

Health strategies for maintaining the quality of care in chemotherapy in the context of the COVID-19 pandemic

Estrategias de salud para mantener la calidad de la atención en quimioterapia en el contexto de la pandemia

COVID-19

Estratégias de saúde para manutenção da qualidade da assistência na quimioterapia no contexto da pandemia da COVID-19

Daniel Teixeira do Nascimento¹ ORCID: 0000-0003-0942-2640 **Giselle Barcellos Oliveira** Koeppe¹

ORCID: 0000-0002-4821-1021 Priscila Pradonoff Oliveira¹ ORCID: 0000-0003-1998-1649 Rafael Ramos Valadao1 ORCID: 0000-0001-5675-7318 Taiana dos Santo Bernardo Prado1

ORCID: 0000-0001-9269-7113 Nicolle Silva dos Santos¹ ORCID: 0000-0003-1831-676X Luciana da Costa Nogueira Cerqueira¹

ORCID: 0000-0003-1339-6828

¹Universidade Veiga de Almeida. Rio de Janeiro, Brazil.

How to cite this article:

Nascimento DT, Koeppe GBO, Oliveira PP, Valadao RR, Prado TSB, Santos NS, Cerqueira LCN. Health strategies for maintaining the quality of care in chemotherapy in the context of the COVID-19 pandemic. Glob Acad Nurs. 2021;2(Spe.2):e117. https://dx.doi.org/10.5935/2675-5602.20200117

Corresponding author:

Luciana da Costa Nogueira Cerqueira E-mail:

luciana.nogueira7@hotmail.com

Chief Editor: Caroliny dos Santos Guimarães da Fonseca Executive Editor: Kátia dos Santos

Armada de Oliveira

Submission: 06-16-2021 Approval: 07-26-2021

Abstract

This study aimed to describe the strategies adopted to maintain the quality of care provided to chemotherapy patients during the COVID-19 pandemic period. This is an integrative literature review, with data collected on the VHL portal with the MEDLINE AND LILACS databases. As inclusion criteria, articles published between November 2019 and March 2021, articles in English, Spanish and Portuguese. Articles published in sectors of any sector that do not involve chemotherapy were excluded. A total of 154,101 thousand articles were found in the search, with 10 articles being selected for the review. Three major variables were found: Effective patient/professional communication (40%), Professional training (20%) and Surveillance and monitoring by teleconsultations (40%). As for the main variables found, the results are evident that the strategies used to care for chemotherapy patients were clarified. The importance of the nursing team's performance in this context is also highlighted, and with this, it is hoped that this study will help nurses working in oncology units.

Descriptors: Health Care; eHealth Strategies; Chemotherapy; COVID-19.

Resumén

Este estudio tuvo como objetivo describir las estrategias adoptadas para mantener la calidad de la atención brindada a los pacientes de quimioterapia durante el período pandémico de COVID-19. Se trata de una revisión bibliográfica integradora, con datos recopilados en el portal BVS con las bases de datos MEDLINE Y LILACS. Como criterios de inclusión, artículos publicados entre noviembre de 2019 y marzo de 2021, artículos en inglés, español y portugués. Se excluyeron los artículos publicados en sectores de cualquier sector que no involucren quimioterapia. En la búsqueda se encontraron un total de 154,101 mil artículos, siendo seleccionados 10 artículos para la revisión. Se encontraron tres variables principales: Comunicación efectiva paciente / profesional (40%), Formación profesional (20%) y Vigilancia y seguimiento por teleconsultas (40%). En cuanto a las principales variables encontradas, los resultados evidencian que se aclararon las estrategias utilizadas para la atención de los pacientes en quimioterapia. También se destaca la importancia del desempeño del equipo de enfermería en este contexto, y con ello se espera que este estudio ayude a los enfermeros que laboran en las unidades de oncología.

Descriptores: Cuidado de la Salud; Estrategias de eHealth; Quimioterapia; COVID-19.

Resumo

Objetivou-se descrever as estratégias adotadas para manutenção da qualidade de assistência do paciente em quimioterapia no período da pandemia da COVID-19. Trata-se de uma revisão integrativa de literatura, com dados levantados no portal BVS com as bases MEDLINE E LILACS. Como critério de inclusão, artigos publicados entre novembro de 2019 e março de 2021, artigos em inglês, espanhol e português. Excluídos os artigos publicados em setores de qualquer setor que não envolva quimioterapia. Foram encontrados na busca 154.101 mil artigos, sendo selecionados para a revisão 10 artigos. Foram encontradas três grandes variáveis: Comunicação efetiva paciente/profissional (40%), Capacitação profissional (20%) e Vigilância e acompanhamento por teleconsultas (40%). Quanto às principais variáveis achadas, os resultados ficam evidentes que foram esclarecidas as estratégias usadas para o atendimento ao paciente em quimioterapia. Destaca-se ainda, a importância atuação da equipe de enfermagem nesse contexto, com isso, espera-se que este estudo venha a ajudar o enfermeiro atuante nas unidades de oncologias.

Descritores: Atenção à Saúde; Estratégias de eSaúde; Quimioterapia; COVID-19.



Introduction

Nowadays, there has been a growing number of those infected by COVID-19, which directly has an important impact on health care, both in general units and in specialties. The severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), the disease-causing virus coronavirus 2019 (COVID-19) has been expanding globally at a very alarming rate. And it would be no different in the chemotherapy sector, where patients, in addition to belonging to the risk group, seem to be more vulnerable to worse results from the infection¹. In this context, there is still a great dilemma regarding cancer patients, regarding the discussion between risk and benefits in treatment.

