

Telemedicine in Cancer Palliative Care: a Legacy of the Pandemic

<https://doi.org/10.32635/2176-9745.RBC.2023v69n1.2698>

Telemedicina em Cuidados Paliativos Oncológicos: um Legado da Pandemia

Telemedicina en Cuidados Paliativos Oncológicos: un Legado de la Pandemia

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ABSTRACT

Introduction: Telemedicine can be a useful tool for monitoring patients in palliative care, especially in the context of the COVID-19 pandemic. **Objective:** To describe the use of telemedicine for outpatients followed up in an Oncological Palliative Care unit in a national reference hospital. **Method:** A retrospective analysis of medical teleconsultations performed between April 2020 and February 2021 to outpatients followed up at the unit. Demographic and clinical data of patients, telemedicine characteristics and medical management were analyzed. A subjective evaluation was carried out with the professionals responsible for the calls. **Results:** 1,645 medical teleconsultations were carried out to 470 patients with a mean age of 62 (54-73) years, mostly females (n=258; 54.9%) and with Karnofsky Performance Status estimated at 40% or higher (n=423; 90.0%) at the time of the first remote contact. Most of the teleconsultations were carried out (n=928; 56.4%) to monitor the burden of symptoms between in-person consultations. Of these, 612 (relative frequency=65.9%) controlled the symptom in the subsequent teleconsultation. The most prevalent complaint was pain (n=303; relative frequency=32.7%) followed by flu-like symptoms (n=108; relative frequency=11.6%). Of the clinical conducts planned, the most prevalent (n=921; 56.0%) was only for the person responsible to pick up the medications, the patient did not need to go to the hospital. **Conclusion:** Telemedicine proved to be useful in monitoring symptoms of patients with advanced cancer and it allowed patients and caregivers to stay in their homes, reducing displacement and, consequently, the risk of contagion by COVID-19.

Key words: palliative care; ambulatory care; telemedicine.

RESUMO

Introdução: A telemedicina pode ser um instrumento útil para o acompanhamento de pacientes em cuidados paliativos, especialmente no contexto da pandemia por covid-19. **Objetivo:** Descrever o uso da telemedicina para pacientes em cuidados paliativos oncológicos acompanhados ambulatorialmente em uma unidade de referência nacional. **Método:** Análise retrospectiva de teleatendimentos médicos realizados entre abril de 2020 e fevereiro de 2021 a pacientes da unidade acompanhados ambulatorialmente. Foram analisados dados demográficos e clínicos dos pacientes, características do teleatendimento e conduta médica, e feita uma avaliação subjetiva com os profissionais responsáveis pelos teleatendimentos. **Resultados:** Foram realizados 1.645 teleatendimentos médicos a 470 pacientes com idade média de 62 (54-73) anos, sendo a maioria do sexo feminino (n=258; 54,9%) e com *Karnofsky Performance Status* estimado em 40% ou superior (n=423; 90,0%) no momento do primeiro contato a distância. Os teleatendimentos foram realizados, em sua maior parte (n=928; 56,4%), para o monitoramento da carga de sintomas entre as consultas presenciais. Destes, em 612 (frequência relativa=65,9%), houve sintoma controlado no teleatendimento subsequente. A queixa mais prevalente foi dor (n=303; frequência relativa=32,7%) seguida por sintomas gripais (n=108; frequência relativa=11,6%). Entre as condutas traçadas, a mais prevalente (n=921; 56,0%) foi o comparecimento apenas do responsável pela retirada dos medicamentos, sem necessidade de deslocamento do paciente. **Conclusão:** A telemedicina mostrou-se útil na monitorização de sintomas de pacientes com câncer avançado e permitiu que pacientes e cuidadores se mantivessem em seus domicílios, reduzindo o deslocamento e, conseqüentemente, o risco de contágio por covid-19.

Palavras-chave: cuidados paliativos; assistência ambulatorial; telemedicina.

