

# Covid-19 and dental care for patients with special needs in Latin America

## *Covid-19 y la Odontología Latinoamericana para pacientes con necesidades especiales*

### *Covid-19 e a Odontologia Latinoamericana para pacientes com necessidades especiais*

Márcia Cançado Figueiredo<sup>1</sup>  0000-0002-4279-5417

Ana del Carmen Armas-Vega<sup>2</sup>  0000-0003-3800-8166

Andrea Muñoz Martínez<sup>3</sup>  0000-0002-4633-0713

Andrés A. Agudelo-Suárez<sup>4</sup>  0000-0002-8079-807X

Fabiana Pía Marina Carletto-Korber<sup>5</sup>  0000-0003-0641-4725

Gloria Beatriz Medina Quiñónez<sup>6</sup>  0000-0002-4417-0592

Judith Liberman Perlmutter<sup>7</sup>  0000-0002-6560-9146

Olga de Ceballos Zambrano<sup>8</sup>  0000-0002-0995-6178

Rosa Ana Melgar Hermoza<sup>9</sup>  0000-0003-1124-9306

Ximena Concha Melgar<sup>10</sup>  0000-0002-5426-4728

Verónica Quiñones Lazcano<sup>11</sup>  0000-0002-5590-3309



## Abstract

Latin America has become the most affected region by the COVID-19 pandemic in the world. People with special needs—an already vulnerable population—are suffering terrible consequences on account of this crisis. These people need to be protected and cared for at all times. Therefore, a group of lecturers from ten Latin American countries came together to analyze the regional situation of dental care for patients with special needs. Every country shows evidence that lockdowns and movement restrictions interrupt these people's access to essential goods and services. The general course of action regarding dental care is to postpone routine procedures unless they are clinically urgent or an emergency, implement strict personal protection measures and avoid or minimize processes that may produce aerosols. Remote dental care is considered essential these days since it allows practitioners to assess the need for face-to-face care and offer support, information, and safety to patients and families. The pandemic has shown us all that supporting health promotion is the true path and that we should not wait until conditions that affect people's quality of life appear to act.

**Keywords:** Betacoronavirus, Latin America, persons with disabilities, public policy, remote dental care.

1 Pediatric Dentistry. Facultad de Odontología. Universidade Federal do Rio Grande do Sul. Porto Alegre, Brasil. mcf1958@gmail.com

