

# The impacts of COVID-19 on the lives of cancer patients

https://doi.org/10.56238/homeIIsevenhealth-097

Mariana Talarico Marçal Galvão University of Ribeirão Preto, Medical School

#### **Renata Dellalibera-Joviliano**

University of the State of Minas Gerais Avenida Constabile Romano 2201 - Ribeirânia, Ribeirão Preto - SP, 14096-900. e-mail:redellajov@gmail.com

#### **1 INTRODUCTION**

COVID-19 is an acute respiratory infection caused by the SARS-CoV-2 coronavirus, which is potentially severe, highly transmissible, and globally distributed. With potential inflammatory involvement (NADER, NADER, DELLALIBERA-JOVILIANO, 2023 (a) and (b), this disease has been officially declared a Pandemic, since it is the reason for severe changes in the way of living of the current population and has caused a tremendous wave of high-risk infections in different global axes. The real impact of this virus on humanity is uncertain in the long term, but it is already common knowledge that this disease has caused drastic changes in infrastructure, resources, and drug allocation in the healthcare system (EMANUEL et al., 2020). Thus, such high demands end up creating a need to ration these resources, which when it comes to health and well-being, is not the best option because it puts the most vulnerable at risk. However, as this moment is an uncertain period in world history, the only question that remains is: How will this rationing of resources be distributed fairly?

According to dialectical definition, the word "priority" is characterized as *"the condition of what is first in time, order, and dignity."* However, the just distribution of medical resources during a pandemic goes far beyond establishing who has priority or not, as it is a situation that exceeds the ethical values of society (BIDDISON et al., 2014). Thus, such a situation requires a social-ethical framework that takes into account vulnerability, equality, equity, and adaptability, which depends on the resource and, most importantly, the context.

If we consider oncological disorders, we observe that cancer patients are usually in an age group greater than 60 years, which increases the chance of having more than one type of comorbidities. Due to the very scenario that the pathology causes of the immunodeficiency state, this further increases the risk of mortality and morbidity of COVID-19. In addition, they are on antineoplastic therapy, use high-cost medications, immunomodulatory drugs, and require multi-professional care. Summarizing, these are patients who need many medical resources, and in atypical situations such as the current pandemic, it may or may not complicate their access to such resources (KUDERER et al., 2020).



Due to this current enormous change in priorities, the care of the cancer patient causes a great dilemma in society. The uncertainties about what will happen in the pandemic are not the only ones when the cancer patient is included. This happens because they are not only more vulnerable to infection by SARS-Cov-2, but they also have concerns about how the progression of cancer will be in the pandemic with rationed resources, the negative impact on survival, facing social isolation even with the need to be in hospital environments and a sense of urgency for a possible death (ARAUJO et al., 2021).

In view of the data presented above, it can be seen that promoting research and the search for knowledge about the perceptions of the social impact resulting from the pandemic of COVID-19 on cancer patients enables reflection and a possible improvement of the role of the state and the human being in times of crisis involving this type of risk group, as well as the construction of a more critical, fair and egalitarian look at the health scenario in the post-pandemic period.

#### **2 OBJECTIVE**

This literature review proposes to compare several literary references that show the impacts on the quality of life of patients belonging to the risk group in the post-COVID-19 pandemic, eventually the possible methods of resolution and the consequences for life, especially for oncology patients. Besides analyzing how the pandemic and the post COVID-19 scenario perpetuated and reaffirmed the social difficulties and which are the resolutive actions in order to improve the quality of life of these groups.

#### **3 METHODOLOGY**

This literature review was conducted based on catalogued books, scientific articles and published studies, and were found through research conducted in the digital platforms Scientific Library Online (SciELO), Pubmed, Periódico Capes and Cochrane. Due to the relevance of the original and current theme, we cut articles published in the last 5 years to build the study up to this point.

### **4 DEVELOPMENT**

Maslow's theory of basic human needs fits perfectly in the analysis of the numerous impacts on the quality of life of cancer patients in the COVID-19 Pandemic (CÔRREA, OLIVEIRA, TAETS, 2020). Thus, the five basic human needs end up being affected in a worrying way the life of neoplastic patients. These are: basic and physiological needs, safety needs, love needs, esteem needs, and selfactualization needs. Furthermore, Correa, Oliveira and Taets demonstrate that among these, only four dimensions prevail in a more impacting way in the lives of these patients: biological, spiritual, psychological and social dimensions.



In the biological dimension, it is implied that the cancer patient already has his physiology affected, but with COVID-19 this situation can be worsened severely. In addition, he or she may experience delayed treatment, delayed diagnosis, and an intense change in routine due to social isolation. All these factors, when added together, increase the incidence of the signs and symptoms of this patient, which ends up harming the quality of life of this already vulnerable patient.