The treatments of cancer patients have always been critical and meticulous. The negative impact of the pandemic on cancer patients, estimates that, over the next year, there will be an increase in the number of deaths in cancer patients and that this increase will occur not only in patients who contract COVID-19, but also in those who experience delay in the diagnosis and treatment of neoplasia².

A study carried out at the Hospital Israelita Albert Einstein compared the volume of consultations and visits to cancer patients between the pre-pandemic period (March to May 2019) and the pandemic period (March to May 2020). In this scenario, there is a great limitation and delay in the process of screening, diagnosis, and adherence to treatment by cancer patients. There was a decline of 45.0% and 56.2% in the total number of return visits and new visits, respectively, among patients who sought cancer treatment during the COVID-19 period. There was a 27.5% reduction in the total number of patients undergoing intravenous systemic treatment, in addition to a 57.4% reduction in the number of new patients undergoing intravenous systemic treatment during the period of COVID-19. In contrast, there was a substantial increase of 309% in the number of new patients undergoing oral chemotherapy regimens in the period of COVID-193.

Initial studies on the impact of SARS-COV2 infection on cancer patients indicate that this population presents not only a higher risk of infection, but also a higher probability of unfavorable outcomes, when compared to the general population, being a population at risk and in need of special attention during the current pandemic².

Given this situation, the care of cancer patients has become a dilemma, due to this change in priorities. It required health professionals dedicated to cancer treatment to redesign cancer care to mitigate the potential negative effects of COVID-19 infection in patients undergoing treatment³.

Based on the characteristics of cancer treatment and the changes caused by the COVID pandemic19, it is necessary to build strategies to minimize the impact of this period on the well-being, diagnosis, prognosis, and treatment of cancer patients. These strategies may support not only the fight against COVID-19, but also for future attacks of infectious diseases².

In the chemotherapy treatment process, this patient has comprehensive and multidisciplinary care to guarantee the dignity of the treatment, as well as

improvement in the expected results. Thus, the professional who has a great relationship and has a large direct workload in care for this population group is the nurse, thus becoming a protagonist in care, where he can be represented as the figure that confers greater confidence for the patient and their families for encouragement in carrying out the treatment⁴.

In analyzing this information, the following research question emerged based on the PICo strategy (Chart 1): What is the scientific evidence available regarding the strategies adopted by nurses in relation to patients undergoing chemotherapy during the COVID-19 pandemic period to maintain the quality of health care?

Chart 1. Structured research question by the PICo acromion. Cabo Frio, RJ,
Brazil. 2020

Population	Elderly	adult	patients	undergoing	
	chemotherapy				
Intervention	Strategies for conducting assistance in the				
	pandemic by COVID-19				
Control	maintenance of health				
Outcome	Quality o	f health o	care		

This research aims to study the strategies adopted to maintain the quality of care for chemotherapy patients during the COVID-19 pandemic period.

This study is justified because, with the data generated in this research, it brings up-to-date evidence of the actions of the health team towards the patient and its relevance nowadays, highlighting the importance of the nurse with the patient with cancer during the phase of its tracking, discovery, treatment, and care of its pathology against COVID-19. The research seeks to find scientific data on the strategies used by nurses to maintain the quality of health care during the COVID-19 pandemic so that we can present results that can optimize care and care for these patients during and after this period.

Methodology

The integrative literature review is a method that aims to synthesize results obtained in research on a topic or issue, in a systematic, orderly, and comprehensive way. It is called integrative because it provides broader information about a subject/problem, thus constituting a body of knowledge. In this way, the reviewer/researcher can prepare an integrative review with different purposes, which can be directed towards the definition of concepts, review of theories or methodological analysis of the studies included in a particular topic.⁵

To search for articles, we used the internet to access the following databases: MEDLINE (NIH Database) which indexes 4,800 biomedical journals since 1950 and additional bibliography; and LILACS (Latin American and Caribbean Literature on Health Sciences) encompasses medical and health science journals from Latin American countries.

This study seeks to find and describe the types of strategies and care used to maintain health care for cancer patients from November 2019 to March 2020. Considering the period that began world reports about the pandemic caused by COVID-19.



Health strategies for maintaining the quality of care in chemotherapy in the context of the COVID-19 pandemic

Nascimento DT, Koeppe GBO, Oliveira PP, Valadao RR, Prado TSB, Santos NS, Cerqueira LCN

The structured and trilingual vocabulary DeCS - Descriptors in Health Sciences - was created in 1986 by BIREME - Latin American and Caribbean Center on Health Sciences Information - for use in indexing articles in scientific journals, books, conference proceedings, technical reports, and other types of materials, as well as to be used in the search and retrieval of scientific literature subjects in LILACS, MEDLINE, and other databases. In the VHL, Virtual Health Library, DeCS is the tool that allows navigation between records and information sources through controlled and organized concepts in Portuguese, Spanish, English and French.⁶

It was developed from the MeSH - Medical Subject Headings of the NLM - US National Library of Medicine - with the objective of allowing the use of common terminology for research in the languages of the region of the Americas, providing a consistent and unique means for independently retrieving information of the language. In addition to the original biomedical terms of MeSH, the specific areas of Science and Health (2005), Homeopathy (1991), Public Health (1986) and Sanitary Surveillance (2005) were developed.⁶

