

Challenges and perspectives in the work of stomatherapists during the COVID-19 pandemic

Desafios e perspectivas na atuação de estomaterapeutas durante a pandemia de COVID-19
Desafíos y perspectivas en la actuación de los estomaterapeutas durante la pandemia del COVID-19

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Abstract

Objective: To analyze the challenges and perspectives in the work of stomatherapists during the COVID-19 pandemic. **Methods:** Descriptive research with a qualitative approach, through semi-structured interviews with eight stomatherapists, selected by the snowball technique. Content Analysis was used, emerging three categories: Challenges in the work of stomatherapists during the COVID-19 pandemic; Strategies to enable remote and face-to-face assistance in stomatherapy; and Impact of the pandemic on stomatherapy care. **Results:** The main challenges mentioned were: closure of outpatient clinics and worsening of the patients' health situation. The strategies included: adaptation of the care methodology, use of standard precautions and remote communication. Among the future perspectives, the growth of the specialty and appreciation by other health professionals stand out. **Conclusion:** There were several challenges in the work of stomatherapists in the pandemic, circumvented, above all, with the diversification of care strategies and modifications in care. However, the increased visibility of the specialty stands out as a future perspective.

Descriptors: Nursing; Enterostomal Therapy; COVID-19.

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Whats is already known on this?

The work of stomatherapists during the COVID-19 pandemic faced care challenges, generating the need to adapt the services provided, with special contribution of the use of telehealth resources.

What this study adds?

The article presents the experience of local stomatherapists, especially in the field of care, highlighting the technological and structural strategies used by professionals to act during the pandemic period.



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Resumo

Objetivo: Analisar os desafios e perspectivas na atuação de estomaterapeutas durante a pandemia de COVID-19. **Métodos:** Pesquisa descritiva de abordagem qualitativa, por meio de entrevista semiestruturada com oito estomaterapeutas, selecionadas pela técnica snowball. Utilizou-se a Análise de Conteúdo, da qual emergiram três categorias: Desafios na atuação de estomaterapeutas durante a pandemia da COVID-19; Estratégias para viabilizar a assistência remota e presencial na estomaterapia; e Impacto da pandemia no cuidado de estomaterapia. **Resultados:** Os principais desafios citados foram: fechamento de ambulatórios e agravamento do quadro de saúde dos pacientes. As estratégias incluíram: adaptação da metodologia dos atendimentos, utilização de precauções-padrão e comunicação remota. Dentre as perspectivas futuras, destacam-se o crescimento da especialidade e valorização por outros profissionais da saúde. **Conclusão:** Houve diversos desafios na atuação de estomaterapeutas na pandemia, contornados, sobretudo, com a diversificação de estratégias assistenciais e modificações nos atendimentos. No entanto, destaca-se como perspectiva futura o aumento da visibilidade da especialidade.

Descritores: Enfermagem; Estomaterapia; COVID-19.

Resumen

Objetivo: Analizar los desafíos y perspectivas en la actuación de los estomaterapeutas durante la pandemia de COVID-19. **Métodos:** Investigación descriptiva con enfoque cualitativo, a través de entrevistas semiestructuradas con ocho estomaterapeutas, seleccionados mediante la técnica de bola de nieve. Se utilizó el Análisis de Contenido, emergiendo tres categorías: Desafíos en el desempeño de los estomaterapeutas durante la pandemia de COVID-19; Estrategias para posibilitar la asistencia remota y presencial en estomaterapia; e Impacto de la pandemia en la atención estomaterápica. **Resultados:** Los principales desafíos citados fueron: cierre de ambulatorios y empeoramiento del estado de salud de los pacientes. Las estrategias incluyeron: adaptación de la metodología de atención, uso de precauciones estándar y comunicación remota. Entre las perspectivas de futuro se destacan el crecimiento de la especialidad y la apreciación por parte de otros profesionales de la salud. **Conclusión:** Hubo varios desafíos en la actuación de los estomaterapeutas durante la pandemia, superados, sobre todo, con la diversificación de las estrategias asistenciales y cambios en la atención. Sin embargo, se destaca como perspectiva de futuro la mayor visibilidad de la especialidad.