In the psychological dimension, according to Maslow's theory, and reinforced by the study of Corrêa, Oliveira and Taets (2020), the change of life that the cancer patient needs to adhere to added to the change of routine that social isolation requires, end up harming in a worrying way the psychological condition of this patient, which can cause symptoms of anxiety disorder, post-traumatic stress disorder, and stress. All of these can negatively impact the patient's immune system, causing it to drop, worsening the clinical picture.

In the social dimension, it is common knowledge that the hospital environment is very frequented by cancer patients, and even in pandemic situations, which require social isolation, they cannot stay away from hospitals and medical clinics. Thus, the recommendation to stay at home is not followed to the letter, and the chance of infection of these patients from the high-risk group increases. Moreover, psychological support for these patients, due to the pandemic, is also removed, which can harm the mental health and social well-being of cancer patients in the treatment against cancer.

Already in the spiritual dimension, where faith is seen as a coping strategy for cancer disease, such drastic and fatal changes in society, can generate feelings of fear and hopelessness, which adversely affects the quality of life of this vulnerable patient (BATISTA DOS SANTOS et al., 2019). The pandemic scenario hinders the safety of effective cancer treatment, with consequent decline in quality of life (GALVÃO, DELLALIBERA-JOVILIANO, 2022).

Not only drugs and surgeries should be the focus of health care for cancer patients, but also alternative treatments provided by multiprofessionals. Thus, physical therapy can help in the prevention of COVID-19 in cancer patients, in order to provide a better immune response and a greater strengthening of the body (FERREIRA et al., 2020). Radiation therapy, chemotherapy, targeted therapy, hormone therapy. All these are considered as the standard treatment of a neoplasm, and have numerous side effects, which in most cases, fatally impair the quality of life of that patient. However, physical therapy emerges in this environment as a "solution", strengthening the muscles, the immune and global system, promotes blood pumping, and can also ensure emotional health (AGUIAR et al., 2020).

The pandemic caused by COVID-19 is still an unusual enemy of a dark and fatal character in society, and being an unprecedented problem, the diagnosis and treatment of patients in general was in some ways one of the most affected spheres in the pandemic. But because there are patients who are



more vulnerable, their health and quality of life has been more adversely affected, and should be given priority and due attention, also in non-pandemic times.

# **5 CONCLUDING REMARKS**

Faced with numerous challenges, it is considered important to adopt measures and management that are specific for cancer patients, reducing the possibility of infection by COVID-19. It may seem utopian, but only a multidisciplinary, integral, and individualized care by the government health services will reduce the morbidity and mortality of cancer patients, and improve the little quality of life they have left. Thus, the management and treatment of the cancer patient must include remote medicine, alternative treatments, mental health care, and continuation of treatment. This includes an analysis of the socio-historical and cultural aspects, as well as the demands, needs, and particularities of each individual involved and affected by SARS-CoV-2.

# $\nabla$

# REFERENCES

ARAUJO SEA, LEAL A, CENTRONE AFY, TEICH VD, MALHEIRO DT, CYPRIANO AS, CENDOROGLO NETO M, KLAJNER S. Impact of COVID-19 pandemic on care of oncological patients: experience of a cancer center in a Latin American pandemic epicenter. Einstein (Sao Paulo). 2020 Dec 21;19:eAO6282. doi: 10.31744/einstein\_journal/2021AO6282. PMID: 33338192; PMCID: PMC7793126.

BATISTA DOS SANTOS, A. C. B., FLORÊNCIO, F. C., NUNES NETO, G. V., FLORENCIO SILVA, Y. L., SILVA CAVALCANTE, L. T., BARRETO SÁ MACIEL, A. M., & GORAYEB DE CARVALHO, M. V. Spirituality: influence on grief processes in patients experiencing finitude in oncology. Enfermagem Brasil, 18(1), 2019.

BIDDISON LD, BERKOWITZ KA, COURTNEY B, DE JONG CM, DEVEREAUX AV, KISSOON N, ROXLAND BE, SPRUNG CL, DICHTER JR, CHRISTIAN MD, POWELL T. Task Force for Mass Critical Care. Ethical considerations: care of the critically ill and injured during pandemics and disasters: CHEST consensus statement. Chest. 2014 Oct;146(4 Suppl):e145S-55S. doi: 10.1378/chest.14-0742. PMID: 25144262.