2 Dental Operatory. Facultad de Ciencias de la Salud. Universidad de los hemisferios. Quito Ecuador.

3 Dentistry School. Universidad de Chile. Santiago, Chile.

4 Dentistry School. Universidad de Antioquia. Medellín, Colombia.

5 Dentistry School. Universidad Nacional de Córdoba. Córdoba, Argentina.

6 Ministerio de Salud Pública y Bienestar Social de Paraguay - Dirección de Salud Bucodental. Assunción, Paraguay.

7 Pediatric Dentistry. Facultad de Odontología. Universidad de la República. Montevideo, Uruguay.

8 Dentistry School. Universidad del Zulia. Zulia, Venezuela.

9 Facultad de Estomatología. Universidad Peruana Cayetano Heredia Lima, Perú.

10 Carrera de Estomatología. Universidad Científica del Sur. Lima, Perú.

11 Dentistry School. Universidad Nacional Siglo XX. Oruro, Bolivia.

Received date: 8/10/2020 - Accepted date: 8/2/2021

## Resumen

La región de América Latina se ha convertido en la más afectada del mundo por la pandemia del COVID-19. Y personas con necesidades especiales, población ya vulnerable, están sufriendo un impacto significativo de la crisis actual. Dado que estas personas no pueden dejar de ser protegidas y cuidadas, un grupo de profesores de 10 países de América Latina se reunió para analizar la situación de la odontología para pacientes con necesidades especiales en la región. En todos los países, se evidenció que el confinamiento y las restricciones de desplazamiento están interrumpiendo el acceso a bienes y servicios esenciales para ellos. En cuanto a la odontología, la disposición general es posponer los procedimientos de rutina, a menos que sean clínicamente urgentes o de emergencia; adoptar estrictas medidas de protección personal y evitar o minimizar las intervenciones que puedan producir aerosoles. La atención odontológica remota, teleodontología, se considera como una herramienta fundamental en este momento, ya que permite evaluar la necesidad de atención presencial y ofrecer soporte, información y seguridad a los pacientes y familias. La pandemia nos ha demostrado, a todos, que impulsar la Promoción de la Salud es el verdadero camino, y que no debemos esperar a que se presenten condiciones que afecten la calidad de vida.

**Palabras clave:** Betacoronavirus, América Latina, Personas con Discapacidad, Política Pública, Teleodontología.

## Resumo

A região da América Latina tem se tornado a mais afetada do mundo pela pandemia do COVID-19. E as pessoas com necessidades especiais, população já vulnerável, estão sofrendo um impacto significativo da crise atual. Uma vez que essas pessoas não podem deixar de ser protegidas e cuidadas, um grupo de professores de 10 países de América Latina se reuniu para analisar a situação da odontologia para pacientes com necessidades especiais na região. Em todos os países se verificaram que o confinamento e restrições de movimento estavam interrompendo o acesso a bens e serviços essenciais para eles. Para a odontologia, a orientação geral é adiar procedimentos de rotina, a menos que seja clinicamente urgente ou emergencial; adotar medidas rígidas de proteção individual e evitar ou minimizar intervenções que possam produzir aerossóis. O atendimento odontológico à distância, teleodontologia, é considerada uma ferramenta fundamental neste momento, pois permite avaliar a necessidade de atendimento presencial e oferecer suporte, informação e segurança aos pacientes e famílias. A pandemia tem demonstrado, para todos, que trabalhar na Promoção da Saúde é o verdadeiro caminho, e que não devemos esperar por condições que afetem a qualidade de vida.

**Palavras-chave:** Betacoronavírus, América Latina, Pessoas com Deficiência, Política Pública, Teleodontologia.

## Introduction

On 8 January 2020, a novel coronavirus (SARS-CoV-2) was officially announced as the pathogen causing COVID-19 by the Chinese Center for Disease Control and Prevention <sup>(1)</sup>. The COVID-19 epidemic started in Wuhan, China, in December 2019 and quickly became a challenging public health issue in China and worldwide. On 30 January, the World Health Organization (WHO) announced it as an international public health emergency and, in March, as a pandemic. It was clearly determined that the virus had high and sustained human-to-human transmissibility <sup>(2)</sup>.

Thus, it became a challenge for health professionals in general and dental surgeons in particular due to the high risk of cross-infection in dental environments. This made it necessary and urgent to implement rigorous and effective infection control protocols in all the countries and regions affected by COVID-19 <sup>(3)</sup>.

The COVID-19 incubation period—the time between exposure to the virus and onset of symptoms—is 5 to 6 days on average, but it can be between 0 and 14 days. Many studies are underway worldwide to better understand the virus transmissibility, severity, and other related resources. The available information shows that the virus spreads through respiratory droplets (expelled when talking, coughing, or sneezing) and by direct contact with infected persons or indirectly through contaminated hands, objects, or surfaces, in the same way as other respiratory pathogens spread. Transmission may also occur through aerosols (smaller and lighter than droplets) generated during specific procedures <sup>(4)</sup>. The absence of a vaccine with proven effectiveness invites us to reflect on the need for protection barriers to prevent the disease and its spread.

All care is insufficient because many people infected with the virus may not take the necessary precautions and spread it unknowingly because they are asymptomatic. Moreover, some people have mild symptoms, and others have severe

symptoms, which can lead to death. Currently, the most common signs and symptoms of COVID-19 are fever, cough, and shortness of breath. There are other non-specific or atypical symptoms such as sore throat, diarrhea, anosmia (inability to smell) or hyposmia (decreased smell), myalgia (muscle pain), and tiredness or fatigue <sup>(5)</sup>.