Descriptores: Enfermería; Estomaterapia; COVID-19.

INTRODUCTION

The pandemic of COVID-19, a disease caused by the SARS-CoV-2 virus, decreed by the World Health Organization in March 2020, required countries to urgently determine sanitary measures to contain the rapid spread of the disease. In Brazil, among the first strategies implemented, there was the interruption of non-essential face-to-face activities, aiming at social distancing.⁽¹⁾ In addition, there were changes in the health sector and the prioritization of care for those infected by the new coronavirus.⁽²⁾

Initially, there was a temporary suspension or reduction of care in outpatient services, and it was recommended that the population avoid going to these places without urgent need.⁽³⁾ This situation particularly affected people with chronic diseases, observed in a survey carried out in Brazil with 1,701 diabetics, which 95.1% decreased the frequency of leaving home, 59.5% reduced physical activities and 38.5% postponed consultations and routine examinations, potentially increasing the risk of acute and chronic complications or mortality of this population.⁽⁴⁾

In view of this, several agencies, such as the Ministry of Health and regional health councils, published care guidelines for the resumption of elective services, reflecting on the reorganization of care flows and redefinition of the task of different levels of care.⁽⁵⁾ Overall, changes in the organization of the physical environment, control of patient flow and reinforcement of standard precautions were proposed. In addition, health professionals, institutions and local bodies were allowed to create specific internal prevention and control protocols, according to their needs and demands.⁽⁶⁾

Thus, considering the stomatherapy outpatient clinics, changes were observed regarding the dynamics of care, the establishment of priority demands and, in some cases, the reduction of the frequency of consultations. Also, the removal of collecting and adjuvant equipment by family members of the registered individual was made more flexible and the ostomized patients without peristomal skin lesion were requested to perform the exchange of the collecting bag at home.⁽⁷⁾

In the meantime, there were still the challenges faced in the work of nurses, from the risk of infection by COVID-19 to the lack of material resources for the implementation of care.⁽⁸⁾ However, several strategies were used to promote care in the period, such as the telehealth resource, which was released by the Federal Nursing Council, given the increase in this modality in the capital São Paulo, by 72%, in February 2020.⁽³⁾

However, many users required face-to-face care, which resulted in impaired management of various health conditions. This fact was demonstrated in a study of 1,288 people with chronic diseases, including hypertension and diabetes, which are risk factors for vascular complications and, consequently, the development of skin lesions.⁽²⁾

Therefore, this research is justified considering the impacts of the COVID-19 pandemic on stomatherapy care and losses caused to people who need specialized care from stomatherapists, the possible costs generated by the worsening of chronic conditions and the need to proportion adaptations to this service. Still, it is intended to assist in understanding the challenges in the care of people with wounds, ostomies and incontinence in the period and in the reflection of care strategies to promote good nursing practices in this area of knowledge.

The present study aimed to analyze the challenges and perspectives in the work of stomatherapists during the COVID-19 pandemic.

METHODS

This is a descriptive research, with a qualitative approach, for which the Equator COREQ checklist was used. This was carried out online, between September and November 2021, and had as a guiding question: "What are the challenges and perspectives in the work of stomatherapists during the COVID-19 pandemic?". The interviews were conducted by the main author, a graduate student in nursing, who was part of an outreach project in the area of stomatherapy since 2018, which influenced the selection of the theme of this research.

There was a previous contact with the participants to present the authors and their motivations, objectives, risks and benefits. The selection of participants was based on convenience, initially approaching the members of the research group on good nursing practices to which the researchers belonged, and then using the snowball technique, in which participants were asked to indicate another potential participant, and so on, successively.⁽⁹⁾ The interview took place through the social media application WhatsApp and, after acceptance, the interview, guided by a semi-structured script, was carried out individually in a virtual room created on the Google Meet platform.

