REUFPI
Revista de Enfermagem da UFPI
ISSN 2238-7234

EXPERIENCE REPORT

Schoolchildren's oral health care during the COVID-19 pandemic: an experience report

Atenção à saúde bucal de escolares durante a pandemia de COVID-19: relato de experiência

Atención de la salud bucal de niños en edad escolar durante la pandemia de COVID-19: informe de experiencia

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ABSTRACT

Objective: To report the experience in carrying out educational and preventive activities in oral health for the population of schoolchildren in the inland of Rio Grande do Norte, in the midst of the COVID-19 pandemic. **Methods:** A report of the experience underwent by a dental surgeon working in a basic health unit from inland Potiguar. An active search for the schoolchildren was conducted in partnership between the municipal institutions and the family health team. The activities took place between June and August 2020, involving 207 schoolchildren. They included infant health promotion actions for children and guardians alike, considering the family context to generate changes. **Results:** The schoolchildren underwent an oral evaluation, received guidance about oral hygiene and supervised brushing. An Odontogram and a clinical form were filled out. Guidance was offered to parents/guardians in a leaflet, and they were handed in an oral hygiene kit, gifts and a Certificate of Completed Treatment. **Conclusion:** Through this action, it was possible to monitor the epidemiological situation of oral diseases in the school-aged population and carry out the activities provided for in the Health at School Program, keeping it implemented, even during a period in which several procedures were suspended due to the pandemic.
Descriptors: Health Education, Dental. Health Promotion. Child Health. COVID-19.

RESUMO

Objetivo: Relatar a experiência vivenciada na realização de atividades educativas e preventivas em saúde bucal para o público de crianças escolares do interior do Rio Grande do Norte, em meio à pandemia de COVID-19. **Métodos:** Relato de experiência vivenciada por cirurgiã-dentista atuante em uma unidade básica de saúde do interior de Potiguar. Foi realizada busca ativa dos escolares através da parceria entre as instituições municipais e a equipe de Saúde da Família. As atividades ocorreram entre junho e agosto de 2020, envolvendo 207 escolares. Contaram com ações de promoção à saúde infantil, para as crianças e os responsáveis, considerando-se o contexto da família para geração de mudança. **Resultados:** Os escolares receberam avaliação bucal, orientação sobre a higiene bucal, escovação supervisionada. Houve preenchimento do Odontograma e ficha clínica. Foram ofertadas orientações aos pais/responsáveis em forma de folheto, entrega de kit de higiene bucal, brindes e Certificado de Tratamento Concluído. **Conclusão:** Através dessa ação, foi possível acompanhar a situação epidemiológica das doenças bucais da população em idade escolar e realizar as atividades previstas no Programa Saúde na Escola, mantendo-o implementado, mesmo durante um período em que diversos procedimentos foram suspensos devido à pandemia.
Descritores: Educação em Saúde Bucal. Promoção da Saúde. Saúde da Criança. COVID-19.

RESUMÉN

Objetivo: Informar la experiencia al realizar actividades educativas y de prevención en salud bucal para el público de niños en edad escolar del interior do Rio Grande do Norte, en medio de la pandemia de COVID-19. **Métodos:** Informe de la experiencia de una cirujana dental que trabaja en una unidad básica de salud del interior de Potiguar. Se realizó una búsqueda activa de los alumnos por medio de una asociación entre las instituciones municipales y el equipo de Salud de la Familia. Las actividades tuvieron lugar entre junio y agosto de 2020, con la participación de 207 alumnos. Incluyeron acciones de promoción de la salud infantil tanto para los niños como para sus padres/tutores, considerando el contexto familiar para generar cambios. **Resultados:** Los niños en edad escolar fueron sometidos a una evaluación bucal, y se les ofreció orientación higiene bucal y cepillado supervisado. Se completaron el Odontograma y la ficha clínica. Se ofrecieron pautas a los padres/tutores en forma de folleto, entrega de un kit de higiene bucal, obsequios y el Certificado de Tratamiento Finalizado. **Conclusión:** Por medio de esta acción fue posible monitorear la situación epidemiológica de las enfermedades bucales de la población en edad escolar y realizar las actividades previstas en Programa Salud en la Escuela, manteniéndolo implementado, incluso durante un período en el que diversos procedimientos fueron suspendidos debido a la pandemia.
Descriptores: Educación en Salud Dental. Promoción de la Salud. Salud infantil. COVID-19.