The descriptors selected for this research were duly selected and verified in the databases corresponding to the research, and are described in the table below:

Chart 2. Descriptors according to the database. Cabo Frio, RJ, Brazil, 2020

Data base	Uncontrolled	Controlled			
LILACS	- Chemotherapy - Cancer treatment - Adult	DrugTherapy; MedicationTherapy Management CancerCareFacilities Adult; Meddleaged, Aged			
	- Health strategy -Health care - COVID-19 pandemic	-eHealthStrategies; Strategies for Universal Health Coverage - Delivery of Health Care - CoronavirusInfections			
	Usalah araw atina	-OutcomeandProcess Assessment, Health Care - Health Consortia			
	 - Health promotion - Nursing care - Importance of the nursing team 	 - Health Promotion - TreatmentOutcome - NursingCare - HospiceandPalliativeCareNursing - SkilledNursingFacilities - CriticalCareNursing - PatientCare Planning - Nursing, Team 			
		 QualityIndicators, Health Care United States Agency for Healthcare ResearchandQuality Health CareQuality, Access, andEvaluation Qualityof Life 			
	- Quality of care - Quality of life				
MEDLINE	- Chemotherapy - Cancer treatment - Adult	DrugTherapy; MedicationTherapy Management CancerCareFacilities Adult; Meddleaged, Aged			
	- Health strategy - Health care - COVID-19 pandemic	-eHealthStrategies; Strategies for Universal Health Coverage - Delivery of Health Care - CoronavirusInfections			
		-OutcomeandProcess Assessment, Health Care - Health Consortia - Health Promotion - TreatmentOutcome			
	- Health promotion- Nursing care- Importance of the nursing team	NursingCare HospiceandPalliativeCareNursing SkilledNursingFacilities CriticalCareNursing PatientCare Planning			

- Nursing, Team
- QualityIndicators, Health Care
- United States Agency for Healthcare ResearchandQuality
- Health CareQuality, Access, andEvaluation
- Qualityof Life

Quality of careQuality of life

It was defined as an inclusion criterion, to have been duly published in a scientific journal, to have been published between November 2019 and March 2021, this time horizon being chosen because it contemplates the period of the COVID-19 pandemic in the world, articles published in English, Spanish and Portuguese. As exclusion criteria were determined: articles published in sectors of any sector that does not involve chemotherapy.

Articles were pre-selected by title and abstract, following the inclusion and exclusion criteria. To ensure careful reading, a maximum limit of 200 productions was adopted for each crossing of the descriptors controlled in the pre-selection period. Afterwards, they were analyzed in full to confirm the selection. The crossings of descriptors were performed to exhaust the data with Boolean operator "AND", 55 crossings were performed (Chart 3).

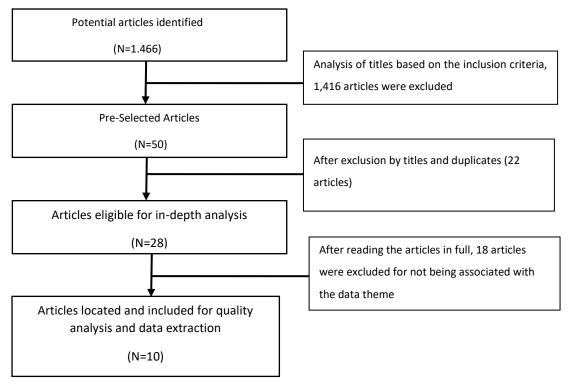
Chart 3. Crossing performed with the descriptors controlled in the VHL portal. Cabo Frio, RJ, Brazil, 2020

Number	Crossing	Found	Selected
1	(Drug Therapy) AND (Medication Therapy Management)	39.410	0
2	(Drug Therapy) AND (Medication Therapy Management) AND (Cance rCare Facilities)	86	1
3	(Drug Therapy) AND (eHealth Strategies)	157	6
4	(Drug Therapy) AND (Strategies for Universal Health Coverage)	82	0
5	(Drug Therapy) AND (Delivery of Health Care)	11.139	0
6	(Drug Therapy) AND (Delivery of Health Care) AND (CoronavirusInfections)	123	16
7	(DrugTherapy) AND (QualityIndicators, Health Care)	2.022	0
8	(DrugTherapy) AND (QualityIndicators, Health Care) AND (United States Agency for Healthcare ResearchandQuality)	0	0
9	(DrugTherapy) AND (Health CareQuality, Access, andEvaluation)	86	0
10	(DrugTherapy) AND (Qualityof Life)	25	0
11	(MedicationTherapy Management) AND (CancerCareFacilities)	127	1
12	(MedicationTherapy Management) AND eHealthStrategies	97	1
13	(MedicationTherapy Management) AND (Strategies for Universal Health Coverage)	2	0
14	(MedicationTherapy Management) AND (Delivery of Health Care)	2.196	0
15	(MedicationTherapy Management) AND (Delivery of Health Care) AND (CoronavirusInfections)	34	2
16	(MedicationTherapy Management) AND (QualityIndicators, Health Care)	505	0
17	(MedicationTherapy Management) AND (QualityIndicators, Health Care) AND (United States Agency for Healthcare ResearchandQuality)	0	0
18	(MedicationTherapy Management) AND (QualityIndicators, Health Care) AND (United States Agency for Healthcare ResearchandQuality) AND (Health CareQuality, Access, andEvaluation)	25	0
19	(QualityIndicators, Health Care) AND (Qualityof Life)	6.443	0
20	(CancerCareFacilities) AND (eHealthStrategies)	2	1
21	(CancerCareFacilities) AND (Strategies for Universal Health Coverage)	7	0
22	(CancerCareFacilities) AND (Delivery of Health Care)	1.134	0
23	(CancerCareFacilities) AND (Delivery of Health Care) AND (CoronavirusInfections)	13	7
24	(CancerCareFacilities) AND (QualityIndicators, Health Care)	238	0
25	(CancerCareFacilities) AND (QualityIndicators, Health Care) AND (United States Agency for Healthcare ResearchandQuality)	0	0
26	(CancerCareFacilities) AND (QualityIndicators, Health Care) AND (United States Agency for Healthcare ResearchandQuality) AND (Health CareQuality, Access, andEvaluation)	27	0
27	(CancerCareFacilities) AND (Qualityof Life)	787	0
28	(eHealthStrategies) AND (Strategies for Universal Health Coverage)	13	0
29	(eHealthStrategies) AND (Delivery of Health Care)	341	0
30	(eHealthStrategies) AND (Delivery of Health Care) AND (CoronavirusInfections)	34	12
31	(eHealthStrategies) AND (QualityIndicators, Health Care)	19	0
32	(eHealthStrategies) AND (United States Agency for Healthcare ResearchandQuality)	0	0