Given the above, it is essential to implement biosafety protocols for dental practitioners at all stages of patient care. So far, there are no conclusive documents or resolutions on how dental care should be implemented in the world. The general recommendation so far in different Latin American countries is for dental surgeons to postpone routine procedures unless they are clinically urgent or an emergency. Professionals must take strict personal protective measures for such procedures and avoid or minimize interventions that may produce droplets or aerosols <sup>(3,6)</sup>.

## Caring for patients with special needs

Patients with special needs (PSN) have disabilities (physical, mental, sensory, developmental, behavioral, emotional, cognitive) and limited conditions that require medical care (systemic health problems that require specialized treatment programs or services). The pathological condition may be congenital or acquired and cause limitations or incapacity in day-to-day activities <sup>(7)</sup>.

The current COVID-19 pandemic increases the existing inequalities sustained by this population: they are vulnerable to developing severe health conditions, poverty, neglect, violence, and abuse. Besides, they also have less access to education, employment, health care, and society participation <sup>(8)</sup>.

This situation is worrying throughout Latin America. According to the Economic Commission for Latin America and the Caribbean (ECLAC), there are over 70 million people with disabilities, amounting to 12.6% of the

population<sup>(9)</sup>. This figure is close to the 15% reported in the latest WHO's World Report on Disability<sup>(10)</sup>.

Prevalence rates are not constantly updated and there are variations among countries: Brazil (23.9%)<sup>(11)</sup>, Chile (16.7%)<sup>(12)</sup>, Uruguay (15.9%)<sup>(13)</sup>, Paraguay (11.6%)<sup>(14)</sup>, Argentina (10.2%)<sup>(15)</sup>, Perú (5.2%)<sup>(16)</sup>, Colombia (4.1%)<sup>(17)</sup>, Ecuador (2.43%)<sup>(18)</sup>.

These data reflect the urgent need to act and ensure that these people are protected and cared for during the pandemic, taking into account their social and economic conditions. Many of them require additional support for basic hygiene procedures, live in crowded residential institutions with limited social distancing options, and have a fragile connection with the labor market. Additionally, lockdowns and travel restrictions have disrupted access to goods and services that are essential to their well-being. This can cause considerable stress and anxiety to them and their families<sup>(19)</sup>.

Latin America has significant regulations and publications that aim to ensure the rights of this population. There follow some examples: Brazil's informative material *People with disabilities, rare diseases and COVID-19*, which helps disseminate the necessary care they require<sup>(20)</sup>; Uruguay's *COVID-19 and caring for persons with disabilities* of Uruguay, which provides guidance for their care during emergencies<sup>(21)</sup>; Colombia's report *Persons with disabilities, differential challenges in the framework of COVID-19*, which focuses on this issue<sup>(17)</sup>; the *Guide to prevention against coronavirus* prepared by the National Committee of Persons with Disabilities in Bolivia, which provides recommendations by type of disability<sup>(22)</sup>; Argentina's *Recommendations for the care of persons with disabilities and persons with mental health problems who are undergoing referral and/or hospitalization in a second-level hospital*, which ensure continuity of care, support and treatment<sup>(23)</sup>; Peru's Legislative Decree No. 1468, which establishes prevention and protection regulations

for persons with disabilities during the state of emergency<sup>(24)</sup> and Chile's *Special considerations for the management and treatment of persons with disabilities during the SARS-CoV-2 Pandemic* to improve health-care response during the health emergency<sup>(25)</sup>.

Regarding oral health, Governments must ensure that persons with disabilities have access to dental care because they are at high risk for oral diseases. This may be exacerbated by the impact on people's general health and by the emotional and psychological implications the current situation has for them and their families and/or caregivers<sup>(8)</sup>.