INTRODUCTION

Deciduous tooth eruption generally begins after six months of life and is completed by 30 months with 20 teeth[1]. Continuously, mixed dentition, that is, the exchange of deciduous teeth for permanent ones, begins around six years of age and ends at 11 years old.[2] Until that age, the deciduous teeth will be responsible for the child's chewing, aesthetics and speech, and their conservation is essential. Furthermore, deciduous dentition is important for development of the jaws and facial muscles, serving as a guide for the permanent teeth to erupt into the correct position.[3]

In childhood, one of the main causes of early tooth loss is the presence of caries, which is considered a serious public health problem, affecting more than 50% of Brazilian children up to five years of age and unevenly distributed according to the socioeconomic vulnerability indices.[4]

Despite its seriousness, dental caries control becomes possible from the popularization of preventive methods of adequate oral hygiene and reduction of sugar intake, essentially when such positive attitudes and behaviors are acquired from childhood.[4] In this sense, the importance of Oral Health Education is emphasized during this phase, as a way to reduce the risks of dental caries and the reduction of oral problems in adulthood, through health education programs, even at school age.[5-6]

The Health at School Program (*Programa Saúde na Escola*, PSE) contributes to the execution of actions in the perspective of integral development and provides inclusion the of students in programs and projects that articulate health and education, in order to face the vulnerabilities that hinder the full progress of Brazilian children, adolescents and young people.[7] In the meantime and in partnership with the schools, the teams working in the Basic Health Units (BHUs) promote various educational and preventive activities, targeting schoolchildren.

Although educational institutions and BHUs elaborated and maintained an annual schedule of activities to be developed, the new coronavirus (SARS-CoV-2), responsible for the COVID-19 disease, emerged at the end of 2019 and, still in January 2020, reached the level of public emergency of international importance.[8] During this period, all health care was exclusively focused on flu-like symptoms and the Unified Health System (*Sistema Único de Saúde*, SUS) users lost access to face-to-face groups for monitoring chronic diseases.

The high transmissibility rate of the virus and the risk of contracting it in a dental office forced several entities, such as the Federal Council of Dentistry (*Conselho Federal de Odontologia*, CFO) and the National Health Surveillance Agency (*Agência Nacional de Vigilância Sanitária*, ANVISA), to establish strict protocols for oral health care during the pandemic period, such as the suspension of elective appointments and maintenance of emergencies only.[9] In addition to that, the impacts of the pandemic led to the interruption of face-to-face classes in the country's schools, consequently suspending all the PSE activities.[10]

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In view of the aforementioned scenario, the objective of this article was to report the experience in carrying out educational and preventive activities in oral health for the population of schoolchildren in the inland of Rio Grande do Norte, in the midst of the COVID-19 Pandemic.

METHODS

This is a report of the experience underwent by a dental surgeon, a student attending a *lato sensu* graduate program in Public and Family Health of a private college from Rio Grande do Norte. An experience report is translated as a description of certain experiences, which are capable of contributing to the construction of knowledge in different areas, performing differentiation and critical-reflexive association.[11] The performance scenario of this report was a BHU located in the municipality of Santana do Seridó.

This municipality has an estimated population of 2,699 inhabitants, according to data from the Brazilian Institute of Geography and Statistics (*Instituto Brasileiro de Geografia e Estatística*, IBGE) (2021). Its Human Development Index (HDI) is 0.642 and the estimated schooling rate of children aged from 6 to 14 years old is 99.2%.[12]

In its staff, the BU includes a receptionist, a nursing technician, a nurse, a physician, a dental surgeon, an oral health technician, a nutritionist, a psychologist, a physiotherapist, a general service assistant and community health agents (CHAs).[13] The current report is about an experience planned and underwent by the dental surgeon active at the BHU, in partnership with the oral health technician and Community Health Agents (CHAs).

