# Orientations for Nutritional Assistance to Patients with Advanced Cancer in Palliative Care with Suspected or Confirmed New Coronavirus Infection

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Orientações para Assistência Nutricional a Pacientes com Câncer Avançado em Cuidados Paliativos Suspeitos ou Confirmados de Infecção pelo Novo Coronavírus

Pautas para la Asistencia Nutricional a Pacientes con Cáncer Avanzado en Atención Paliativa Sospechada o Confirmada de Nueva Infección con Coronavirus

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## INTRODUCTION

Currently, the world public health faces a challenge: the pandemic created by the novel coronavirus, the agent that causes the disease called coronavirus disease 2019 (COVID-19), found on December 31, 2019<sup>1,2</sup>. The World Health Organization (WHO)<sup>1</sup> declared the status of pandemic on March 11, 2020. It is known that the virus has high transmissibility and provokes the severe acute respiratory syndrome coronavirus 2 – Sars-CoV-2 that ranges from mild cases – nearly 80% - to severe cases with potentially lethal respiratory failure – between 5% and 10% of the cases<sup>2-4</sup>.

Patients with malignant neoplasms are more susceptible to this infection when compared with healthy individuals because of the compromise of the immune system caused by the presence of the disease and by anti-tumor treatments<sup>5-7</sup>. In the setting of oncologic palliative care, this group becomes more vulnerable to the severe form of COVID-19, attributed to great risk of unfavorable results and worse prognosis of the advanced disease<sup>7,8</sup>.

Within the context of the pandemic, it is essential to offer palliative care<sup>9</sup> – approach addressed to the improvement of the quality of life of patients and relatives who face a life-threatening disease by prevention and relief of suffering, early identification and treatment of the pain and other physical, psychosocial and spiritual symptoms<sup>10</sup>.

In the area of nutrition and advanced cancer, studies about the impact of the COVID-19 infection in the nutritional status were not encountered. However, the findings that related the nutritional status with the infection indicate that malnourishment, loss of muscle mass and functionality can cause worse results<sup>8,11</sup>. Regarding laboratory changes, anemia and hypoproteinemia are frequent in patients with malignant neoplasms, which can affect the immunocompetence and increase the susceptibility to Sars-CoV-2 and hypoxia and dyspnea<sup>8,11</sup> are the most common symptoms.

### RECOMMENDATIONS

In the scenario of the COVID-19 pandemic, it became necessary to review the care practices, processes and protocols to ensure the quality and safety of the patients and collaborators who work in the country's health units<sup>12</sup>. Prevention and infection control measures in the hospital environment must be implemented to avoid or reduce to the minimum the transmission and dissemination of the coronavirus during any health care conducted<sup>13</sup>.

As cancer patients in palliative care fulfill the criteria of risk group for COVID-19, the National Academy of Palliative Care (NAPC) recommends the suspension of the in-person consultations whenever possible, with the objective of minimizing the exposure to the virus and possible contamination, prioritizing the follow up by tele-consultation in outpatient and home care<sup>14</sup>.

In the modality of home care, it is necessary to reorganize the functioning and consultation flow, following the recommendations published by WHO to provide care to patients suspected or confirmed with

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COVID-19 as well as their companions<sup>15</sup>. Because of more exposure of the patients and health professionals during the home visits, it is recommended its reduction whenever possible. Therefore, like in the outpatient care, each patient must be evaluated about the necessity of inperson consultation, substituting for tele-consultation.

In case the interdisciplinary team considers the necessity of nutritional advice, it can occur via teleconsultation, as disposed in the Resolution of the Federal Council of Nutritionists (CFN) number 646, dated March 18, 2020, that authorizes exceptionally the non in-person consultation for nutritional advice.

## **PROMPT CARE**

During the COVID-19 pandemic, it is recommended to follow the flow of emergency planning developed by each hospital facility. The flow must be specific per area where patients admitted with suspected COVID-19 contamination must be referred to an exclusive facility for that purpose<sup>13</sup>. In the prompt care services, the nutritionist should plan the nutritional care based in the evaluation performed by the team of physicians and nurses and with information obtained through secondary sources (relatives, charts or other members of the interdisciplinary team)<sup>12</sup>.

## **OUTPATIENT CARE**

The in-person consultation must be evaluated cautiously and can be offered according to the patient's necessity and pursuant to the demands to be prioritized by the interdisciplinary team and agreed with the administration of the institution<sup>14,17</sup>.

It must be considered the recommendations of each institution for using personal protective equipment (PPE) and biosafety, proper for in-person consultation<sup>13</sup>.

The use of physical resources for nutritional evaluation in non-suspected cases, as metric tapes, scales, dynamometers, adipometers, among others, must be evaluated thoroughly and, if used, must be cleaned with alcohol 70% before each consultation<sup>12</sup>.

In case of non in-person consultation, secondary data from charts must be considered and utilize subjective instruments for screening and nutritional evaluation as well as laboratory parameters, evaluation of the symptoms and prognostic indicators that meet the necessities of each service, which will guide the nutritional consultation<sup>11,12,18,19</sup>.

During the consultation, the complaints of the patient and its relatives must be taken into account, correlating them to the clinical, laboratory and nutritional conditions of the patient in order to plan an individualized nutritional planning avoiding unnecessary journeys to the health facility<sup>14,19</sup>. If in-person consultation is indicated with the support of the interdisciplinary team, it is recommended that only one expert at a time remains in the room with the patient following the recommended precautions<sup>13,14</sup>.

The orientation provided and the nutritional plan must be entered in the chart<sup>19</sup> and shared with the assistant team.

It is emphasized still to consider follow up through tele-consultation and the possibility of extending the interval between subsequent consultations according to nutritional anamneses, clinical status, control of the symptoms and prognosis of the patient and/or pursuant to the emergent necessities of the patient or its relatives.