RESUMEN

Introducción: La telemedicina se muestra una herramienta útil para el seguimiento de pacientes en cuidados Paliativos, especialmente en el contexto de la pandemia de covid-19. **Objetivo:** Describir el uso de la telemedicina para pacientes en cuidados paliativos oncológicos en seguimiento ambulatorio en un hospital de referencia nacional. **Método:** Análisis retrospectivo de las teleconsultas médicas realizadas entre abril de 2020 y febrero de 2021 a pacientes ambulatorios seguidos en el hospital. Se analizaron datos demográficos y clínicos de los pacientes, características de la teleconsulta y gestión médica. Fue realizada una evaluación subjetiva con los profesionales responsables de los servicios que hacían el atendimento en telemedicina. **Resultados:** Fueron hechas 1645 llamadas médicas a 470 pacientes con una edad promedio de 62 años (54-73), la mayoría eran mujeres (n=258; 54,9%) y con *Karnofsky Performance Status* estimado en 40% o superior (n=423; 90,0%) en el momento del primer contacto a distancia. La mayoría de las llamadas fueron realizadas (n=928; 56,4%) para monitorear la carga de síntomas entre consultas presenciales. De estos, 612 (frecuencia relativa=65,9%) controlaron el síntoma en la llamada siguiente. La queja más prevalente fue el dolor (n=303; frecuencia relativa=32,7%) seguido de síntomas gripales (n=108; frecuencia relativa=11,6%). Entre los procedimientos señalados, el más prevalente (n=921; 56,0%) fue la asistencia únicamente de la persona responsable de tomar la medicación, sin necesidad de desplazamiento del paciente. **Conclusión:** La telemedicina demostró ser útil en el seguimiento de los síntomas de los pacientes con cáncer avanzado y permitió que los pacientes y cuidadores se quedasen en sus hogares, reduciendo el desplazamiento y, en consecuencia, el riesgo de contagio por covid-19.

Palabras clave: cuidados paliativos; atención ambulatoria, telemedicina.

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INTRODUCTION

Telemedicine for palliative care is growing steadily¹ in the last decade, involving the use of telecommunications and virtual technologies to deliver health care services¹. More recently with the COVID-19 pandemic innumerable services started to offer this modality to continue providing safe follow-up, avoiding displacements and agglomerations of patients at the facilities³ to secure the quality-of-life and symptoms management⁴. Most of the studies about this theme address the benefits of providing care, training and education to multidisciplinary teams to minimize the repercussions physical distancing caused in the activities of daily life^{5,6}.

Outpatient teleconsultation to patients followed up at “*Hospital do Câncer (HC) IV*”, which it is the Palliative Care Unit (PC) of the National Cancer Institute (INCA) as described by Pinto et al.¹⁰ was structured within the framework of the pertinent regulatory bodies (Ministry of Health, Brazilian Federal Council of Medicine, Brazilian Federal Council of Nursing). Its objective was to reduce the volume of in-person consultations, avoiding agglomerations and displacements of patients and caretakers to and at the PC, monitor and manage the symptoms, dispensation of medications and supplies to provide care to patients at home, track, guide and monitor suspected COVID-19 infected patients¹⁰⁻¹². Teleconsultations were conducted mostly by nurses and physicians while psychology, social service and nutrition consultations were held only on demand¹⁰.

Teleconsultations started in April 2020 and likely will be incorporated definitely at the service and redesigned after the end of the pandemic. In addition to subjective impression of effectiveness, it has been revealed that the demand for prompt consultation or hospital admission did not increase in this period. The objective of this article is to describe the use of telemedicine to patients with advanced cancer in exclusive palliative care followed up at the outpatient unit of a national reference hospital.

METHOD

Retrospective analysis of patient’s charts followed up at INCA’s PC outpatient in Rio de Janeiro – RJ, Brazil in the modality of teleconsultation from April 2020 to February 2021.

INCA is a public reference institution to prevent and control cancer in Brazil. It relies on HC I, II and III at different neighborhoods of Rio de Janeiro for specific disease modifying therapies, that is, any intent-to-cure intervention, increase of survival and/or disease-free survival with chemotherapy, radiotherapy or surgery. HC

IV is INCA’s PC for patients referred by any other hospital (HC I, II and III), after all lines of treatment have been exhausted and cure was unattainable or disease progression during treatment (its continuation may not be beneficial) or aggravation of the physical conditions, preventing the continuation of specific therapeutic interventions.

Outpatient consultation to PC patients involves in-person and teleconsultation follow-up. The managing team responsible for teleconsultations organized the agenda of subsequent pre-scheduled consultations, the first always in-person to ensure multiprofessional evaluation and qualified reception and to meet some common demands from patients and caretakers, in addition to symptoms management, clarifications and guidance about palliative care. Patients and family preference for conventional (in-person) consultations was considered¹⁰.