The activities were conducted between June and August 2020, in the midst of the COVID-19 pandemic. In view of the interruption of face-to-face classes, cooperation of the CHAs was requested in the active search for these children in their homes, using the family registration of each one and a list of enrolled children, previously requested from the school management of each institution covered in the action. The participants recruited were 312 schoolchildren attending six municipal public schools, which offered from kindergarten to elementary school.

Once the children were identified, communication was carried out with the parents or guardians, requesting their presence and the children's to carry out activities within the BHU scope. At that moment, the parents or guardians signed the authorization form to participate in the activity. Despite acceptance, only 207 students (out of 312 recruited subjects) took place in the activity.

The schoolchildren and their guardians went to the BHU on the previously scheduled day and time. On that occasion, the following activities took place: oral evaluation, filling out of the Odontogram and clinical form, guidance on oral hygiene, supervised brushing, guidance to parents/guardians in a leaflet, and delivery of oral hygiene kits, gifts and Certificate of Completed Treatment. In the cases in which treatment required continuity, return visits were scheduled.

As the study is an experience report, it is noted that it was not submitted to any ethics committee. The participants' data were not disclosed.

RESULTS

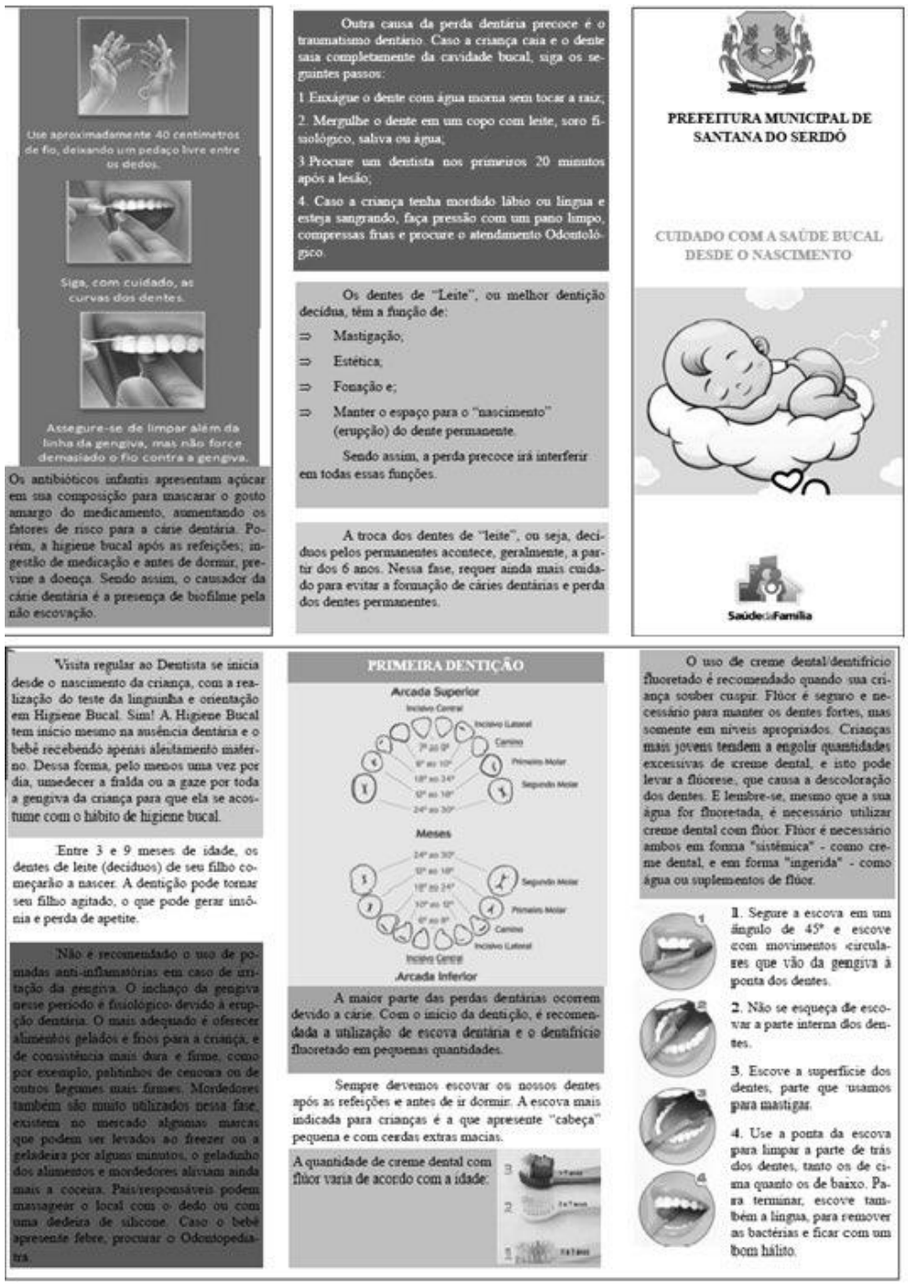
Even though we were experiencing a pandemic scenario, the care flow and schedule for the professionals working at the BHU were reorganized, in accordance with the ANVISA and CFO standards, in order to guarantee access to oral health for the students. Of 312 students enrolled in the educational institutions included in the study, 207 attended the evaluation, with 103 requiring treatment due to dental caries and 104 returning every 6 months for control and preservation of their oral health.