Ten nurses were contacted; however, there were two dropouts due to the unavailability of the participants' schedules for the interview, thus totaling a sample of eight participants. Stomatherapists of both sexes, residents of Teresina-Piauí, who had been working in the area for at least one year, were included, and those who did not perform stomatherapy assistance during the COVID-19 pandemic were excluded.

The data collection instrument was not submitted to the pilot test, after the deadline for data presentation. This was composed of two parts: the first investigated demographic and professional data and the second covered the following open questions: According to your experience, what is the importance of stomatherapy for the treatment of people with wounds, ostomies and incontinence?; What were the main challenges in your work as a stomatherapist during the COVID-19 pandemic?; What strategies have you and/or your team used to enable remote and/or face-to-face patient care in the last year?; Describe your future prospects for post-pandemic stomatherapy.

The interviews were recorded in video format, using the OBS Studio application and lasted from four to 15 minutes, and the field notes were performed only after the transcription of the content. The collection was interrupted according to the criterion of data saturation, that is, when the data obtained started to present a certain redundancy or repetition.⁽¹⁰⁾ It is noteworthy that the names of the participants were replaced by alphanumeric codes, using the abbreviation of the term stomatherapist with the letter "S" and the interview number sequentially.

The transcription of the data occurred manually, through the insertion of the videos of the interviews on the Youtube streaming platform, privately, and subsequent extraction of the automatic subtitles generated by the platform. The texts were in a Word document to correct spelling errors and then returned for approval by the participants.

The methodology followed Bardin's Content Analysis technique, which occurs through the systematization of the message received and grouping into thematic categories. This method has three stages: pre-analysis, in which the material is organized through listening and literal transcription of the content, the exploration of the material, in which the data are aggregated into necessary units, defining the thematic categories, and finally the treatment of the results, when inferences are made about the data obtained with the aid of the literature.⁽¹¹⁾

The data were analyzed according to the question asked and in each answer the central information that responded to the proposed theme was listed. Then, the participants who expressed the same opinion were quantified by comparing the similarity of the words used. From this, three thematic categories

emerged: Challenges in the work of stomatherapists during the COVID-19 pandemic, Strategies to enable remote and face-to-face assistance in stomatherapy and Impact of the pandemic on stomatherapy care.

The study was self-financed by the authors and was approved by the Research Ethics Committee of the Federal University of Piauí, through opinion number 4,987,136/2021 (CAAE: 48187121.3.0000.5214). In addition, the research participants read and signed the Informed Consent Form, receiving a copy of the document by email. The standards for research involving human beings, contained in Resolutions 466/2012 and 510/2016 of the National Health Council, were respected.

RESULTS

The analysis of sociodemographic data showed that the eight participants were female, aged between 26 and 52 years. The mean length of experience in the area of stomatherapy was eight years and seven reported having attended the graduate course of stomatherapy in Teresina-Piauí, Brazil. In relation to professional data, the time in the current work ranged from eight months to nine years. There was a predominance of outpatient and home care; and the performance of care provision. Regarding the area of activity, the work in the treatment of wounds and ostomies was highlighted. In addition, seven reported working in other areas, including urgency and emergency, patient safety and public health.

Through the analysis of the discourses given by the professionals in the interviews, three categories were emerged: Challenges in the work of stomatherapists during the COVID-19 pandemic; Strategies to enable remote and face-to-face assistance in stomatherapy; and Impact of the pandemic on stomatherapy care.

Challenges in the work of stomatherapists during the COVID-19 pandemic

The main challenges, reported by five participants, were the closure of outpatient clinics and worsening of the patients' health situation. In addition, three participants emphasized the population's fear of going to health services and the risk of becoming infected with COVID-19 or contaminating others.