		itit, i rado 130, 3diitos 143, c
(eHealthStrategies) AND (Health CareQuality, Access, andEvaluation)	66	1
(eHealthStrategies) AND (Qualityof Life)	293	0
(Strategies for Universal Health Coverage) AND (Delivery of Health Care)	188	0
(Strategies for Universal Health Coverage) AND (CoronavirusInfections)	7	0
(Strategies for Universal Health Coverage) AND (QualityIndicators, Health Care)	25	0
(Strategies for Universal Health Coverage) AND (United States Agency for Healthcare ResearchandQuality)	1	0
(Strategies for Universal Health Coverage) AND (Health CareQuality, Access, andEvaluation)	18	0
(Strategies for Universal Health Coverage) AND (Qualityof Life)	38	0
(Delivery of Health Care) AND (CoronavirusInfections)	1628	0
(Delivery of Health Care) AND (CoronavirusInfections) AND (QualityIndicators, Health Care)	13	1
(Delivery of Health Care) AND (United States Agency for Healthcare ResearchandQuality)	397	0
(Delivery of Health Care) AND (United States Agency for Healthcare ResearchandQuality) AND (Health CareQuality, Access, andEvaluation)	38	0
(Delivery of Health Care) AND (Qualityof Life)	9041	0
(CoronavirusInfections) AND (QualityIndicators, Health Care)	67.068	0
(CoronavirusInfections) AND (QualityIndicators, Health Care) AND (United States Agency for Healthcare ResearchandQuality)	0	0
(CoronavirusInfections) AND (QualityIndicators, Health Care) AND (United States Agency for Healthcare ResearchandQuality) AND (Health CareQuality, Access, andEvaluation)	32	1
(CoronavirusInfections) AND (Qualityof Life)	452	0
(QualityIndicators, Health Care) AND (United States Agency for Healthcare ResearchandQuality)	404	0
(QualityIndicators, Health Care) AND (United States Agency for Healthcare ResearchandQuality) AND (Health CareQuality, Access, andEvaluation)	18	0
(QualityIndicators, Health Care) AND (Qualityof Life)	5.846	0
(United States Agency for Healthcare ResearchandQuality) AND (Health CareQuality, Access, andEvaluation)	138	0
(United States Agency for Healthcare ResearchandQuality) AND (Qualityof Life)	250	0
(Health CareQuality, Access, andEvaluation (AND (Qualityof Life)	3.090	0
	(eHealthStrategies) AND (Qualityof Life) (Strategies for Universal Health Coverage) AND (Delivery of Health Care) (Strategies for Universal Health Coverage) AND (QualityIndicators, Health Care) (Strategies for Universal Health Coverage) AND (QualityIndicators, Health Care) (Strategies for Universal Health Coverage) AND (United States Agency for Healthcare ResearchandQuality) (Strategies for Universal Health Coverage) AND (Health CareQuality, Access, andEvaluation) (Strategies for Universal Health Coverage) AND (Qualityof Life) (Delivery of Health Care) AND (CoronavirusInfections) (Delivery of Health Care) AND (CoronavirusInfections) (Delivery of Health Care) AND (United States Agency for Healthcare ResearchandQuality) (Delivery of Health Care) AND (United States Agency for Healthcare ResearchandQuality) AND (Health CareQuality, Access, andEvaluation) (Delivery of Health Care) AND (QualityIndicators, Health Care) (CoronavirusInfections) AND (QualityIndicators, Health Care) AND (United States Agency for Healthcare ResearchandQuality) (CoronavirusInfections) AND (QualityIndicators, Health Care) AND (United States Agency for Healthcare ResearchandQuality) AND (Health CareQuality, Access, andEvaluation) (CoronavirusInfections) AND (QualityIndicators, Health Care) AND (United States Agency for Healthcare ResearchandQuality) AND (Health CareQuality, Access, andEvaluation) (CoronavirusInfections) AND (Qualityof Life) (QualityIndicators, Health Care) AND (United States Agency for Healthcare ResearchandQuality) AND (Health CareQuality, Access, andEvaluation) (QualityIndicators, Health Care) AND (Qualityof Life) (United States Agency for Healthcare ResearchandQuality) AND (Health CareQuality, Access, andEvaluation) (United States Agency for Healthcare ResearchandQuality) AND (Health CareQuality, Access, andEvaluation) (United States Agency for Healthcare ResearchandQuality) AND (Health CareQuality, Access, andEvaluation)	(eHealthStrategies) AND (Qualityof Life) (Strategies for Universal Health Coverage) AND (Delivery of Health Care) (Strategies for Universal Health Coverage) AND (CoronavirusInfections) (Strategies for Universal Health Coverage) AND (QualityIndicators, Health Care) (Strategies for Universal Health Coverage) AND (QualityIndicators, Health Care) (Strategies for Universal Health Coverage) AND (United States Agency for Healthcare ResearchandQuality) (Strategies for Universal Health Coverage) AND (Health CareQuality, Access, andEvaluation) (Strategies for Universal Health Coverage) AND (Qualityof Life) (Delivery of Health Care) AND (CoronavirusInfections) (Delivery of Health Care) AND (CoronavirusInfections) (Delivery of Health Care) AND (United States Agency for Healthcare ResearchandQuality) (Delivery of Health Care) AND (United States Agency for Healthcare ResearchandQuality) (Delivery of Health Care) AND (Qualityof Life) (CoronavirusInfections) AND (QualityIndicators, Health Care) (Delivery of Health Care) AND (QualityIndicators, Health Care) AND (United States Agency for Healthcare ResearchandQuality) (CoronavirusInfections) AND (QualityIndicators, Health Care) AND (United States Agency for Healthcare ResearchandQuality) (CoronavirusInfections) AND (Qualityof Life) (CoronavirusInfections) AND (Qualityof Life) (QualityIndicators, Health Care) AND (United States Agency for Healthcare ResearchandQuality, Access, and Evaluation) (CoronavirusInfections) AND (Qualityof Life) (QualityIndicators, Health Care) AND (United States Agency for Healthcare ResearchandQuality, Access, and Evaluation) (QualityIndicators, Health Care) AND (United States Agency for Healthcare ResearchandQuality, Access, and Evaluation) (QualityIndicators, Health Care) AND (United States Agency for Healthcare ResearchandQuality) AND (Health CareQuality, Access