Five children and their respective parents/guardians were scheduled per day. Initially, there was guidance on hygiene and the importance of oral health with the parents and then with the children, taking into account the family context to consolidate the changes.

We emphasize the importance of the co-accountability of parents/guardians in the promotion and maintenance of children's oral health conditions since it is common for some of them to transfer to the dentist all responsibility for promoting oral health, exempting themselves from their responsibilities. Consequently, through the teaching-learning process, the guardians gradually assumed the role of educators day after day.

Figure 1 presents the educational material, which was prepared by the authors based on scientific articles[14-15], ministerial documents[16-17] and the Maternal and Child Oral Health Guide of the Brazilian Society of Pediatrics (*Sociedade Brasileira de Pediatria*, SBP)[18], to be delivered to the parents/guardians after carrying out the activity, so that they could read and reinforce with their children what was learned during the health education activity.

Figure 1. Educational material for children's oral health promotion since birth. Santana do Seridó, Rio Grande do Norte, Brazil, 2020.



Source: authors (2022).

In addition to that, referring to the activities offered by the oral health team, the schoolchildren underwent and oral assessment, received guidelines on oral hygiene and supervised brushing. An Odontogram and a clinical form were filled out. Guidance was also offered to the parents/guardians in a leaflet, and they were also handed in an oral hygiene kit (brush, toothpaste and dental floss), gifts and a Certificate of Completed Treatment.

DISCUSSION

Due to the emergence of the COVID-19 Pandemic, schools were closed and face-to-face classes were suspended. Thus, the PSE had to be readjusted by the Primary Health Care (PHC) teams, in order to maintain execution of the planned actions, as well as health care continuity for the students.

The professionals in the area have reinvented themselves to ensure user access to health services. In line with the SUS principles and complying with the standards recommended by ANVISA and state protocols, the oral health team working at the BHU under study reorganized the care flow and schedule, allowing the students to enjoy the procedures and activities in a more adequate and safe way. The parents/guardians received an appointment with a date and time to accompany their children for assessment and guidance on oral hygiene.

The literature points out that the prevalence of dental caries decreases as the individual's age increases, leading to assert the importance of parents/guardians participating in the minors' hygiene care, considering that they lack this perception of significance and have inefficient motor coordination until a certain age.[19]

The presence of prolonged dental caries without restorative treatment will consequently lead to more invasive and traumatic treatments, such as endodontic treatments or extractions.[20] The first will allow permanence of the dental element until its replacement by the permanent one, but it is a high-cost treatment, being unfeasible for the reality of the entire population. The second will imply early tooth loss, causing loss of space for the eruption of the permanent teeth, generating another oral health condition that directly interferes with aesthetics, speech and mastication.[21]

The oral health assessment in early life phases reinforces the need to carry out preventive actions for parents/guardians and even caregivers, promoting awareness of children's oral hygiene habits and healthy eating.[22]