"People stopped asking for home evaluations, outpatient care was missing and the reverse also happened, right, if you stopped offering the service" (ST2)

"There were many patients turned here to the area of the injury that got worse, there was a patient who had sepsis due to the injury and then died" (ST7)

"The care of not leading to contamination, protecting himself and protecting that family, especially with patients who were already in a risk group" (ST5)

Also, two participants reported the difficulty in readjusting care, both at home and at the outpatient clinic. One participant also mentioned the increase in the cost of care and, on the other hand, the reduction of the team.

"Until we managed to adjust our care, it was a whole re-education, both for the professional and the patient" (ST7)

"A loss for these patients and an increased cost of care" (ST8)

"Because the team was smaller, some activities, such as changing decubitus and carrying out bandages, became a little more tiring and laborious" (ST3)

Strategies to enable remote and face-to-face care in stomatherapy

The main strategy to enable face-to-face care, mentioned by four participants, was the adaptation of the care methodology. In addition, two participants cited the use of standard precautionary measures; two other participants inferred the training of human resources and one participant spoke of the role of vaccination to reinforce safety in home care.

"We had to change the entire care methodology, reduce the number of patients and not cluster" (ST1)

“The strategies were the standard measures, right, if I had any flu-like symptoms I canceled the service, I wore a N95 mask, hand washing” (ST5)

“Human resources were trained, so when the patient arrived, the team already knew they had to put a pneumatic mattress” (ST3)

“It is a relief that vaccines have arrived, because patients at home, the public is mainly elderly” (ST7)

Regarding remote strategies, seven participants reported using the cell phone for verbal communication with the patient, family members or the team and three professionals highlighted the monitoring of the patient by video call. In the long term, one nurse reported conducting research and building health indicators.

“Remotely we always make our WhatsApp available, even if informal, even if not recognized by the board” (ST2)

“Make a video call with the patient's attending physician... make an orientation, ask for exams to be collected or pass the exam result” (ST2)

“I went home and the subsequent dressings I found a family member, guided and supervised, so it was a face-to-face dressing and the other remote” (ST4)

“We did a survey, so that we have a real indicator and get a public policy and if there is a new wave we no longer allow you to close the outpatient clinic” (ET6)

Impact of the pandemic on stomatherapy care

The eight participants recognized that stomatherapy is essential for treating people with wounds, ostomies and incontinence. Six emphasized its importance for preventing the worsening of the health situation of the assisted public and five highlighted the quality of life provided to this specific population.

“The main one I see today is prevention, because with the guidelines we can prevent many other complications” (ST7)

“From the moment I can shorten the resolution of this problem, we may be giving quality of life to these patients” (ST5)

“When I took care of a patient, it was very difficult for him not to have anything that was not taken care of the stomatherapy, sometimes he had a wound, an incontinence or an ostomy” (ST8)

Regarding future prospects, seven participants highlighted the growth of the area and four participants cited its recognition by other health professionals and the increase in demands. In addition, three participants mentioned the expansion of the use of technologies for teaching and assistance, two participants mentioned remote training and two participants encouraging education and innovation.

“In the media today everyone talks about laser, coverage, you open Instagram there is a universe of professionals talking about dressing, injuries, ostomies” (ET4)

“In the same matter of other professionals... already request opinions, want a specialist nurse to accompany their patients” (ST1)

“Diseases that already existed in the population, which are chronic diseases, accidents, neoplasms [...] The outlook for the future is increasing demand” (ST8)

“Being able to carry out more of the training part in a virtual way and even the teleconsultation part, I think this is the way of the future; we take hybrid courses” (ST2)

DISCUSSION

Stomatherapy care is essential for people with wounds, ostomies and incontinence, conditions arising from a set of non-communicable chronic diseases, which reflect the main users of health services in Brazil and cause 70% of deaths worldwide.⁽¹²⁾ In this context, it is emphasized that the COVID-19 pandemic caused the lack of assistance of this population, given the inability of the services to meet all demands, evidencing the need to reorganize the Brazilian health system.⁽¹³⁾

