

# Nutritional Assistance to Cancer Outpatients during the COVID-19 Pandemic in Specialized Hospital Care

doi: <https://doi.org/10.32635/2176-9745.RBC.2020v66nTemaAtual.1218>

*Assistência Nutricional a Pacientes Ambulatoriais com Câncer durante a Pandemia de Covid-19 na Atenção Hospitalar Especializada*

*Asistencia Nutricional a Pacientes Ambulatorios con Cáncer durante la Pandemia de Covid-19 en Atención Hospitalaria Especializada*

Gabriela Villaça Chaves<sup>1</sup>; Patrícia Villas-Boas de Andrade<sup>2</sup>; Amine Farias Costa<sup>3</sup>

## ABSTRACT

**Introduction:** The coronavirus disease 2019 (COVID-19) pandemic is responsible for thousands of cases and deaths in Brazil and cancer patients are more vulnerable to the disease. The need for social isolation determined the restructuring of flows and routines at the Cancer Hospital II of the National Cancer Institute José Alencar Gomes da Silva (HCII-INCA). **Objective:** To describe the experience of the HCII-INCA nutrition clinic in patients remote care during the pandemic. **Method:** The experiences of the nutritionists responsible for outpatient care and the head of the Nutrition and Dietetics Section of the HCII (SND-HCII) between April and June 2020 were compiled and discussed. **Results:** Some SND-HCII adaptation measures were carried out, such as the restriction of in-person assistance and the beginning of remote assistance, via telephone; the suspension of group activities and the extension of the interval for scheduling patients' return. Between April and June 2020, 192 patients were seen at the nutrition clinic, a 56% drop compared to the first quarter of 2020. Despite the drop in the number of visits, the absenteeism rate decreased considerably when the two quarters are compared. The reduction in this index was considered the main advantage of remote service, allowing a greater number of services to be carried out, in proportion to the hours available. **Conclusion:** Remote nutritional care for outpatients at HCII-INCA may be considered for incorporation into the institution's routine.

**Key words:** Coronavirus Infections; Telemedicine; Food and Nutrition Education; Medical Oncology.

## RESUMO

**Introdução:** A pandemia da doença pelo coronavírus 2019 (*coronavirus disease 2019 – Covid-19*) é responsável por milhares de casos e mortes no Brasil e pacientes com câncer são mais vulneráveis à doença. A necessidade do isolamento social determinou a reestruturação de fluxos e rotinas no Hospital do Câncer II do Instituto Nacional de Câncer José Alencar Gomes da Silva (HCII-INCA). **Objetivo:** Descrever a experiência do ambulatório de nutrição do HCII-INCA no atendimento remoto aos pacientes durante a pandemia. **Método:** Foram compiladas e discutidas as experiências das nutricionistas responsáveis pelos atendimentos ambulatoriais e da chefia da Seção de Nutrição e Dietética do HCII (SND-HCII) no período entre abril e junho de 2020. **Resultados:** Algumas medidas de adaptação da SND-HCII incluíram a restrição dos atendimentos presenciais e o início dos atendimentos remotos, via telefone; a suspensão das atividades de grupo; e a ampliação do intervalo para agendamento de retorno dos pacientes. Entre abril e junho de 2020, 192 pacientes foram atendidos no ambulatório de nutrição, uma queda de 56% em comparação com o primeiro trimestre de 2020. Apesar dessa queda no número de atendimentos, o índice de absenteísmo reduziu consideravelmente quando os dois trimestres são comparados. A redução desse índice foi considerada a principal vantagem do atendimento remoto, possibilitando a realização de um número maior de atendimentos, proporcionalmente aos horários disponíveis. **Conclusão:** O atendimento nutricional remoto aos pacientes ambulatoriais do HCII-INCA pode ser considerado para incorporação na rotina da Instituição. **Palavras-chave:** Infecções por Coronavírus; Telemedicina; Educação Alimentar e Nutricional; Oncologia.