Time between consultations was designed according to the patient’s demands and in-person or remote evaluation by the attending team based in the presence and intensity of symptoms, with priority to those whose intensity and number of symptoms granted shorter consultation interval. The patient itself or family member could contact the teleconsultation service spontaneously to report doubts or clinical changes. A standard form was created to determine the teleconsultation which was recorded in the electronic chart with the modality of consultation¹⁰.

Where telemedicine was unable to detect the demands effectively and safely, in-person consultations were kept according to the initial planning with goals and potential problems. Along the time, some flows were redesigned. Initially, teleconsultations scheduled or by spontaneous demand were conducted by one physician, two nurses, one psychologist and one social worker who received patients after screening according to their or family member demands and later, nutritional teleconsultation was performed upon request and medical report. The *Revista Brasileira de Cancerologia*¹⁰ published specific details of this process¹⁰.

The attending health professional attempted to determine the functionality, the oncologic disease related symptoms, management of invasive devices, ostomy and wounds based in the patient or family member information collected during teleconsultation, in addition to guidance and orientation, correct use of medications and therapeutic adherence.

COVID-19 related symptoms, necessity of medicines dispensation and required materials for home care were routinely evaluated. The cases were discussed by the physician and nurse to determine the best conduct and an in-person consultation was promptly scheduled if needed. Whether admission was established upon evaluation by the teleconsultation attending team in cases

of management of excruciating symptoms or end-of-life care, a bed at the infirmary was secured and the case discussed with hospital physicians.

The data presented herein are partial and collected during teleconsultation with patients in palliative care. The inclusion criteria were: (i) in palliative care; (ii) locally advanced or metastatic, histologically or clinically confirmed cancer; (iii) not receiving any intent-to-cure antineoplastic treatment; (iv) ≥ 20 years old; (v) teleconsultation performed during the study period. Patients whose data were unable to be collected from the charts were excluded.

The following information were collected from the charts: demographic [age (years) and sex (male, female)], clinic [primary tumor site (gastrointestinal tract, gynecologic, breast, head and neck, lung, skin, bones soft tissues and other)] and functionality (Karnofsky Performance Status – KPS). KPS (from 0% [death] to 100% [fully active]) was estimated by the attending teleconsultation physician based in the daily physical functioning reported by the patient at the evaluation¹³.

The number of teleconsultations per patient, contact, mean of consultation (telephone, video), medical conduct, rescheduling of the next consultation (yes, no, time in days), monitoring (yes, no, time in days), presence of symptoms (yes, no) and type of symptoms (presence of flu-like symptoms suggestive of COVID-19 infection) were obtained as well.

In addition, positive and negative aspects of teleconsultation were evaluated subjectively by the attending teleconsultation team.

Stata 13.1 (Stata Corp., College Station, Texas, USA) was adopted for statistical analyzes. Kolmogorov-Smirnov test was utilized to evaluate the distribution of the variables. The numerical variables were described in median with interquartile range (IQR), percentiles 25 and 75. Categorical variables were described as absolute (n) and relative (%) frequency.

The Institutional Review Board of INCA approved the study, report number 4,685,226 (CAAE: submission for ethical review 54919016.4.0000.5274) in compliance with Directive 466/2012¹⁴ of the National Health Council, .

RESULTS

Data of 1,645 medical teleconsultations conducted during the study period with 470 different patients were evaluated as shown in Figure 1. Only one physician performed all the teleconsultations at the outpatient unit in the study period, either prescheduled or spontaneous demand by the patient or family member.

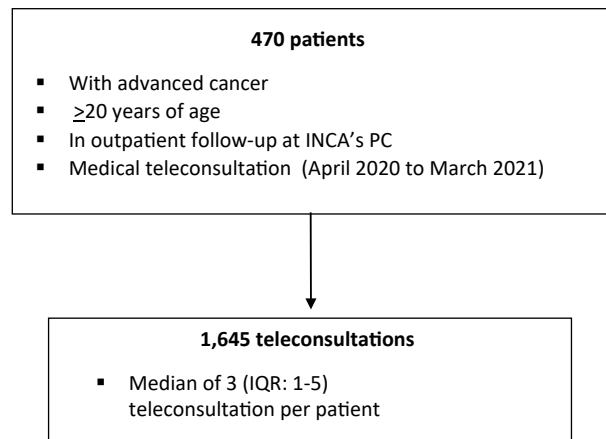


Figure 1. Medical teleconsultations to patients with advanced cancer in palliative care

Captions: PC = Palliative Care; INCA = National Cancer Institute; IQR = interquartile range .