Remote dental care—teledentistry—should be the first line of care during the public health crisis and when face-to-face contact between patient and specialist is impossible due to geographical distance or other impediments. It should be considered a fundamental tool at this time since it enables professionals to assess the degree of urgency or emergency for dental care, stressing the importance of solving the problem and following up on the case. Each country has a teledentistry council that guides its practice. Chile pioneered in Latin America by establishing Telehealth in 2007. It also has a *Guide to good practices and telemedicine recommendations in times of COVID-19*, which includes the entire health team. Colombia and Peru have implemented guidelines for teledentistry practice during the COVID-19 pandemic. Argentina, Bolivia, Ecuador, Paraguay, and Uruguay have telehealth legislation that includes dentistry and other health specialties<sup>(26-27)</sup>.

The Latin American Association of Pediatric Dentistry has launched a series of documents and directives to support professionals and families on how to approach the dental care of children during this health crisis. They are fully applicable to patients with special needs and are based on the best scientific evidence available<sup>(28)</sup>. These measures are difficult to implement if the practitioner does not have the necessary knowledge, empathy, and ability to deal

with this type of patient and their environment and help them understand changes and process their feelings.

As health professionals, we are responsible for transmitting healthy habits and prioritizing prevention, always attempting to be conservative and as minimally invasive as possible. Patients with special needs cannot sustain further harm during and after the pandemic. Their care and attention must be essentially trans-disciplinary, considering the different types of disabilities and respecting the beliefs, feelings, and complaints of the patient and their relatives and/or caregivers to establish effective health communication.

It is still challenging to establish when and what new measures will be taken for the dental care of patients with special needs. There is still a lot to learn about COVID-19. Therefore, professionals must remain rational when considering dental care in these moments of considerable uncertainty. Risks and benefits should be weighed, and care should be simplified or postponed when possible. Additionally, we should establish alternatives and means to provide support, information, and security<sup>(29)</sup>. The pandemic shows us that advancing health promotion is the way forward, without waiting until emergency situations decrease people's quality of life.

## References

1. Li Q, Guan X, Wu P, Wang X, Zhou L, Tong Y, et al. 2020. Early transmission dynamics in Wuhan, China, of novel coronavirus-infected pneumonia. *N Engl J Med* 2020;382(13):1199-1207.
2. Mahase E. China coronavirus: WHO declares international emergency as death toll exceeds 200. *BMJ* 2020;368:m408.
3. Meng L, Hua F, Bian Z. Coronavirus Disease 2019 (COVID-19): Emerging and Future Challenges for Dental and Oral Medicine. *J Dent Res* 2020;99(5):481-87.
4. 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(1):9.
5. Huang C, Wang Y, Li X, Ren L, Zhao J, Hu Y, et al. Clinical features of patients infected with 2019 novel coronavirus in Wuhan, China. *Lancet*. 2020;395(10223):497-506.
6. Sigua-Rodríguez EA, Bernal-Pérez JL, Lanata-Flores AG, Sánchez-Romero C, Rodríguez-Chessa J, Haidar Ziyad S, et al. COVID-19 y la Odontología: una Revisión de las Recomendaciones y Perspectivas para Latinoamérica. *Int J Odontostomat* 2020;14(3):299-309.
7. Silva LCP, Lobão DS. Manejo de Pacientes con Necesidades Especiales. Capítulo 26. In: Manual de Referência para Procedimentos Clínicos em Odontopediatria. 1st ed. São Paulo: Santos; 2014.
8. World Health Organization (WHO). Disability considerations during the COVID-19 outbreak. [Internet] [Cited: 2020 Aug 20] Available from: <https://www.who.int/publications/i/item/WHO-2019-nCoV-Disability-2020-1>
9. Comisión Económica para América Latina y el Caribe (CEPAL). Informe regional sobre la medición de la discapacidad. Una mirada a los procedimientos de medición de la discapacidad en América Latina y el Caribe. [Internet] [Cited: 2020 Aug 24] Available from: [https://repositorio.cepal.org/bitstream/handle/11362/36906/1/S1420251\\_es.pdf](https://repositorio.cepal.org/bitstream/handle/11362/36906/1/S1420251_es.pdf)
10. World Health Organization (WHO). World Report on Disability. [Internet] [Cited: 2020 Aug 24] Available from: [https://www.who.int/disabilities/world\\_report/2011/accessible\\_en.pdf?ua=1](https://www.who.int/disabilities/world_report/2011/accessible_en.pdf?ua=1)
11. Instituto Brasileiro de Geografia e Estatística. Pessoas portadoras de deficiência. [Internet] [Cited: 2020 Aug 30] Available from: <https://educa.ibge.gov.br/jovens/conheca-o-brasil/populacao/20551-pessoas-com-deficiencia.html>