A previous study dealt with the conduction of educational activities during the COVID-19 pandemic, although remotely. It also portrayed the challenges faced in carrying out health promotion activities through the PSE, and the ability to reinvent themselves in the face of a pandemic scenario, through virtual meetings.[23] Nevertheless, these meetings, arising from online platforms, provided a positive impact on technological advances for carrying out the health education activity.[24]

Even though the educational activities carried out remotely are of great value, the consolidation of face-to-face appointments allowed for a better assessment and diagnosis of the students' oral condition, reiterating that the team consulted and respected the CFO and ANVISA biosafety standards in care provision.[25]

The incidence of caries is the main cause of early tooth loss, and Oral Health Education is one of the most used tools to prevent the disease. Deciduous dentition is neglected by part of the population, who believe that the teeth will be replaced. However, despite this replacement, the first dentition has the aesthetics, mastication and speech functions and maintains the space for the eruption of permanent teeth.

In this conception, it is indispensable to expand the information and guidance to regions of greater social and health vulnerability, in addition to implementing mask and oral hygiene utensil donation campaigns, contributing to the fight against the Pandemic and oral diseases.[26]

Despite the difficulties inherent to the Pandemic in carrying out the activities, the initiative was considered satisfactory, in the sense of promoting the oral health of the population selected for the action. With regard to the experience report, its pertinence and importance are evidenced so that the intervention herein described can be reproduced, considering the generalization level for similar situations and realities.

Due to the craftsmanship of the material used in the actions, its complete reproduction becomes impracticable, suggesting that future studies may establish protocols and reference materials, which can be used in other actions with a similar objective.

CONCLUSION

Through this experience report, it was possible to describe the educational and preventive activities offered to the population of schoolchildren in the inland of Rio Grande do Norte, in the midst of the COVID-19 Pandemic. The action described also made it possible to monitor the epidemiological situation of oral diseases in the school-aged population and carry out the activities provided for in the PSE, keeping it implemented, even during a period in which several procedures were suspended.

Access to information about the risk factors that lead to the occurrence of dental caries allows the construction of healthier life habits. However, during the COVID-19 Pandemic, a large part of the educational and assistance activities were exclusively focused on combating transmission of the virus. Thus, dental care was suspended due to the risk of spreading the disease, making it difficult to continue providing assistance in this modality.

However, thinking about the users and the guarantee of access, the oral health team at the BHU in this report reinvented itself and organized the activities that would be developed in the PSE, ensuring that performance of procedures and activities essential to oral health were offered in an objective and fruitful way, also involving the participation of parents/guardians in this prevention process.

REFERENCES

1. Andrade MTV, Katz CRT. Relação entre a erupção dos dentes decíduos e manifestações locais e/ou sistêmicas: revisão integrativa. Arq. Odontol. [Internet]. 2018 [Cited: 20 mai. 2022]; 54(12). Available from: https://periodicos.ufmg.br/index.php/arquivosemodontologia/article/view/3778.

2. Reher VGS, Reher P. Introdução a anatomia dental humana. *In*: Teixeira LMS, Reher VGS, Reher P. Anatomia aplicada a Odontologia - Rio de Janeiro: Guanabara Koogan; 2001. p. 249-50.

3. Pinto VG. Saúde Bucal Coletiva. 4 ed. São Paulo: Livraria Editora Santos; 2000.

4. Lima LHG, Rocha NB, Antoniassi CP, Moura MS, Fujimaki M. Prevalence and severity of dental caries in elementary school students in a vulnerable municipality. Rev. Odontol. UNESP. [internet]. 2020; 49:e20200063. https://doi.org/10.1590/1807-2577.06320.

5. Bellotto E, Novaes P, Fragoso Y. Projeto piloto de cartilha educacional para prevenção de cáries na pré-escola. Higei@. [internet]. 2018 [Cited: 20 mai. 2022]; 2(3). Available from: https://periodicosunimes.unimesvirtual.com.br/index.php/higeia/article/view/1008/802.