#### HOME CARE

For in-person home care or through tele-consultation, the interdisciplinary team must summon the referenced nutritionist for the visit when nutritional demands are required.

Preferentially, the nutritionist must provide remotely to the other team professionals in contact with the patient and relatives or caretakers nutritional advice to avoid scheduling in-person visits<sup>14,17</sup>. The nutritional planning must be entered in the chart<sup>19</sup> or in the appropriate form for the entire team to access<sup>17</sup>.

Whenever possible the nutritionist must provide the patient and its caring network, nutritional and food education. The demands for nutritional advice must be prioritized, among which, nutritional orientations to control the symptoms of nutritional impact as nausea, vomits, hyporexia, dysphagia, constipation, mucositis among others and nutritional prescription of enteral diet, in case the food route has been implemented recently or for the first time<sup>19</sup>. Orientations about content, preparation and correct manipulation and administration of the diet must be provided, in addition to rearrangement of the nutritional conduct because of possible events related to nutritional therapy as intolerance to the volume prescribed, diarrhea, constipation, abdominal distention among others.

#### HOSPITALIZATION

The nutritionist working in the hospital environment must follow personal hygiene procedures and use proper PPE during the time it remains in the hospital following strictly the orientations of the Hospital Infection Control Commission of the institution<sup>12,13,17</sup>.

All the patients with advanced cancer in palliative care hospitalized with suspicion of COVID-19 or with diagnostic confirmed must receive nutritional support<sup>12,18</sup>. The objectives of the nutritional approach modify according to the moment when the patient is in the course of evolution of the oncologic disease<sup>19</sup>. The nutritional strategies must focus, mainly, in the functional and nutritional status, food anamneses and bioethical aspects as autonomy, whose goal is to provide satisfaction and comfort for symptoms control and improvement of quality of life<sup>19,20</sup>.

To admit the patient with suspicion or confirmation of COVID-19, the nutritionist must obtain the necessary information through relatives or caretakers, but not direct companions and who do not have symptoms of flu-like syndrome, through data from the charts and information gathered by members of the interdisciplinary team that are already in in-person contact with the patient.

The in-person nutritional advice must occur during the care to suspected or confirmed cases of COVID-19<sup>12,18</sup>. However, it is recommended to keep the nutritional evaluation of the patients according to the institutional protocol whenever possible. It is recommended the use of clinical data, prognosis indicators, evaluation of the symptoms of nutritional impact, laboratory parameters and instruments that can be filled out by the patient without the support or by the relative or caretaker<sup>18,19</sup>.

The evaluation of the food intake and the monitoring of the presence of symptoms must happen daily. It is recommended that the nutritionist uses tele-consultation, data from charts and discussions with the interdisciplinary team to guide the planning of the nutritional care<sup>12</sup>.

The adjustments of the food and nutritional plan must be performed with clinical, nutritional evaluation and according to the symptomatology presented in order to promote the proper food acceptance, assist with the control of the symptoms and maintenance or recovery of the nutritional status, among others<sup>18,19</sup>. Consider oral and enteral nutritional therapy of the patients in nutritional risk and who are not in the final phase of life<sup>19</sup>, according to institutional protocols.

At hospital discharge, the nutritionist must provide nutritional advice to the patient, when possible, in addition to orientations to the relatives or caretaker. All the nutritional advices should be made in writing.

The consultations realized, the orientations provided, and the nutritional care plan must be entered in the chart<sup>19</sup> and shared with the team according to the institutional routine.

Food and beverages offered to the hospitalized patients must be prepared in compliance with good practices of food manufacturing and manipulation in order to ensure the delivery of safe nutrition<sup>21</sup>. The patients should not share plates, glasses, cutlery and other items<sup>13</sup>, it is recommended the use of disposables materials to pack them.

## **C**LINICAL RESEARCH

Among the measures to reduce the circulation and agglomeration of individuals in the health units, it is

recommended the suspension/postponement of data collection of ongoing clinical researches when in-person interviews, focal groups of physical evaluations of patients and professionals were planned, that can have repercussions and increase unnecessarily the exposure of these individuals. The modality of remote work must be a priority for students associated to research programs.

Retrospective research data collection, whose information of interest can be gathered remotely through access to digital platforms, search in electronic charts and other existing institutional programs might be encouraged.

In addition, the development and continuation of researches whose methodology includes data collection by telephone, digitally or through secondary banks or databases and the development of systematic review of the literature should be stimulated.

Because of the paucity of studies in the specific area of nutrition and advanced cancer associated to COVID-19 it is essential the promotion of scientific researches in that area with the purpose of producing evidences for better care of this group of individuals in the context of the pandemic.

# CONCLUSION

Based in the exposition, the definition of new flows and recommendations with the objective of maintaining the quality of the nutritional care to patients with advanced cancer during the COVID-19 pandemic is unquestionable. However, always in compliance with the approach for symptoms control, comfort and promotion of the quality of life and death of the patients and its relatives/caretakers based in communication and interdisciplinary work. Thus, it is pursued through this article, to help other health services to offer dignified nutritional care with quality to patients with advanced cancer in palliative care affected by COVID-19.

## CONTRIBUTIONS

Karla Santos da Costa Rosa and Livia Costa de Oliveira contributed for the conception and design of the study, wording and interpretation of the manuscript. Emanuelly Varea Maria Wiegert, Rosane de Souza Santos and Mariana Fernandes Costa contributed equally for the wording, analysis and interpretation of the manuscript. All the authors participated of the critical review of the manuscript and approved the final version.

### DECLARATION OF CONFLICT OF INTERESTS

There is no conflict of interests to declare.

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