CORRÊA, K. M.; OLIVEIRA, J. D. B. de; TAETS, G. G. de C. C. Impacto na Qualidade de Vida de Pacientes com Câncer em meio à Pandemia de Covid-19: uma Reflexão a partir da Teoria das Necessidades Humanas Básicas de Abraham Maslow. Revista Brasileira de Cancerologia, *[S. l.]*, v. 66, n. TemaAtual, p. e-1068, 2020. DOI: 10.32635/2176-9745.RBC.2020v66nTemaAtual.1068. Available at: https://rbc.inca.gov.br/index.php/revista/article/view/1068. Accessed on: 8 abr. 2023.

EMANUEL EJ, PERSAD G, UPSHUR R, THOME B, PARKER M, GLICKMAN A, ZHANG C, BOYLE C, SMITH M, PHILLIPS JP. Fair Allocation of Scarce Medical Resources in the Time of Covid-19. N Engl J Med. 2020 May 21;382(21):2049-2055. doi: 10.1056/NEJMsb2005114. Epub 2020 Mar 23. PMID: 32202722.

FERREIRA, L. M. A. et al. Physiotherapy in the prevention of covid-19 in oncological patients. Cadernos ESP, v. 14, n. 1, p. 61-67, 22 jul. 2020.

GALVÃO, MTM, DELLALIBERA-JOVILIANO, R. The social impact of the stigma attached to Sars-CoV-2. International Journal of Health Science, v. 2, p. 1-2, 2022.

KUDERER NM, CHOUEIRI TK, SHAH DP, SHYR Y, RUBINSTEIN SM, RIVERA DR, SHETE S, HSU CY, DESAI A, DE LIMA LOPES G JR, GRIVAS P, PAINTER CA, PETERS S, THOMPSON MA, BAKOUNY Z, BATIST G, BEKAII-SAAB T, BILEN MA, BOUGANIM N, LARROYA MB, CASTELLANO D, DEL PRETE SA, DOROSHOW DB, EGAN PC, ELKRIEF A, PHARMAKIOTIS D, FLORA D, GALSKY MD, GLOVER MJ, GRIFFITHS EA, GULATI AP, GUPTA S, HAFEZ N, HALFDANARSON TR, HAWLEY JE, HSU E, KASI A, KHAKI AR, LEMMON CA, LEWIS C, LOGAN B, MASTERS T, MCKAY RR, MESA RA, MORGANS AK, MULCAHY MF, PANAGIOTOU OA, PEDDI P, PENNELL NA, REYNOLDS K, ROSEN LR, ROSOVSKY R, SALAZAR M, SCHMIDT A, SHAH SA, SHAYA JA, STEINHARTER J, STOCKERL-GOLDSTEIN KE, SUBBIAH S, VINH DC, WEHBE FH, WEISSMANN LB, WU JT, WULFF-BURCHFIELD E, XIE Z, YEH A, YU PP, ZHOU AY, ZUBIRI L, MISHRA S, LYMAN GH, RINI BI, WARNER JL. COVID-19 and Cancer Consortium. Clinical impact of COVID-19 on patients with cancer (CCC19): a cohort study. Lancet. 2020 Jun 20;395(10241):1907-1918. doi: 10.1016/S0140-6736(20)31187-9. Epub 2020 May Erratum in: Lancet. 2020 Sep 12;396(10253):758. PMID: 32473681; PMCID: PMC7255743.



LOPES DE ALMEIDA RIZZI SK, DE TEIVE ARGOLLO SAMARTIN CERQUEIRA M, OLIVEIRA GOMES N, MUNARETTO TIMM BAIOCCHI J, SALES DE AGUIAR S, BERGMANN A. Nota Técnica da Associação Brasileira de Fisioterapia em Oncologia sobre os Atendimentos de Fisioterapia em Oncologia frente à Pandemia de Covid-19. Rev. bras. Cancerol. [Internet]. 22nd April 2020 [cited 9th April 2023];66(CurrentTopic):e-1973. Available from: https://rbc.inca.gov.br/index.php/revista/article/view/973

NADER, TARIK OLIVEIRA ; NADER, TUFIK OLIVEIRA ; DELLALIBERA, EDILEINE ; Dellalibera-Joviliano, Renata . Analysis of inflammatory cytokines IL-4, IL-8 and interferon-gamma in Sars-Cov2 infected patients in the acute phase. Brazilian Journal of Health Review, v. 6, p. 742-769, 2023. (b)

NADER, TUFIK OLIVEIRA ; NADER, TARIK OLIVEIRA ; DELLALIBERA, EDILEINE ; Dellalibera-Joviliano, Renata . Covid-19: the role of cytokines IL-1, IL-6 and TNF- $\alpha$  in the inflammatory response. Brazilian Journal of Health Review, v. 6, p. 2