6. Nóbrega AV, Moura LFAD, Andrade NS, Lima CCB, Dourado DG, Lima MDM. Impact of dental caries on the quality of life of preschoolers measured by PedsQL questionnaire. Ciênc. Saúde Colet. [internet]. 2019; 24(11):4031-42. https://doi.org/10.1590/1413-812320182411.04712018.

7. Ministério da Saúde (BR). Secretaria de Atenção à Saúde. Departamento de Atenção Básica. Passo a passo PSE: Programa Saúde na Escola: tecendo caminhos da intersetorialidade. Brasília: Ministério da Saúde; 2011 [Cited: 28 nov. 2022]. Available from: https://bvsms.saude.gov.br/bvs/publicacoes/passo_a_passo_programa_saude_escola.pdf.

8. Oliveira MEC, Nóbrega WFS, Nóbrega WS, Gomes KAL, Franklin RG, Santos RD, et al. From expectation to ten thousand dead: Quantitative content analysis of COVID-19 in Brazilian tweets. Comunic. Pública. [internet]. 2021; 16(31). https://doi.org/10.34629/cpublica.31.

9. Nóbrega WFS, Silva GCB, Barbosa DV, Calvacanti SDLB. Access to oral health services in primary care before and during the context of the pandemic of COVID-19. Arch. health invest. [internet]. 2021; 10(7):1164-6. https://doi.org/10.21270/archi.v10i7.5467.

10. Parcianello L, Santos V, Krug MM. Resumption of the school health program: an intervention by the multiprofessional residency in primary care. Sal. Conhec. [internet]. 2021 [Cited: 20 mai. 2022]; 7(7). Available from: https://publicacoeseventos.unijui.edu.br/index.php/salaoconhecimento/article/view/20679.

11. Mussi RFF, Flores FF, Almeida CB. Assumptions for the preparation of an experience report as scientific knowledge. Rev. Práxis Educ. [internet]. 2021; 17(48):60-77. https://doi.org/10.22481/praxisedu.v17i48.9010.

Schoolchildren's oral health care during the COVID-19..

12. Instituto Brasileiro de Geografia e Estatística. Indicadores Populacionais. 2021 [Cited: 23 jun. 2022]. Disponível em https://www.ibge.gov.br/cidades-e-estados/rn/santana-do-serido.html.

13. Cadastro Nacional de Estabelecimentos de Saúde. Ficha de estabelecimento. Profissionais. 2022 [Cited: 20 mai. 2022]. Available from: https://cnes.datasus.gov.br/pages/estabelecimentos/ficha/profissionais-ativos/2411425543959.

14. Lima-Arsati YBO, Gomes ARLF, Santos HKA, Arsati F, Oliveira MC, Valéria SF. Exposição a fluoretos por crianças na faixa etária crítica para fluorose dentária, residentes no seminário brasileiro. Cien. Saude Colet. [internet]. 2018; 23(4):1045-54. https://doi.org/10.1590/1413-81232018234.07952016.

15. Zaze ACSF, Oliveira ER, Melão MJAS, Alves E. Eficácia de diferentes tipos de escovas dentais na remoção de biofilme bucal. Arq. Ciênc. Saúde UNIPAR, Umuarama. [internet]. 2016 [Cited: 28 mai. 2022]; 20(2):101-9. Available from: https://revistas.unipar.br/index.php/saude/article/viewFile/5395/3301#:~:text=Pode-se%20concluir%20que%20todas,que%20também%20possui%20cerdas%20regulares.

16. Ministério da Saúde (BR). Secretaria de Atenção à Saúde. Departamento de Atenção Básica. Saúde Bucal. Brasília: Ministério da Saúde; 2008 [Cited: 28 mai. 2022]. Available from: https://bvsms.saude.gov.br/bvs/publicacoes/saude_bucal.pdf.

17. Ministério da Saúde (BR). Secretaria de Atenção à Saúde. Departamento de Atenção Básica. Cadernos temáticos do PSE – Promoção da Saúde Bucal. Brasília: Ministério da Saúde; 2016 [Cited: 28 mai. 2022]. Available from: http://189.28.128.100/dab/docs/portaldab/documentos/caderno_saude_bucal.pdf.