## RESUMEN

**Introducción:** La pandemia del coronavirus 2019 (*coronavirus disease 2019 – Covid-19*) es responsable de miles de casos y muertes en Brasil y los pacientes con cáncer son más vulnerables a la enfermedad. La necesidad de aislamiento social determinó la reestructuración de flujos y rutinas en el Hospital Oncológico II del Instituto Nacional del Cáncer José Alencar Gomes da Silva (HCII-INCA). **Objetivo:** Describir la experiencia de la clínica de nutrición HCII-INCA en la atención remota de pacientes durante la pandemia. **Método:** Se recopilaron y discutieron las experiencias de los nutricionistas responsables de la atención ambulatoria y del jefe de la Sección de Nutrición y Dietética del HCII (SND-HCII) entre abril y junio de 2020. **Resultados:** Algunas medidas de adaptación para el SND-HCII incluyeron la restricción de la asistencia presencial y el inicio de la asistencia remota, vía telefónica; la suspensión de las actividades grupales y la extensión del intervalo para programar el regreso de los pacientes. Entre abril y junio de 2020, 192 pacientes fueron atendidos en la clínica de nutrición, una caída del 56% respecto al primer trimestre de 2020. A pesar de esta caída en el número de visitas, la tasa de absentismo disminuyó considerablemente cuando se comparan los dos trimestres. La reducción de este índice se consideró la principal ventaja del servicio a distancia, permitiendo realizar un mayor número de servicios, en proporción a las horas disponibles. **Conclusión:** La atención nutricional remota para pacientes ambulatorios del HCII-INCA puede ser considerada para su incorporación a la rutina de la institución. **Palabras clave:** Infecciones por Coronavirus; Telemedicina; Educación Alimentaria y Nutricional; Oncología Médica.

<sup>1</sup>Nutritionist. Technologist in C&T. PhD in Medical Clinic. Acting Coordinator of Nutrition and Dietetics Section of Cancer Hospital II (HCII) of the National Cancer Institute José Alencar Gomes da Silva (INCA). Rio de Janeiro (RJ), Brazil. Orcid iD: <https://orcid.org/0000-0003-0029-7310>

<sup>2</sup>Nutritionist. Technologist in C&T. Master's in Medical Clinic. Nutrition and Dietetics Section of HCII/INCA. Rio de Janeiro (RJ), Brazil. Orcid iD: <https://orcid.org/0000-0002-5739-638X>

<sup>3</sup>Nutritionist. Technologist in C&T. PhD in Public Health. Coordinator of the Nutrition and Dietetics Section of HCII/INCA. Rio de Janeiro (RJ), Brazil. Orcid iD: <https://orcid.org/0000-0001-7944-7291>

**Corresponding author:** Amine Farias Costa. Avenida Binário do Porto, 831, sala 290 - Santo Cristo. Rio de Janeiro (RJ), Brazil. CEP 20220-250. Email: [acosta@inca.gov.br](mailto:acosta@inca.gov.br)



## INTRODUCTION

So far, the coronavirus disease 2019 – COVID-19 pandemic is responsible for 3,501,975 confirmed cases and 112,304 deaths in Brazil<sup>1</sup>. Patients with cancer are more vulnerable to severer COVID-19 manifestations<sup>2</sup>, in special, patients with lung cancer, those submitted to bone marrow transplantation or in chemotherapy treatment<sup>3,4</sup>.

Social distancing as the only form to minimize the rapid spread of the disease and the deceleration of the caring flows to treat health conditions unrelated to COVID-19 suspected or confirmed cases in order to assign the workforce of the health teams to fight the pandemic determined the redesigning of flows and routines in tertiary care, among them, tele-consulting.

The experience of remote nutritional consultation in Brazil is new, approved by the Federal Council of Nutritionists exceptionally during the COVID-19 pandemic<sup>5</sup>. Whereas nutritional consultation is an essential part of the treatment of patients with lung cancer consulted at the National Cancer Institute José Alencar Gomes da Silva (INCA) helping to control the symptoms related to the treatment and to the disease and minimizing the changes of the nutritional status, the goal of this communication was to describe the experience of remote consultation at the nutrition outpatient of Cancer Hospital II of INCA (HCII-INCA) between April and June of 2020 during the COVID-19 pandemic.

## METHOD

The accomplishments of nutritionists responsible for outpatients' consultations from April to June 2020 in HCII-INCA and the managerial experiences of the coordination of the Nutrition and Dietetics Section of HCII (SND-HCII) were compiled and discussed with adjustments of routines and procedures during the same period.

The results of some indicators of quality of SND-HCII produced and evaluated systematically by the head of SND-HCII and by the direction of HCII-INCA for the period from April to June 2020 related to the activities of the nutrition outpatient of the facility were also included in the discussion and compared with the results of the same indicators of the first trimester of 2020.

The data related to the consultations and procedures performed in the nutrition outpatient of HCII-INCA are logged in a specific spreadsheet and entered electronically in the billing system of the institution for further compilation, analysis and construction of the indicators of SND-HCII.