The median age was 62 (IQR: 54-73) years with predominance of females (n=258; 54.9%), gastrointestinal as primary tumor site (n=99; 21.1%), followed by head and neck (n=87; 18.5%). The estimated KPS of most of the patients (n=423; 90.0%) was $\geq 40\%$ at the first teleconsultation (Table 1).

Table 1. Clinical and demographic characteristics of patients with advanced cancer in palliative care who received medical teleconsultation (n=470)

Variable	n (%)
Age (years) [median (IQR)]	62 (54-73)
Sex	
Male	212 (45.1%)
Female	258 (54.9%)
Primary tumor site	
Gastrointestinal tract	99 (21.1%)
Head and neck	87 (18.5%)
Gynecologic	66 (14.0%)
Breast	60 (12.8%)
Lung	52 (11.1%)
Skin, bones and soft tissues	44 (9.4%)
Other ^a	62 (13.2%)
Estimated KPS (%)	
<40%	47 (10.0%)
>40%	423 (90.0%)

Captions: n = number of observations; IQR = interquartile range; KPS = Karnofsky Performance Status.

(a) Central nervous system, kidney and urinary system, male and female genital organs, peritoneum, mediastinum, unknown primary site.

The median of teleconsultations per patient was 3 (IQR: 1-5), mostly by telephone (n=1,300; 79.0%). The patient itself was the main contact for the majority of

the teleconsultations (n=644; 39.1%) or son/daughter (n=493; 30.0%) whose main objective was to monitor the symptoms burden at every in-person outpatient consultation. Part of the patients who reported symptoms (n=612; relative frequency = 65.9%) did not report uncontrolled symptom at the next consultation. For those who attended teleconsultation for symptoms monitoring, the most prevalent symptom was pain (n=542; 33%), followed by flu-like symptoms suggestive of COVID-19 infection (n=197; 12%) (Table 2).

The main medical conducts were divided in: 1 – person assigned to receive materials and medications when the patient was stable (31.0%); or 2 – person assigned to pick up new medications or when the patient presented any uncontrolled symptoms or mild to moderate complications, but passible to manage after prescription was changed (25.0%) (Graph 1).

DISCUSSION

These data corroborate the benefits of telemedicine since the strategy supported continuous safe care and favored monitoring and symptoms management to patients with advanced cancer in palliative care as already reported by other health facilities¹⁵⁻¹⁷. However, teleconsultations should not replace in-person consultations, for instance, first consultation to patient with advanced cancer in severe or unstable clinical condition when physical exam with the presence of the physician is essential¹⁸.

During the pandemic, teleconsultation was an important strategy to reduce the exposure of patients and family, transportation, time at the waiting room and other. Further to the individual benefit, it helped to restrain the circulation of persons at the PC and globally in the streets as only 18% of consultations were in-person for complex cases.

Additionally, it protected the health team due to the small number of in-person consultations or health professionals with risk factors who were able to conduct consultations for severe cases of COVID-19 remotely, further to keeping the work force active and updated through teleconsultation. The health professionals adhered to the new modality, but only medical consultations were included in the present investigation.

A period of adjustment to the new modality of teleconsultation is required both for patients and health professionals. Salem et al.¹⁹, in a qualitative study involving health caregivers and patients in palliative care and their family conducted between 2015 and 2017 concluded that it is necessary to clarify the goals and limitations of teleconsultations to avoid frustrations and to offer effective communication to improve the outcome.