18. Global Child Dental Fund (UK). Sociedade Brasileira de Pediatria. Guia de Saúde Oral Materno-infantil. 2020 [Cited: 28 mai. 2022]. Available from: https://www.sbp.com.br/fileadmin/user_upload/Guia-de-Saude_Oral-Materno-Infantil.pdf.

19. Ministério da Saúde (BR). Secretaria de Vigilância em Saúde. SB Brasil 2010: Pesquisa Nacional de Saúde Bucal: resultados principais. Brasília: Ministério da Saúde; 2012.

20. Calixto LF, Dias VO, Oliveira MJL, Maia NGF, Oliveira CC, Martins MATS. Impacto das lesões cariosas cavitadas e das consequências da cárie dentária não tratada na qualidade de vida de crianças de 08 a 10 anos de idade. Arq. Odontol. [internet]. 2018 [Cited: 20 mai. 2022]; 54: e13. Available from: https://periodicos.ufmg.br/index.php/arquivosemodontologia/article/view/3779

21. Nobrega ML, Barbosa CCN, Brum SC. Implicações da perda precoce em odontopediatria. Rev. Pró-UniverSUS. [internet]. 2018 [Cited: 20 mai. 2022]; 9(1):61-7. Available from: http://editora.universidadedevassouras.edu.br/index.php/RPU/article/view/1306.

22. Santos LGP, Rodrigues DC, Mariz WS, Torres JLM, Pinheiro NSSL, Macena MCB, et al. Manejo do comportamento infantil e saúde bucal na sala de

Oliveira NPG, Nóbrega WFS & Cordeiro JKR
espera: um relato de experiência. Res., Soc. Dev. [internet]. 2020; 9(7):e888975069. https://doi.org/10.33448/rsd-v9i7.5069.

23. Reis ETV, Pereira JVS, Conceição TDC, Tourinho RCC, Domingos LLP. Programa saúde na escola em tempos de pandemia da covid-19: um relato de experiências sobre as possibilidades e os desafios na educação infantil. PC-RESC. [internet]. 2022 [Cited: 28 nov. 2022]; 3:e13246. Available from: https://revistas.uneb.br/index.php/saudecoletiva/article/view/13246.

24. Tomaz JBC. Educação na saúde em tempos de pandemia: desafios e oportunidades. Cadernos EPS/CE. [internet]. 2020 [Cited: 28 nov. 2022]; 14(2):7-9. Available from: https://cadernos.esp.ce.gov.br/index.php/cadernos/article/view/510.

Schoolchildren's oral health care during the COVID-19..

25. Agência Nacional de Vigilância Sanitária. Nota técnica GVIMS/GGTES/ANVISA Nº 04/2020. Orientações para serviços de saúde: medidas de prevenção e controle que devem ser adotadas durante a assistência aos casos suspeitos ou confirmados de infecção pelo novo coronavírus (SARS-CoV-2) – atualizada em 25/02/2021. Brasília; 2021 [Cited: 28 nov. 2022]. Available from: https://www.gov.br/anvisa/pt-br/centraisdeconteudo/publicacoes/servicosdesaude/notas-tecnicas/nota-tecnica-gvims_ggtes_anvisa-04_2020-25-02-para-o-site.pdf.

26. Gomes ACA, Chaves ATD, Castro CCLP, Mendonça GL, Barbosa IO, Almeida LV et al. Promoção e prevenção da saúde bucal na pandemia do Covid-19: Relato de experiência. Reupe. [internet]. 2021 [Cited: 28 nov. 2022]; 6:52-60. Available from: https://www.revistaextensao.upe.br/index.php/reupe/article/view/34.

Financing source: No
Conflicts of interest: No
Date of submission: 2022/23/06
Accepted: 2022/10/12
Publication: 2023/26/01

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How to cite this article:

Oliveira NPG, Waleska Nóbrega FS, Cordeiro JKR. Schoolchildren's oral health care during the COVID-19 pandemic: an experience report. Rev Enferm UFPI [internet]. 2022 [Cited: ano mês abreviado dia]; 11: e2776. Available from: DOI: 10.26694/reufpi.v11i1.2776