## RESULTS AND DISCUSSION

The HCII-INCA nutrition outpatient is open regularly from Monday to Friday, 7 A.M to 3 P.M. offering 14 consultations upon appointments previously set up for outpatients including first time and follow up consultations. Previously unscheduled consultations are considered of immediate necessity and are met as demanded and included in the extra outpatient agenda.

With routine and physical structure changes in HCII-INCA because of COVID-19 pandemic, all the services of the Hospital started to work according to a contingency plan approved by the direction. Among the measures adopted, social distancing and respiratory isolation of COVID-19 suspected or confirmed patients resulted in physical and structural changes in the facilities of the Hospital and impacted several routines and consultations.

Therefore, from March 30, 2020, in-person consultations of the nutrition outpatient were limited to Tuesday and Thursday from 7 A.M. to noon and the other consultations started to be conducted remotely via telephone.

The adjustment measures of SND-HCII included the suspension of group activities, extension of the interval to schedule the return of patients in follow up, restriction of the number of companions and limitation of anthropometric evaluation of weight and height for in-person consultations. In cases where these parameters were not valid for nutritional diagnosis, this diagnosis was limited to anamneses and physical exam. Patients followed up remotely who were able to verify their body weight were advised to do it prior to consultations.

Patients screening for in-person or remote consultation was performed weekly through evaluation of the list of patients who have scheduled outpatient consultation at the scheduling sector of HCII-INCA and analysis of the patient electronic chart.

The clinical criteria established for non in-person consultation included: first time patients for initial evaluation which could be completed or not in-person according to the necessity; patients without nutritional therapy (NT) and/or significant alterations of the nutritional status with complaints related to the symptoms of the disease or of cancer treatment as constipation, actinic enteritis among others; patients of group activities for whom consultation shifted to individual; patients in NT waiting for surgical treatment considering that for most of the cases, in special, pelvic masses, nutritional repletion is possible only after removal of the mass.

Some routines had to be reorganized and performed early to ensure that the eligible patients for remote consultation were contacted prior to the consultation date

and were correctly briefed. The nutritionist responsible for telephone consultations worked remotely at home.

Therefore, the eligible patients for remote consultation were contacted by telephone always in the eve of the scheduled consultation date to avoid unnecessary journeys to HCII-INCA. The nutritional guidelines, feeding plan and educative leaflets were sent to the patient digitally and the nutritionist sent the oral NT prescriptions to be printed in HCII-INCA, the patients and/or companions were instructed to pick them up at SND-HCII when they occasionally had to come to HCII-INCA.

Between April and June 2020, 192 patients were consulted in HCII-INCA nutrition outpatient, a drop of 56% in comparison with the first trimester of 2020. Of these 192, 67% were consulted remotely via telephone.

Despite the drop of the number of consultations associated to every peculiar aspect of the pandemic, the rate of absenteeism reduced considerably while comparing the two trimesters. The rate of absenteeism is calculated by the division of the number of patients consulted at the nutrition outpatient (in-person or remotely) and the number of scheduled consultations. During the exclusive in-person consultation period the rate reflects only the missed patients and in the reduced in-person and remote consultation period, the rate also reflects the impossibility of contacting the patient by telephone.

In the first trimester of 2020, the mean rate of absenteeism of the HCII-INCA nutrition outpatient was 47% while in the period between April and June, it dropped to 25%. If considered only the remote consultations of this period, 14% of all the patients scheduled were not consulted remotely.

The rate of absenteeism in the nutrition outpatient is high since the indicator started to be calculated (mean of 36% in 2018 and 34% in 2019). The most common motives for the patients who miss the nutrition outpatient consultation are: lack of financial resources to pay for the transportation to HCII-INCA; patient not included in the social programs of the municipality they live that usually provide local transportation or offer vouchers, worsening of the health condition as the onset of chemotherapy or radiotherapy treatment related symptoms, lack of companion in the day of the consultation and forgetfulness of the consultation day.

The Head of SND-HCII already counts with strategies to attempt to reduce this rate as scheduling nutritional outpatient consultation in the same day of the medical consultation or with other professionals of the assistance-technical division as psychology or physiotherapy or referral of patients to social services outpatient if social issues were detected and are influencing their treatment.

However, remote consultation was never an option even because it is not ruled by any law.