From the discourses of the stomatherapists, several challenges were identified in this care model. This gap in specialized care was observed in other studies, especially regarding the reduction of outpatient care, the difficulty of access to health centers and the fear of acquiring COVID-19 infection.⁽¹⁴⁻¹⁶⁾ This situation led to the worsening of chronic conditions and, consequently, an increase in the cost of care, as mentioned by the participants. In addition, it was directly reflected in health indicators, such as the increase in the number of amputations and disarticulations of the lower limbs, mainly due to complications of the diabetic foot.⁽¹⁵⁾

Regarding the aspects of patient safety, in a study conducted with 693 nursing professionals working in Brazil, 81.8% reported the low effectiveness of internal care flows, 79% the absence or insufficiency of team training and 69.3% the lack of personal protective equipment, which corroborates the report of two participants regarding the difficulty in adjusting attendances in the face-to-face modality. In addition, the literature highlights difficulties regarding the dimensioning of human and material resources in care practice, presented by a participant the problem of team reduction and work overload in the pandemic period.^(13,17)

Given this, there was the adaptation of the care methodology at all levels of care, including the reinforcement of standard precautions, the hiring and training of staff and the reduction of surgeries and elective consultations. Such strategies were adopted in the practice of the interviewed stomatherapists, demonstrating compliance with the sanitary measures established in the country.⁽¹⁸⁾ In addition, vaccination against COVID-19 was essential to reduce the risk of infection in health care, as mentioned by a participant who performed home care, as soon as professionals in the area, the elderly and people with comorbidities were included in the priority groups.⁽¹⁹⁾

During the pandemic period, there was an increase in the use of technologies in the field of health, to mediate guidance, screening and consultations. These helped, mainly, to contain the spread of the new coronavirus, avoid overload of complex care, expand access to services and reduce costs in care. Therefore, while remote strategies were adopted to face the pandemic, the federal nursing council authorized teleconsultation for professionals in the class.^(3,20)

This favored remote monitoring, especially of people with chronic wounds, for purposes such as assessment of the condition, supervision of dressing change, selection of therapeutic coverage to be applied and guidance of other care to contribute to the healing process.⁽²¹⁾ This strategy, essential to continue the treatment of these individuals, was used by seven study participants even in the absence of formalization of the resource within the institution where they worked.

In the meantime, it was observed that the use of telehealth resources was adopted in other countries in order to assist individuals with demands in stomatherapy. Regarding wound management, there is the integration of telemedicine for non-critical cases in the literature, based on the stratification of the etiology and current characteristic of the lesion.⁽²²⁾ Similarly, an algorithm was created in an institution located in Kaohsiung City, Taiwan, to maintain regular care of chronic wounds outside the hospital environment.⁽²³⁾

The Whatsapp consultation was used to assist in the perioperative stage of ostomy preparation, including consultations before surgery and follow-up after intervention.⁽²⁴⁾ In addition, communication technologies have enabled the evaluation and remote management of people with pelvic floor dysfunctions, such as urinary retention, incontinence and urinary tract infections.⁽²⁵⁾

In this new care scenario shaped during the public health crisis, in addition to telehealth, the need to apply technologies in the educational sphere arose, due to the perceived benefits of hybrid teaching, such as greater engagement and satisfaction of students, and the possibility of training health professionals at a distance.⁽²⁶⁾ This methodology was described by three interviewees as a future perspective for teaching in stomatherapy, passing through the graduation, specialization and training of nurses.