Results and Discussion

Figure 1. Study selection flowchart. Cabo Frio, RJ, Brazil, 2020





At first, the Virtual Health Library (VHL portal to access the journals indicated in the methodology) was used as a research base, where 1,466 articles were found, after inclusion and exclusion criteria, 50 articles were preselected, 28 articles were excluded and 12 were repeated. articles, in the end 10 articles were selected for synthesis. As shown in Figure 1.

Based on the analysis of selected studies, it can be identified that there was a domain of the MEDLINE (100%) and LILAC (0%) databases. These selected articles, in turn, were read in full to identify which ones addressed the researched topic and which, in this way, could meet the established inclusion criteria. This factor may be associated with the fact that MEDLINE is an international database, present in more than 80 countries and with more than 5,400 indexed journals, its greater coverage in the world scenario, thus making it more evident in the search for articles with trustworthiness, safe and well-regarded, especially in the field of oncology in the current context.

Based on the studies eligible for selection based on the objective proposed by the work, relevant data that are related to the proposed objective were extracted, generating a synthesis of the articles read in full, including objective, year of publication, titles, journals, place of origin publication, main results, and conclusion (Chart 4).

Chart 4. Summary of the results of selected articles. Cabo Frio, RJ, Brazil, 2020

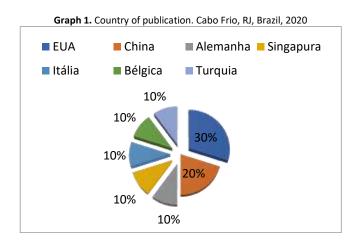
No.	Title	Journal	Year	Local	Results
1	COVID-19 pandemic and healthcare disparities in head and neck cancer: Scanning the horizon.	Head Neck	2020	North America, United States	Strategies to mitigate these disparities, collection of detailed data on access to care and awareness of HNC disparities.
2	Usage Patterns of a Web-Based Palliative Care Content Platform (PalliCOVID) During the COVID-19 Pandemic.	J Pain Symptom Manage	2020	U.S	80% of users were first time visitors, while the remaining 19% were return visitors.
3	Perspectives on Oncology-Specific Language During the Coronavirus Disease 2019 Pandemic: A Qualitative Study.	JAMA Oncol	2020	U.S	Worse results from COVID-19, delay in cancer screening, diagnostic investigation, initiation of treatment, interruptions, delay in imaging or care follow-up, inability to be admitted to hospital for management.
4	Oncological care organization during COVID-19 outbreak.	Elsevier Limited em nome da European Society for Medical Oncology	2020	North America / Europe, Belgium	Only targeted clinical and instrumental examinations were performed. Self-isolation was required for employees with positive or symptomatic COVID-19.
5	Early Outcomes of a National Cancer Center's Strategy Against COVID-19 Executed Through a Disease Outbreak Response Taskforce.	JCO Oncol Pract	2021	Asia, Singapore	Patients who are on maintenance treatment continued to receive timely treatment without interruption. All cancer-related surgeries took place without delay.
6	Appropriate arrangement of cancer treatment after COVID-19 epidemic peaks in China.	J Cancer Res Clin Oncol	2020	Asia, China	Neither staff nor patients were diagnosed/infected by COVID-19.
7	Evidence-based management of COVID-19 in cancer patients: Guideline by the Infectious Diseases Working Party (AGIHO) of the German Society for Haematology and Medical Oncology (DGHO).	Eur J Cancer	2020	Europe, Germany	Inclusion of monthly clinical patients. Summary of disease severity during COVID-19 from uninfected to outpatient.
8	The impactof the COVID-19 pandemic on lung cancer patients.	Ann Palliat Med	2020	Asia, China	Postponements of return consultations due to COVID-19. Patients with delayed admission during the epidemic.
9	Impact of COVID-19 outbreak on cancer immunotherapy in Italy: a survey of young oncologists.	BMJ Publishing Group	2020	Europe, Italy	Telemedicine was widely used. Most respondents tended not to delay the start of ICIs. There were no changes in supportive treatments, but some of the doctors chose to postpone surgery.
10	Teleoncology or telemedicine for oncology patients during the COVID-19 pandemic: the new normal for breast cancer survivors?	Future Oncol	2020	Turkey	Communication was more frequent by voice call. No further examination or intervention was required.