The SND-HCII project for 2020 was to evaluate systematically why the patients miss the nutritional outpatient consultation and further devise strategies together with the departments of quality, direction and other services of HCII-INCA with the objective to reduce the rate of absenteeism of the outpatient consultations. Nonetheless, the project was discontinued due to the national public health emergency and abrupt change of all the hospital's routines and procedures.

The experience of remote consultation and follow up although pushed by the pandemic raised several reflections about the process of nutritional care to HCII-INCA patients.

Unquestionably, the main benefit was to reduce the rate of absenteeism resulting in higher number of consultations adjusted to the available schedule. This can increase the number of patients in oncologic treatment in HCII-INCA who receive outpatient nutritional care when hospitals routines are resumed after this public health emergency period. Another advantage identified was to avoid unnecessary travels of patients to HCII-INCA, being possible to resolve several issues remotely as wrong scheduling or renew oral NT prescriptions until further lab tests are performed.

The disadvantages of remote consultation: impossibility to contact the patient due to non-updated telephone contacts in HCII-INCA, rejecting phone calls from unknown contacts, in addition to the difficulties some patients have in handling electronic medias and devices, mobiles or reading digital documents. In order to circumvent the effects of this last obstacle, it was requested to the patient that when it was scheduled for other consultation or procedure at HCII-INCA, to go to SND-HCII to obtain nutritional guidelines, feeding plans and printed educative leaflets.

As limitation of the telephone nutritional consultation, it is noticeable to mention, the lack of visual contact with the patient can be an issue for the proper nutritional evaluation and the understanding of the nutritionist guidelines transmitted to the patient. The use of video calls instead of phone calls can overcome these limitations.

In the future, with the possibility of incorporation of remote consultation in the institution definitely, it will be possible to test other activities in this modality as remote consultation for group activities (lectures and workshops). Still, it will be possible to screen all the eligible outpatients for nutritional care remotely by professional nutritionist in order to assign them to the most appropriate consultation modality, individual or group consultation, evaluating

the urgency and necessity of more immediate nutritional consultation.

## CONCLUSION

Considering the experience of the nutritionists and coordination of SND-HCII during the COVID-19 pandemic, the remote nutritional consultation to HCII-INCA outpatients was beneficial for nutritional care to patients with cancer, its incorporation in the institution's routine can be weighed.

## CONTRIBUTIONS

Amine Farias Costa and Gabriela Villaça Chaves contributed equally for the study conception, design, wording, analysis and interpretation of the manuscript. Patrícia Villas-Boas de Andrade contributed for the wording, analysis and interpretation of the manuscript. All the authors participated of the critical review and approved the final version to be published.

## DECLARATION OF CONFLICT OF INTERESTS

There is no conflict of interests to declare.

## FUNDING SOURCES

None.

## REFERENCES

1. Ministério da Saúde (BR). Painel Coronavírus [Internet]. Versão v2.0. Brasília, DF: Ministério da Saúde; [2020] [acesso 2020 ago 21]. Available from: <https://covid.saude.gov.br/>
2. Ferreira JD, Lima FCS, Oliveira JFP, et al. COVID-19 e câncer: atualização de aspectos epidemiológicos. *Rev Bras Cancerol.* 2020;66(TemaAtual):e-1013. doi: <https://doi.org/10.32635/2176-9745.RBC.2020v66nTemaAtual.1013>
3. Sidaway P. COVID-19 and cancer: what we know so far. *Nat Rev Clin Oncol.* 2020;17:336. doi: <https://doi.org/10.1038/s41571-020-0366-2>
4. Liang W, Guan W, Chen R, et al. Cancer patients in SARS-CoV-2 infection: a nationwide analysis in China. *Lancet Oncol.* 2020;21(3):335-7. doi: [https://doi.org/10.1016/S1470-2045\(20\)30096-6](https://doi.org/10.1016/S1470-2045(20)30096-6).
5. Conselho Federal de Nutricionistas (BR). Resolução CFN nº 646, de 18 de março de 2020. Suspende até o dia 31 de agosto de 2020 o disposto no artigo 36 da Resolução CFN nº 599, de 25 de fevereiro de 2018, que aprova o Código de Ética e de Conduta dos Nutricionistas

[Internet]. Diário Oficial da União, Brasília, DF; 2020 mar 19. Seção I:81 [acesso 2020 ago 12]. Available from: <https://www.cfn.org.br/wp-content/uploads/2020/03/Resol-CFN-646-codigo-etica.pdf>

Recebido em 21/8/2020

Aprovado em 21/8/2020