12. Chile. Ministerio de Desarrollo Social. II Estudio Nacional de la Discapacidad. [Internet] [Cited: 2020 Aug 30] Available from: <https://www.ciudadaccesible.cl/wp-content/uploads/2017/02/Libro-Resultados-II-Estudio-Nacional-de-la-Discapacidad.pdf>
13. Nuñez I. Personas con discapacidad en Uruguay: algunas cifras del censo 2011. [Internet] [Cited: 2020 Aug 30] Available from: [https://www.bps.gub.uy/bps/file/8195/1/44.\\_personas\\_con\\_discapacidad\\_en\\_uruguay.\\_algunas\\_cifras\\_del\\_censo\\_2011.\\_nunez.pdf](https://www.bps.gub.uy/bps/file/8195/1/44._personas_con_discapacidad_en_uruguay._algunas_cifras_del_censo_2011._nunez.pdf)
14. Paraguay. Dirección General de Estadística, Encuestas y Censos. Características sociodemográficas de los hogares particulares con personas con discapacidad. [Internet] [Cited: 2020 Aug 30] Available from: <https://www.dgeec.gov.py/Publicaciones/Biblioteca/investigacion%20tematica/Caracteristicas%20sociodemograficas%20de%20los%20hogares%20particulares%20con%20personas%20con%20discapacidad.pdf>
15. Argentina. Estudio Nacional sobre el Perfil de las Personas con Discapacidad. [Internet] [Cited: 2020 Aug 30] Available from: [https://www.indec.gob.ar/ftp/cuadros/poblacion/estudio\\_discapacidad\\_12\\_18.pdf](https://www.indec.gob.ar/ftp/cuadros/poblacion/estudio_discapacidad_12_18.pdf)
16. Perú. Instituto Nacional de Estadística e Informática (INEI). Características de la Población con Discapacidad. [Internet] [Cited: 2020 Aug 30] Available from: [https://www.inei.gob.pe/media/MenuRecursivo/publicaciones\\_digitales/Est/Lib1209/Libro.pdf](https://www.inei.gob.pe/media/MenuRecursivo/publicaciones_digitales/Est/Lib1209/Libro.pdf)
17. Colombia. Departamento Administrativo Nacional de Estadística (DANE). Personas con discapacidad, retos diferenciales en el marco del COVID-19. [Internet] [Cited: 2020 Aug 30] Available from: <https://www.dane.gov.co/index.php/estadisticas-por-tema/demografia-y-poblacion/discapacidad>
18. Monje-Vargas JA. Misión “Manuela Espejo”, paradigma de la solidaridad convertida en política de Estado en Ecuador. *Rev Cubana Salud Pública* 2013;39(3):598-608.
19. Comisión Económica para América Latina y el Caribe (CEPAL). Personas con discapacidad ante la enfermedad por coronavirus (COVID-19) en América Latina y el Caribe: situación y orientaciones. [Internet] [Cited: 2020 Sep 01] Available from: [https://repositorio.cepal.org/bitstream/handle/11362/45491/1/S2000300\\_es.pdf](https://repositorio.cepal.org/bitstream/handle/11362/45491/1/S2000300_es.pdf)
20. Brazil. Ministério da Mulher, da Família e dos Direitos Humanos (MMFDH). Pessoas com deficiência e doenças raras e o Covid-19. [Internet] [Cited: 2020 Sep 01] Available from: <https://sway.office.com/rDuFzFRhn1s8GGi?ref=Link>
21. Uruguay. Sistema Nacional de Emergencias. Covid-19 y atención a la discapacidad. [Internet] [Cited: 2020 Sep 01] Available from: <https://www.gub.uy/sistema-nacional-emergencias/sites/sistema-nacional-emergencias/files/documentos/publicaciones/de%20discapacidad.pdf>
22. Bolivia. Comité Nacional de la Persona con Discapacidad (CONALPEDIS). Guía de Prevención contra el Coronavirus. [Internet] [Cited: 2020 Sep 01] Available from: <https://biblioteca.conalpedis.gob.bo/Coleccion/9>
23. Argentina. Programa de Asistencia Médica Integral (PAMI). Recomendaciones para la atención de personas con discapacidad y personas con problemas de salud mental que se encuentren cursando una derivación y/o internación en un establecimiento hospitalario. [Internet] [Cited: 2020 Sep 01] Available from: [https://www.argentina.gob.ar/sites/default/files/recomendaciones\\_pami\\_para\\_la\\_atencion\\_de\\_personas\\_con\\_discapacidad\\_y\\_salud\\_mental.pdf](https://www.argentina.gob.ar/sites/default/files/recomendaciones_pami_para_la_atencion_de_personas_con_discapacidad_y_salud_mental.pdf)
24. Perú. Decreto Legislativo N° 1468. [Internet] [Cited: 2020 Sep 01] Available from: <https://busquedas.elperuano.pe/normaslegales/decreto-legislativo-que-establece-disposiciones-de-prevencio-decreto-legislativo-n-1468-1865717-2/>
25. Chile. Ministerio de Salud. Consideraciones especiales en el manejo y tratamiento de las personas con discapacidad durante la pandemia SARS-COV-2. 2020. [Internet] [Cited: 2020 Sep 01] Available from: <https://www.minsal.cl/wp-content/uploads/2020/07/ConsideracionesPersonasconDiscapacidad130720.pdf>
26. Chile. Centro Nacional en Sistemas de Información en Salud. Telemedicina durante la epidemia de COVID-19 en Chile: Guía de Buenas Prácticas y Recomendaciones. 2020. [Internet] [Cited: 2020