In addition, seven participants highlighted the growth of the area, and four, the increase in demands and the appreciation of the stomatherapist by other categories, as soon as currently many nurses have sought the specialty, in order to acquire expertise and expand their work possibilities.⁽²⁷⁾ Related to the demands, in the COVID-19 pandemic, the incidence of pressure injuries significantly increased, both in

critically ill hospitalized patients affected by the virus and in health professionals who used personal protective equipment for a prolonged period.⁽²⁸⁾

However, for the qualification of assistance to patients with wounds, ostomies and incontinence, it is essential to intensify the teaching of stomatherapy at graduation, supported by field practice or realistic simulation laboratories, because such demands are also the responsibility of generalist nurses.⁽²⁹⁾ Still, as cited by two interviewees, the strengthening of the specialty requires the continuous encouragement of research, however, in reality, manuscripts are published unevenly in the three subareas of stomatherapy, which may be associated with the fact that most professionals work only on wounds and ostomies, a profile similar to that found in the study participants.⁽³⁰⁾

Regarding the limitations of the study, the research was carried out in only one Brazilian city, which made it impossible to identify the challenges and perspectives in other regions of the country. In addition, there was a limited number of participants, considering data saturation and the time to complete the research and present the results. It is noteworthy that the study will contribute to the practice of the stomatherapist, since the discussion of care strategies to face the challenges imposed by the pandemic, can serve as a model of good practices for health institutions. In addition, the results may encourage new research, as soon as the health crisis, which is still ongoing, is a forgotten event.

CONCLUSION

There were several challenges in the work of stomatherapists during the COVID-19 pandemic, highlighting the closure of specialized outpatient clinics and the worsening of the patients' health situation. However, these were circumvented through the diversification of care strategies, by expanding the use of teleconsultation and changes in the methodology of care. In addition, it was possible to reflect the importance of stomatherapy for the qualification of nursing care and the prevention of diseases, in addition to positive future perspectives, such as the increased appreciation of the specialty and the expansion of technologies for assistance and education in the area.

CONTRIBUTIONS

Contributed to the conception or design of the study/research: Carvalho SO. Contributed to data collection: Carvalho SO. Contributed to the analysis and/or interpretation of data: Carvalho SO. Contributed to article writing or critical review: Carvalho SO, Silva GRF, Vasconcelos CDA, Braga FCSAG, Trindade FR, Galiza FT. Final approval of the version to be published: Silva GRF, Vasconcelos CDA, Braga FCSAG, Trindade FR, Galiza FT.

REFERENCES

1. Aquino EM, Silveira IH, Pescarini JM, Aquino R, Souza JA Filho, Rocha AS, et al. Social distancing measures to control the COVID-19 pandemic: potential impacts and challenges in Brazil. *Ciênc. Saúde Colet.* 2020;25(Suppl 1):2423-46. doi: <https://doi.org/10.1590/1413-81232020256.1.10502020>
2. Leite JS, Feter N, Caputo EL, Doring IR, Cassuriaga J, Reichert FF, et al. Managing noncommunicable diseases during the COVID-19 pandemic in Brazil: findings the PAMPA cohort. *Ciênc. Saúde Colet.* 2021;26(3):987-1000. doi: <https://doi.org/10.1590/1413-81232021263.39232020>
3. Castro TM, Silva BA, Venturi K. Quantitative analysis of remote care during the COVID-19 pandemic related to the historical landmarks of the disease in Brazil. *Saúde Colet.* 2020;10(53):2394-2403. doi: <https://doi.org/10.36489/saudecoletiva.2020v10i53p2394-2403>
4. Barone MT, Harnik SB, De Luca PV, Lima BL, Wieselberg RJ, Ngongo B, et al. The impact of COVID-19 on people with diabetes in Brazil. *Diabetes Res Clin Pract.* 2020;166:108304. doi: <https://doi.org/10.1016/j.diabres.2020.108304>
5. Teixeira MG, Medina MG, Costa MC, Netto MB, Carreiro R, Aquino R. Reorganization of primary health care for universal surveillance and containment of COVID-19. *Epidemiol. Serv. Saúde.* 2020;29:e2020494. doi: <https://doi.org/10.5123/S1679-49742020000400015>
6. Cavalcante FJ, Nascimento IR, Cavalcante RM. PPE and healthcare workers safety during the COVID-