Table 2. Descriptive characteristics of medical teleconsultations to patients with advanced cancer in palliative care (n=1,645)

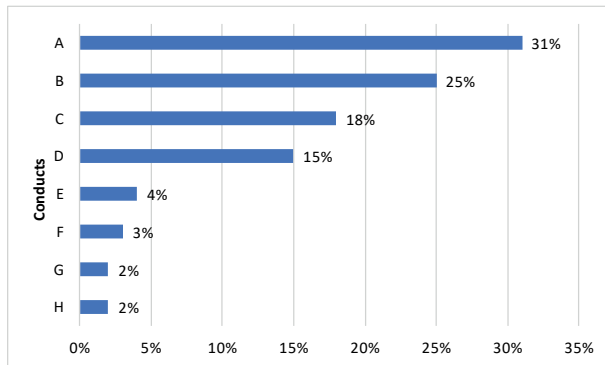
Variable	Total
Teleconsultations per patient [median (IQR)]	3 (1-5)
Main contact	
Own patient	644 (39.1%)
Son/daughter	493 (30.0%)
Spouse	222 (13.5%)
Other ^a	286 (17.4%)
Mean of consultation	
Telephone	1.300 (79.0%)
Video	345 (21.0%)
Reschedule the next consultation for an earlier date	
No	947 (58.5%)
Yes	668 (41.4%)
Time of rescheduling (days) [median (IQR)]	30 (20-30)
Monitoring before the consultation	
No	1.315 (79.9%)
Yes	330 (20.1%)
Time for monitoring (days) [median (IQR)]	5 (2-7)
Motive of teleconsultation	
Monitoring of symptoms	928 (56.4%)
Other	717 (43.6%)
Symptoms related to teleconsultations	
Pain	542 (32.9%)
Flu-like symptoms	197 (12.0%)
Bleeding	99 (6.0%)
Dyspnea	82 (5.0%)
Fatigue	82 (5.0%)
Other	643 (39.1%)
Continuing symptom at the next consultation	
No	612 (65,9%) ^b
Yes	316 (34,1%) ^b

Captions: n = number of observations; IQR = interquartile range;

(a) Friends, caretakers or other family members.

(b) Relative frequency.

After the first in-person consultation, the continuation can be made by teleconsultation with good adherence by the patients. A qualitative study to evaluate video consultation conducted by Tasneem et al.²⁰ revealed that the patients thought the experience was good, they claimed that the relation patient-doctor was kept, in addition to financial benefit, well-being and optimized access to care.



Graph 1. Conducts for teleconsultation to patients with advanced cancer in palliative care

A: Patient stable but with insufficient medication/material between consultations. Only the responsible should attend.

B: Patient with some uncontrolled symptoms but possible to manage if medical prescription changes. Only the responsible should attend to receive the medication.

C: Patient with some uncontrolled symptoms in use of medications and without possibility of management with teleconsultation alone. The patient and the responsible should attend.

D: Patient stable with insufficient medication and material at home. Reschedule outpatient consultations postponing the date to attend.

E: Videoconference, request material to nurse, recall for symptoms management, consultation upon patient's initiative, request imaging or lab test, return to the origin unit, patient hospitalized and/or order procedure.

F: Medical prescription.

G: Referral to Prompt Service.

H: Family consultation post-death.

In a study about the utilization of video consultations in palliative care conducted by Jess et al.²¹, six themes addressing advantages and disadvantages, barriers and facilitators emerged: redesigning care; communication; user's perception; technology; privacy and economic implications. Communication was described as equivalent to in-person consultation (advantage of non-verbal communication during videocall *versus* conventional call). Staying home avoiding displacements sometimes painful, better symptoms management and good acceptance by professionals are some of the advantages. The disadvantages are access to technology, organization of the service to offer equipment and space to the professionals to facilitate bringing up sensitive themes.

The patient presented controlled symptoms in 34% of the teleconsultations as the present study investigated and the intervention was to deliver a new prescription and medication; in 15%, no intervention was necessary, not even a new prescription because the drugs are inexpensive and easy to purchase avoiding a trip from the patient's residence to the PC to get the medicine; and in 20%, an in-person consultation was required (outpatient, emergency or hospital admission). Among 25% of the patients requiring change of medication, the most common were adjustment of analgesia, opioids rotation, antibiotic therapy for non-complicated infections and

pain management of tumor wounds, initiation and optimization of antidepressants and anxiolytic.

Biswas et al.²² described the practice of telemedicine in India within the COVID-19 pandemic lockdown. Of the 314 patients, 157 needed guidance for symptom management, 129 for opioid titration and 86 to restock their opioid medication. Fifty-six patients were very satisfied and 152 were satisfied with the service.