When analyzing the place of publication of the studies, there was a greater publication (30%) in the US, followed by China (20%) and Germany (10%), Singapore (10%), Italy (10%), Belgium and Turkey, both with 10% (Graph 1). As for the type of study, most were randomized clinical trials (30%), followed by observational and descriptive (both with 20%) and integrative review, crosssectional descriptive and longitudinal retrospective (both with 10%). According to Graph 2.

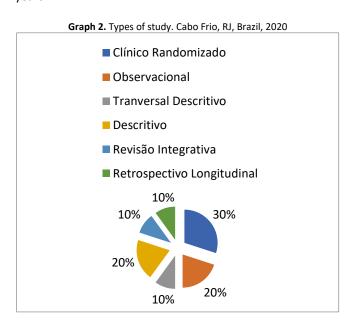
The great predominance of studies from the USA has an influence, as in addition to being countries with a large fraction of the world population, they are also two places where they were considered epicenters of the coronavirus. China where the disease was discovered in November 2019 and was the first country to register the disease and the United States as a major world economic power, which when hit was fatally injured with the death of thousands of people⁷. In addition to Italy, which was the



second epicenter of the disease (currently with 4.23 million cases), and for being a country where the number of elderly people was high, they were affected in masse with the death of its citizens. Other Asian and European countries were also very affected in addition to the rest of the world population, where their schedules and routines were changed due to the pandemic and the non-wider dissemination of the disease⁸.



Considering that these countries had a higher and faster prevalence of the disease, the interest in researching and studying the disease and the behavior of its inhabitants in the face of the pandemic, as well as the care of patients undergoing cancer treatment, for example, and among other comorbidities. It is noteworthy that no publications were identified in Brazil on the subject involved, this fact may have been since Brazil has many researchers who carry out their research activities outside the country, as it presents greater possibility of visibility and prominence or even research that they are developed in Brazil and published in international journals in view of the desired scope of information. However, it is worth noting that Brazil has been on a rise in terms of publications and scientific development over the years.



The results show that among the six types of studies used by the selected articles, the randomized clinic was more common, since we are still experiencing the pandemic, clinical trials are a powerful tool for the assessment of health interventions, studies where an interest group in which a therapy or exposure is used is monitored, comparing it with a control group⁹. This result may have been significantly influenced by the search for a vaccine to immunize the population, studies are needed to make the use of immunizing agents available throughout the country. Observational and descriptive studies, which were the second most used, use criteria where observational studies o researcher does not interfere in the exposure, in this study the researcher plans and actively intervenes in the factors that influence the sample, thus minimizing the influence of confounding factors⁹.

Descriptive studies aim to determine the distribution of diseases or health-related conditions, according to the time, place and/or characteristics of individuals¹⁰. Having also chosen the integrative review, which is a method that aims to synthesize results obtained in research on a topic or issue, in a systematic, orderly, and comprehensive way¹¹. The descriptive cross-sectional is used in different niches, but this method in particular studies mainly the prevalence in the health area, where epidemiological factors are analyzed in their proportion in relation to the population or specific period¹². And the longitudinal retrospective are studies in which exposure to the factor or cause is present to the effect at the same moment or time interval analyzed¹³.

After a careful analysis carried out based on the results provided in the synthesis of the studies, the findings with more evidence based on the objective proposed by this review were grouped by categorization of variable by similarity for a better discussion on the identified theme. It was possible to identify 03 major variables: Effective patient/professional communication (40%), Professional training (20%) and Surveillance and monitoring by teleconsultations (40%).

Table 1. Variables found in the synthesis of studies. Cabo Frio, RJ, Brazil, 2020

2020		
VARIABLE	N	%
Effective patient/professional communication	4	40%
Professional training	2	20%
Surveillance and monitoring by teleconsultations	4	40%
Total	10	100%

Communication is one of the most important tools we can use in the daily professional nursing, as through it we seek to generate information so that we can accompany the patient, promote their comfort, confidence to start or continue the treatment and prevent some potential complications. In this scenario, when communication is not effective between patient and professional, it can hamper

the patient's development, such as delay in cancer screening, delay in diagnostic investigation, delay in starting treatment, non-standardized treatment provision and treatment breaks¹⁴.

