian dental councils and associations regarding the use or not of sedation during the period of COVID-19 pandemic.

\textbf{Azevedo, Marina Sousa; Oliveira, Rosiane Pereira de; Schardosim, Lisandrea Rocha; Costa, José Ricardo Sousa; Figueiredo, Mârcia Cançado; Potrich, Mariana Vianna; Condessa, Aline Macarevich (2020). Reflections on the care of special needs patients in the face of the COVID-19 pandemic (preprint submitted to: Brazilian Journal of Dentistry). EmeRI - Emerging Research Information. DOI: 10.18363/preprint2020005.}
Thinking about the care of SNP at hospital network, according to the latest guidelines for the prevention and control of infections by the new coronavirus for surgical procedures, elective procedures should be postponed, non-essential elective surgeries canceled, as well as endoscopies or other invasive procedures, taking into account the local epidemiological situation, since the occurrence of COVID-19 does not have a uniform distribution in the country.4

In any case, it is essential that health services daily evaluate with security their decisions to perform elective surgical procedures, and that they always take into account the possibility of having to interrupt again the essential elective surgeries, in case the local epidemiological scenario become unfavorable.

And the future?

It is still very difficult to establish when and what new measures will be taken in relation to dental care. There is still much to learn about COVID-19 and research is underway around the world, attempting to better understand the disease, testing possible treatments and creating a vaccine. While there is no vaccine available to prevent infection, taking actions to stop the virus from spreading is still the only way to prevent COVID-19.4

So, for the moment, a lot of caution, ethics and equilibrium are needed. The anguish to provide care to the SNP can cause an even greater problem, not only for the patient, but for the entire population. Thus, professionals must be very rational in this moment of so many uncertainties, when considering dental care, thinking about risks and benefits and, if possible, postpone it. In addition, being always informed and updated to provide safe dental care to SNP and great respect for patients and for the entire community.

Given this scenario, the need for cooperation in teaching, research and services, previously existing, should be reinforced and solidified. Expanding the capacity for information acquisition by professionals working in the SNP area can reduce anxieties, stimulate and qualify the approach.

Through the training of new professionals and on the development of researches that look for the best way to provide accessibility, the universities assume an important role in the construction of “the new”. In addition, the services, benefited from what will be created and innovated, especially those of the public network, with their scarce structural, material and human resources, should reinvent themselves in a biosafety way, but not less resolute.

This is an unprecedented moment of significant and quick changes that impact the professional life of the dentist who works with SNPs and, this new emergency demand that is presented to him, may require reflections, strategies and new referrals. There is no doubt that this moment gives to all dentistry the opportunity to face old fears, attempt to control all anxiety, and allows to face with work, innovation and proactivity the renovation of dental practice focused on SNP.

It is not acceptable the justification of further reducing the offer of dental care access to SNP because we are not prepared for this “new”. Therefore, it is reinforced the need of organization and share management among all instances and institutions guiding dental practice, with true, real and relevant social impact.

It is believed that this crisis will not only impact those contaminated by COVID-19, but all users of the health system, since other health problems will be harmed and several accumulated demands will have to be resolved in the future, including oral health. The Resolution of the Federal Council of Dentistry,22 which provides the practice of remote dentistry, is the way to be closer to patients in this period of crisis. Thus, the question about the performance of dentists who attend SNPs in this teleconsultation modality should be immediately placed at the center of the discussions. This tool is essential for the patients’ oral health care and for maintain safe care in a time of pandemic.

The daily impact on the care of SNP is huge. Therefore, it is important to establish a contingency plan to protect them and also to maintain the essential activities of the dentist. This population, that has already so much difficulties in accessing oral health services, cannot be the most affected in the pandemic. The principle of equity has never been so necessary to guarantee the oral health of SNPs.
Azevedo, Marina Sousa; Oliveira, Rosiane Pereira de; Schardosim, Lisandrea Rocha; Costa, José Ricardo Sousa; Figueiredo, Mârcia Cançado; Potrich, Mariana Vianna; Condessa, Aline Macarevich (2020). Reflections on the care of special needs patients in the face of the COVID-19 pandemic (preprint submitted to: Brazilian Journal of Dentistry). **EmeRI - Emerging Research Information**. DOI: 10.18363/preprint2020005.

References


Submitted: 06/19/2020
Accepted for publication: 07/017/2020

Correspondence author
Marina Sousa Azevedo
Email: marinasazevedo@gmail.com

Mini Curriculum and Contribution of Authors:
1. Marina Sousa Azevedo - DDS. PhD. Contribution: Review of the literature, preparation and draft of the manuscript; critical review and final approval. ORCID: 0000-0002-7519-6808
2. Rosiane Pereira de Oliveira - Dentistry Graduate Student. Contribution: Review of the literature, preparation and draft of the manuscript; critical review and final approval. ORCID: 0000-0002-7254-8732
3. Lisandrea Rocha Schardosim - DDS. PhD. Contribution: Critical review and final approval. ORCID: 0000-0001-9957-8029
4. José Ricardo Sousa Costa - DDS. PhD. Contribution: Preparation and draft of the manuscript; critical review and final approval. ORCID: 0000-0002-2542-2053
5. Márcia Cançado Figueiredo - DDS. PhD. Contribution: Preparation and draft of the manuscript; critical review and final approval.
6. Mariana Vianna Potrich - Psy.D. MSc Contribution: Review of the literature, preparation and draft of the manuscript; critical review and final approval.
7. Aline Macarevich Condeessa - DDS. MSc. Contribution: Preparation and draft of the manuscript; critical review and final approval. ORCID: 0000-0002-8129-4324

Azevedo, Marina Sousa; Oliveira, Rosiane Pereira de; Schardosim, Lisandrea Rocha; Costa, José Ricardo Sousa; Figueiredo, Márcia Cançado; Potrich, Mariana Vianna; Condeessa, Aline Macarevich (2020). Reflections on the care of special needs patients in the face of the COVID-19 pandemic (preprint submitted to: Brazilian Journal of Dentistry). EmeRI - Emerging Research Information. DOI: 10.18363/preprint2020005.