After teleconsultation, the visits were rescheduled with median of 30-days interval. The cases were evaluated individually and the patients needing close follow-up were identified, which ensured 5-days interval in some cases. In addition to these visits scheduled by the service, patients and family have also spontaneously demanded consultations. Therefore, the number of teleconsultations for each of the 470 patients was variable with median of three consultations for each patient. Teleconsultation has also favored the monitoring of patients, active dying process and post-death family welcoming, a practice earlier performed preferentially by outpatient psychologists and social workers.

Although unquantified, the barriers to access technology was not a hurdle to utilize telemedicine as initially feared. The great problem was for videocall but not for voice call remote access.

The retrospective design and collection of secondary data recorded by other professionals from charts, with potential biases, for instance, subnotification were limitations of the study.

CONCLUSION

Changes of the care process provoked by the pandemic should be kept after its end. Telemedicine has been proven useful to manage symptoms of patients with advanced cancer in palliative care. It also ensured patients and caretakers to stay home, reducing travels and risk of COVID-19 spread. Remote consultation can facilitate following up patients with low KPS or even those who would suffer if needed to be transported to attend in-person consultation.

CONTRIBUTIONS

All the authors contributed substantially to the study design, acquisition, analysis and interpretation of the data, wording and critical review. They approved the final version to be published.

DECLARATION OF CONFLICT OF INTERESTS

There is no conflict of interests to declare.