Study 3 sought to identify the need for practical communication to facilitate understanding in cancer care. Study 6 sought to create a rational arrangement useful for future restoration of cancer treatments. Studies 8 and 9 highlight the significant impact of the COVID-19 crisis, the need for appropriate change in treatment decisions, the efforts of oncologists to maintain high standards of care and clarification of the safety profile for continuity of treatment.

The emergence of COVID-19 has caused a global health emergency, leading to several critical challenges and, in turn, professional training is also of immeasurable importance as health teams need to be prepared and solicitous to be able to deal with any and any occurrences that may affect your work, your professional safety, patient care, patient treatment, and can optimize your patient care and prevent any adverse event that may complicate and risk your life and of the patient¹⁵. Studies 5 and 7 pointed out the possibility of avoiding transmissions between patients and professionals without compromising the provision of care, the vulnerability of patients to infection, providing state-of-the-art care at the time of COVID-19 and the optional and recommended treatments for same period.

Surveillance and follow-up in teleconsultations were a tool that served as an example of a scalable digital healthcare solution that can bring palliative care resources to front-line professionals. This tool has the potential to inform to better meet users' needs and guide future dissemination strategies. The use of this tool could extend the ability to provide clinical care that was compassionate, rational, and well-aligned with patients' values and goals¹⁶. The participation of nurses in the fight against the pandemic is essential, in these moments of social isolation as people need to have access to secure information and with the possibility of care with no or minimal travel to health facilities.

Studies 1 and 2 provided an opportunity and justification for a renewed dedication to investigating the causes and solutions for disparities in care, a platform (PolliCOVID) as an example of a digital healthcare solution to generate resources and patient care, and data to complement future research for this platform to be able to provide clinical care. Studies 4 and 10 focused on implementing pragmatic measures to deal with the health emergency associated with COVID-19, the effectiveness of each intervention in large studies and shows that telemedicine can open a new era for oncology specialists.

The teleconsultation had its permission granted through resolutions in accordance with their respective councils, in accordance with the Federal Council of Medicine, with the Official Letter No. 1756/2020, authorizing the practice of telemedicine in Brazil with the objective of protecting both health of patients and professionals¹⁷. The Federal Council of Nursing, on the other hand, has Resolution 634/2020 that authorizes nurses to carry out consultations, guidance, and referrals by technological

means as an alternative to ensure the capacity to provide care and fight the new coronavirus, preserving patients and professionals¹⁸. The Federal Council of Physiotherapy and Occupational Therapy, through Resolution No. 516, authorizes teleconsultation and physiotherapy and occupational therapy care to the population and, at the same time, ensures the well-being of the professional¹⁹.

In summary, these actions included panels and virtual consultations on tumors, outsourcing of laboratory and imaging tests, screening of pre-hospital and on-arrival patients, exclusive patient flows for suspected or confirmed cases of COVID-19, therapeutic adjustments aimed at a reduced number of hospital visits (oral or subcutaneous treatments) and postponement of surgical treatment. Like the nursing care teams, they live a unique moment in patient care and in the professional life of each involved, as they face an emergency, of a little-known and very treacherous disease²⁰.

Conclusion

The present review achieved the proposed objective, as it raised from the available scientific evidence describing the strategies adopted to maintain the quality of patient care in chemotherapy during the COVID-19 pandemic period, always choosing to provoke the importance of the entire health professional team during patient care with a focus on the nurse in this process.

This review points to a predominance of studies from randomized clinical trials, from the USA and China, which are more representative in MEDLINE. The main strategies adopted involved the process of effective communication between patient and professional, professional training and surveillance and monitoring by teleconsultation.

The theme addressed in this review appeals to well-targeted journals and databases with an important impact on the health area. It is noteworthy that it is necessary to encourage more journals to publish the topic, due to its relevance, as it is still a very recent subject and needs attention, since we are dealing with an approach in patients with a very sensitive health status. and complicated because of chemotherapy drugs, with the aim of national scientific elevation.

The results are evident that the strategies used to care for chemotherapy patients were clarified, from the moment of screening, treatment, and recovery. Going through the fundamental need to assess this patient to estimate the procedure to be performed, to know which strategies would be better applied and to plan the care to be provided.

The importance of the nursing team's role in this context is also highlighted, as it is the professional who has the greatest and most distant contact with the patient during their treatment. Finally, the importance of adopting quality strategies to maintain the patient's health care, which reduces the chances of morbidity and represents an improvement in the quality of life.

Thus, it is expected that this study will help nurses working in oncology units, so that they can base their daily



Health strategies for maintaining the quality of care in chemotherapy in the context of the COVID-19 pandemic

Nascimento DT, Koeppe GBO, Oliveira PP, Valadao RR, Prado TSB, Santos NS, Cerqueira LCN

activities with chemotherapy patients, performing an evidence-based practice and knowing how to plan their care, based on, ensure the patient's health, efficiency in care and success in treatment.