- 19 pandemic: A brief reflection. *Res. Soc. Dev.* 2021;10(7):e55010716809. doi: <https://doi.org/10.33448/rsd-v10i7.16809>
7. Tanaka AK, Paczek RS, De Brum BN, Brito DT, Alexandre EM, Agostini AG. Adaptation of the stomatherapy service during the COVID-19 pandemic: an experience report. *Rev. gaúch. enferm.* 2021;42(esp):e20200214. doi: <https://doi.org/10.1590/1983-1447.2021.20200214>
8. Paixão GLS, Freitas MI, Cardoso LDCC, Carvalho AR, Fonseca GG, Andrade AFSM, et al. Estratégias e desafios do cuidado de enfermagem diante da pandemia da covid-19. *Braz J Dev.* 2021;7(2):19125-39. doi: <https://doi.org/10.34117/bjdv7n2-521>
9. Ghaljaie F, Naderifar M, Goli H. Snowball sampling: A purposeful method of sampling in qualitative research. *Stride. Dev Med Educ.* 2017;14(3):e67670. doi: <http://dx.doi.org/10.5812/sdme.67670>
10. Minayo MCS. Sampling and saturation in qualitative research: consensuses and controversies. *Rev Pesqui Qual [Internet]*. 2017 [cited 2022 Jul 20];5(7). Available from: <https://editora.sepq.org.br/rpq/article/view/82>
11. Bardin L. *Análise de conteúdo*. São Paulo: Edições 70; 2016.
12. Malta DC, Bernal RT, Lima MG, Araújo SS, Silva MM, Freitas MI, et al. Chronic noncommunicable diseases and the use of health services: analysis of the National Health Survey in Brazil. *Rev Saúde Pública.* 2017;51(Suppl 1:4s). doi: <https://doi.org/10.1590/S1518-8787.2017051000090>
13. Massuda A, Malik AM, Vecina Neto G, Tasca R, Ferreira Júnior WC. The resilience of the Brazilian National Health System in the face of the COVID-19 pandemic. *Cad EBAPE.BR.* 2021;19(1). doi: <https://doi.org/10.1590/1679-395120200185>
14. Malta DC, Gomes CS, Silva AG, Cardoso LS, Barros MB, Lima MG, et al. Use of health services and adherence to social distancing by adults with Noncommunicable Diseases during the COVID-19 pandemic, Brazil, 2020. *Ciênc. Saúde Colet.* 2021;26(7):2833-42. doi: <https://doi.org/10.1590/1413-81232021267.00602021>
15. Guarinello GG, D'Amico RC, Miranda ANM, Novack J, Coral FE. Impact of COVID-19 on the surgical profile of vascular surgery patients at a tertiary hospital in Curitiba, Brazil. *J Vasc Bras.* 2022;21. <https://doi.org/10.1590/1677-5449.202200271>
16. Borges KN, Oliveira RC, Macedo DA, Santos JC, Pellizzer LG. O impacto da pandemia de COVID-19 em indivíduos com doenças crônicas e a sua correlação com o acesso a serviços de saúde. *Rev. Cient. Esc. Estadual Saúde Pública Goiás Cândido Santiago.* 2020;6(3):e6000013. doi: <https://doi.org/10.22491/2447-3405.2020.V6N3.6000013>
17. Silva MA, Lima MC, Dourado CA, Pinho CM, Andrade MS. Nursing professionals' biosafety in confronting COVID-19. *Rev. bras enferm.* 2021;75(Suppl 1):e20201104. doi: <https://doi.org/10.1590/0034-7167-2020-1104>
18. Santos JL, Lanzoni GM, Costa MF, Debetio JO, Sousa LP, Santos LS, et al. How are university hospitals coping with the COVID-19 pandemic in Brazil? *Acta Paul. Enferm.* 2020;33:eAPE20200175. doi: <https://doi.org/10.37689/acta-ape/2020AO01755>
19. Lima MA, Rodrigues RS, Delduque MC. Vacinação contra a Covid-19: avanços no setor da saúde no Brasil. *Cad Iberoam Direito Sanit.* 2022;11(1):48-63. doi: <https://doi.org/10.17566/ciads.v11i1.846>
20. Caetano R, Silva AB, Guedes AC, Paiva CC, Ribeiro GR, Santos DL, et al. Challenges and opportunities for telehealth during the COVID-19 pandemic: ideas on spaces and initiatives in the