FUNDING SOURCES

None

REFERENCES

- Hancock S, Preston N, Jones H, et al. Telehealth in palliative care is being described but not evaluated: a systematic review. *BMC Palliat Care*. 2019;18(1):114. doi: <https://doi.org/10.1186/s12904-019-0495-5>
- World Health Organization. Geneva: WHO; c2020. WHO Director-General's opening remarks at the media briefing on COVID-19; 2020 Mar 11 [cited 2020 Apr 12]. Available from: <https://www.who.int/dg/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020>
- Calton B, Abedini N, Fratkin M. Telemedicine in the time of coronavirus. *J Pain Symptom Manage*. 2020;60(1):e12-e14. doi: <https://doi.org/10.1016/j.jpainsymman.2020.03.019>
- Academia Nacional de Cuidados Paliativos. Posicionamento da Academia Nacional de Cuidados Paliativos sobre covid-19 [Internet]. São Paulo: ANCP; [2020] [acesso 2020 abr 20]. Disponível em: https://www.dropbox.com/s/g77qi6xk2jc8rky/FINAL_ANCP_Ebook_cuidados_COVID-19.pdf?dl=0
- Wakan GK, Montgomery JR, Biesterveld BE, et al. Not dying alone - modern compassionate care in the covid-19 pandemic. *N Engl J Med*. 2020;382(24):e88. doi: <https://doi.org/10.1056/NEJMp2007781>
- Grange ES, Neil EJ, Stoffel M, et al. Responding to COVID-19: the UW medicine information technology services experience. *Appl Clin Inform*. 2020;11(2):265-75. doi: <https://doi.org/10.1055/s-0040-1709715>
- Ministério da Saúde (BR). Portaria nº 467, de 20 de março de 2020. Dispõe, em caráter excepcional e temporário, sobre as ações de Telemedicina, com o objetivo de regulamentar e operacionalizar as medidas de enfrentamento da emergência de saúde pública de importância internacional previstas no art. 3º da Lei nº 13.979, de 6 de fevereiro de 2020, decorrente da epidemia de COVID-19 [Internet]. Diário Oficial da União, Brasília, DF; 2020 mar 23 [acesso 2020 abr 7]; Edição 56-B; Seção I – Extra:1. Disponível em: <http://www.in.gov.br/en/web/dou/-/portaria-n-467-de-20-de-marco-de-2020-249312996>
- Conselho Federal de Medicina (BR). Ofício CFM nº 1756/2020 – COJUR [Internet]. Brasília, DF: CFM; 2020 [acesso 2020 abr 10]. Disponível em: http://portal.cfm.org.br/images/PDF/2020_oficio_telemedicina.pdf
- Conselho Federal de Enfermagem (BR). Resolução nº 634, de 26 de março de 2020. Autoriza e normatiza, “ad referendum” do Plenário do Cofen, a teleconsulta de enfermagem como forma de combate à pandemia provocada pelo novo coronavírus (Sars-Cov-2), mediante consultas, esclarecimentos, encaminhamentos e orientações com uso de meios tecnológicos, e dá outras providências [Internet]. Diário Oficial da União, Brasília, DF; 2020 mar 27 [acesso 2020 abr 10]; Edição 60; Seção 1:117. Disponível em: <https://www.in.gov.br/web/dou/-/resolucao-n-634-de-26-de-marco-de-2020-249995879>
- Pinto CS, Borsatto AZ, Vaz DC, et al. Teleatendimento ambulatorial em cuidados paliativos oncológicos: quebrando paradigmas e transformando a realidade atual. *Rev Bras Cancerol*. 2021;67(3):e-071732 doi: <https://doi.org/10.32635/2176-9745.RBC.2021v67n3.1732>
- Freitas R, Oliveira LAF, Rosa KSC, et al. Cuidados paliativos em pacientes com câncer avançado e covid-19. *Rev Bras Cancerol*. 2020;66(TemaAtual):e-1077. doi: <https://doi.org/10.32635/2176-9745.RBC.2020v66nTemaAtual.1077>
- Sampaio SGSM, Dias AM, Freitas R. Orientações do serviço médico de uma unidade de referência em cuidados paliativos oncológicos frente à pandemia de covid-19. *Rev Bras Cancerol*. 2020;66(TemaAtual):e-1058. doi: <https://doi.org/10.32635/2176-9745.RBC.2020v66nTemaAtual.1058>
- Karnofsky DA, Burchenal JH. The clinical evaluation of chemotherapeutic agents in cancer. In: MacLeod CM, editor. *Evaluation of chemotherapeutic agents*. New York: Columbia Univ Press; 1949. p.191-205.
- Conselho Nacional de Saúde (BR). Resolução nº 466, de 12 de dezembro de 2012. Aprova as diretrizes e normas regulamentadoras de pesquisas envolvendo seres humanos. Diário Oficial da União, Brasília, DF. 2013 jun 13; Seção 1:59.
- Hennemann-Krause L, Lopes AJ, Araújo JA, et al. The assessment of telemedicine to support outpatient palliative care in advanced cancer. *Palliat Support Care*. 2015;13(4):1025-30. doi: <https://doi.org/10.1017/S147895151400100X>
- Worster B, Swartz K. Telemedicine and palliative care: an increasing role in supportive oncology. *Curr Oncol Rep*. 2017;19(6):37. doi: <https://doi.org/10.1007/s11912-017-0600-y>
- Chávarri-Guerra Y, Ramos-López WA, Covarrubias-Gómez A, et al. Providing supportive and palliative care using telemedicine for patients with advanced cancer during the covid-19 pandemic in Mexico. *Oncologist*. 2021;26(3):e512-e5. doi: <https://doi.org/10.1002/onco.13568>
- Silva MD, Schack EE. Outpatient palliative care practice for cancer patients during covid-19 pandemic: benefits and barriers of using telemedicine. *Am J Hosp Palliat Care*. 2021;38(7):842-4. doi: <https://doi.org/10.1177/1049909121997358>
- Salem R, El Zakhem A, Gharamti A, et al. Palliative care via telemedicine: a qualitative study of caregiver and

- provider perceptions. *J Palliat Med.* 2020;23(12):1594-8. doi: <https://doi.org/10.1089/jpm.2020.0002>
20. Tasneem S, Kim A, Bagheri A, et al. Telemedicine video visits for patients receiving palliative care: a qualitative study. *Am J Hosp Palliat Care.* 2019;36(9):789-94. doi: <https://doi.org/10.1177/1049909119846843>
21. Jess M, Timm H, Dieperink KB. Video consultations in palliative care: a systematic integrative review. *Palliat Med.* 2019;33(8):942-58. doi: <https://doi.org/10.1177/0269216319854938>
22. Biswas S, Adhikari SD, Gupta N, et al. Smartphone-based telemedicine service at palliative care unit during nationwide lockdown: our initial experience at a tertiary care cancer hospital. *Indian J Palliat Care.* 2020;26(Suppl 1):S31-S35. doi: https://doi.org/10.4103/IJPC.IJPC_161_20

Recebido em 10/5/2022
Aprovado em 29/11/2022