Sep 01] Available from: <https://cens.cl/wp-content/uploads/2020/04/cens-gua-teleconsulta-en-tiempos-de-pandemia.pdf>

27. Equipo de trabajo multidisciplinario de la Revista de Odontopediatría Latinoamericana. Teleodontología: Aplicación a la Odontopediatría durante la pandemia COVID-19. Revista de Odontopediatría Latinoamericana 2020;10(2).
28. Equipo de trabajo multidisciplinario de la Revista de Odontopediatría Latinoamericana. Sección Especial: Centro de Recursos COVID-19. Revista de Odontopediatría Latinoamericana 2020;10(2).
29. Azevedo MS, Oliveira RP, Schardosim LR, Costa JR, Figueiredo MC, Potrich MV, et al. Reflections on the Care of Special Needs Patients in the Face of the COVID-19 Pandemic. Rev Bras Odontol 2020;77:e1867.

#### **Authorship contribution:**

1. Conception and design of the study
2. Acquisition of data
3. Data analysis
4. Discussion of results
5. Drafting of the manuscript
6. Approval of the final version of the manuscript

MCF has contributed in: 1, 3, 4, 5, 6.

ACA has contributed in: 2, 6.

AAA has contributed in: 2, 6.

FCK has contributed in: 2, 6.

JL has contributed in: 2, 6.

GBMQ has contributed in: 2, 6.

RAM has contributed in: 2, 6.

AM has contributed in: 2, 6.

VQL has contributed in: 2, 6.

OCZ has contributed in: 2, 6.

XCM has contributed in: 2, 3, 5, 6.

#### **Editor's opinion:**

This article has been accepted by the Odontostomatología's editor Dra. Vanesa Pereira-Prado.