Brazilian context. *Cad Saúde Pública*. 2020;36(5):e00088920. doi: <https://doi.org/10.1590/0102-311X00088920>

21. Nascimento BO, Souza NVDO, Santos DM, Silva PAS. Telemonitoramento em enfermagem para clientes em situação de estomaterapia: experiência inovadora para o processo ensino-aprendizagem. *Interagir: pensando a extensão*. 2018;1(26):73-8. <https://doi.org/10.12957/interag.2018.39668>

22. Oropallo A, Lantis J, Martin A, Al Rubaiay A, Wang N. Wound care during the COVID-19 pandemic: improving outcomes through the integration of telemedicine. *J. Wound Care*. 2021;30(Suppl 2). doi: <https://doi.org/10.12968/jowc.2021.30.Sup2.S12>

23. Hsieh MC, Lee CC, Ou SF, Kuo YR. Telemedicine algorithm for chronic wound care during COVID-19. *Int Wound J*. 2020;17:1535-7. doi: <https://doi.org/10.1111/iwj.13409>

24. Mendoza LM. Implementación de consulta externa remota por WhatsApp durante la pandemia COVID 19: propuesta para servicios quirúrgicos en Venezuela. *Rev Venez Cir*. 2021;74(1):3-9. doi: <https://doi.org/10.48104/RVC.2021.74.1.3>

25. Grimes CL, Balk EM, Crisp CC, Antosh DD, Murphy M, Halder GE, et al. A guide for urogynecologic patient care utilizing telemedicine during the COVID-19 pandemic: review of existing evidence. *Int Urogynecol J*. doi: <https://doi.org/10.1007/s00192-020-04314-4>

26. Oliveira MB, Silva LC, Canazaro JV, Carvalhido ML, Souza RR, Bussade Neto J, et al. hybrid teaching in brazil after covid-19 pandemic. *Braz J Dev*. 2021;7(1):918-32. doi: <https://doi.org/10.34117/bjdv7n1-061>

27. Costa CC, Soares SS, Vieira ML, Oliveira MD, Pedro RS, Chaves US, et al. Stomatherapists in the world of work: Practicalities and difficulties for the professional practice. *Esc Anna Nery*. 2021;25(2). doi: <https://doi.org/10.1590/2177-9465-EAN-2020-0262>

28. Mota BS, Barbosa IEB, Fonseca AR, Siqueira DSG, Sampaio EC, Melo FS, et al. Pressure ulcer in intensive care unit patients and healthcare workers during the covid-19 pandemic. *Braz J Dev*. 2021;7(4):43066-82. doi: <https://doi.org/10.34117/bjdv7n4-664>

29. Gonçalves FG, Reis FL, Silva NA, Souza NV, Varella TC, Pires AS. Stomatherapy content and teaching strategies in the undergraduate nursing curriculum. *Rev Enferm UERJ*. 2018;26:e28921. doi: <https://doi.org/10.12957/reuerj.2018.28921>

30. Paula MA, Ribeiro SL, Santos VL. Who and where are specialist nurses in enterostomal therapy in Brazil? *Braz J Enterostomal Ther*. 2019;17:e2419. doi: https://doi.org/10.30886/estima.v17.820_PT

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