References

- Richards M, Anderson M, Carter P, Ebert BL, Mossialos E. The impact of the COVID-19 pandemic on cancer care. Nature Cancer [Internet]. 2020 [acesso em 27 fev 2021];1:565-567. Disponível em: www.nature.com/natcancer
- Nascimento CC, Silva PHS, Cirilo SSV, Silva FBF. Desafios e Recomendações à Atenção Oncológica durante a Pandemia da Covid-19. Rev Bras Cancerol. 2020;66:e-1241. https://doi.org/10.32635/2176-9745.RBC.2020v66nTemaAtual.1241
- Araujo SEA, Leal A, Centrone AFY, Teich VD, Malheiro DT, Cypriano AS, Neto MC, Klajner S. Impacto da COVID-19 sobre o atendimento de pacientes oncológicos: experiência de um centro oncológico localizado em um epicentro Latino-Americano da pandemia. Einstein (São Paulo). 2021;19. http://dx.doi.org/10.31744/einstein_journal/2021ao6282
- Ramos RS. A enfermagem oncológica no enfrentamento da pandemia de covid-19: reflexões e recomendações para a prática de cuidado em oncologia. Rev Bras Cancerol [Internet].2020 [acesso em 07 out 2020];66:e-1007. Disponível em: https://rbc.inca.gov.br/revista/index.php/revista/article/view/1007
- Souza MT, Silva MD, Carvalho R. Revisão integrativa: o que é e como fazer. Einstein (São Paulo) [Internet]. 2010 ácesso em 13 mar 2021];8(1). Disponível em https://www.scielo.br/scielo.php?pid=S1679-45082010000100102&script=sci arttext&tlng=pt
- Convite: Lançamento do novo portal DeCS (Descritores em Ciências da Saúde) [Internet]. 2020 [acesso em 20 mar 2021]. Disponível em http://bvs.saude.gov.br/component/content/article?id=3287
- Rodrigues PHA, Gerzson LC. A dimensão geopolítica da pandemia de coronavírus. Physis. 2020;30(2). https://doi.org/10.1590/S0103-73312020300209
- Riboli E, Arthur JP, Mantovani M de F. No epicentro da epidemia: um olhar sobre a Covid-19 na Itália. Cogitare enferm. [Internet]. 2020;25. http://dx.doi.org/10.5380/ce.v25i0.72955
- Oliveira MAP, Parente RCM. Entendendo Ensaios Clínicos Randomizados Understanding Randomized Controlled Trials. Bras. J. 2010;3(4):176-180.
- 10. Lima-Costa MF, Barreto SM. Tipos de estudos epidemiológicos: conceitos básicos e aplicações na área do envelhecimento. Epidemiologia e Servicos de Saúde. 2003:12(4).
- 11. Bento AV. Como fazer uma revisão da literatura: considerações teóricas e práticas. Centro de Investigação em Educação Universidade da Madeira [Internet]. [acesso em 30 mar 2021]. Disponível em: http://www3.uma.pt/bento/Repositorio/Revisaodaliteratura.pdf
- 12. Bordalo AA. Estudo transversal e/ou longitudinal. Rev. Para. Med. [Internet]. 2006 [acesso em 31 mar 2021];20(4). Disponível em http://scielo.iec.gov.br/scielo.php?script=sci arttext&pid=S0101-59072006000400001
- 13. Hochman B, Nahas FX, Filho RSO, Ferreira LM. Desenhos de Pesquisa. Publicado em Acta Cirúrgica Brasileira. 2005;20(sup 2). https://doi.org/10.1590/S0102-86502005000800002.
- 14. Gharzai LA, Resnicow K, An LC, Jagsi R. Perspectives on Oncology-specific Language during the Coronavirus Disease 2019 Pandemic: A Qualitative Study. JAMA Oncol. 2020;6(9):1424–1428. doi: 10.1001/jamaoncol.2020.2980
- 15. Onesti CE, Rugo HS, Generali D, Peeters M, Zaman K, Wildiers H, Harbeck N, Martin M, Cristofanilli M, Cortes J, Tjan-Heijnen V, Hurvitz SA, Berchem G, Tagliamento M, Campone M, et al. Organização de cuidados oncológicos durante surto de COVID-19. Esmo Open. 2020;5(4):e000853. doi: 10.1136/esmoopen-2020-000853.
- 16. MPhil LL, Sato R, He S, et al. Padrões de uso de uma plataforma de conteúdo de cuidados paliativos baseada na web (PalliCOVID) durante a pandemia de COVID-19. Journal of Pain and Sympton Manegement. 2020;60(4):E20-E27. https://doi.org/10.1016/j.jpainsymman.2020.07.016
- 17. Conselho Federal de Medicina (BR). Ofício n.º 1756/2020. Liberação da Prática de Telemedicina no Brasil. Brasília (DF): Conselho Federal de Medicina; 2020.
- 18. Conselho Federal de Enfermagem (BR). Resolução n.º 634/2020 Autoriza os Enfermeiros a Realizarem Teleconsultas. Brasília (DF): Conselho Federal de Enfermagem; 2020.
- 19. Conselho Federal de Fisioterapia e Terapia Ocupacional. Resolução n.º 516/2020. Autoriza a Realização da Teleconsulta e o Atendimento de Fisioterapia e Terapia Ocupacional à População. Brasília (DF): Conselho Federal de Fisioterapia e Terapia Ocupacional; 2020.
- 20. Gomes ILV, Alves AR, Moreira TMM, Campos DB, Figueiredo SV. Reflexões sobre a pandemia COVID-19 e ações de educação permanente em enfermagem num hospital. Glob Acad Nurs. 2020;1(3):e50. https://dx.doi.org/10.5935/2675-5602.20200050

