



## Pharmacy and pain management in cancer patients

### Pharmacy and pain management in front of oncological patients

Received: 09/01/2021 | Accepted: 12/06/2021 | Published: 12/20/2021

#### Alexandra Siqueira da Silva

Orcid : <https://orcid.org/0000-0002-1117-9224>

Lattes: <http://lattes.cnpq.br/4629396742310987>

Faculty of Science and Education Sena Aires, GO, Brazil

Email: alexandra.siqueira16@gmail.com

#### Rayene Pereira Leles Braga

Orcid : <https://orcid.org/0000-0001-7941-3657>

Lattes: <http://lattes.cnpq.br/6464312031836838>

Faculty of Science and Education Sena Aires, GO, Brazil

Email: rayene\_leles@hotmail.com

#### Fellipe José Gomes Queiroz

orcid : <https://orcid.org/0000-0002-2268-4138>

Lattes: <http://lattes.cnpq.br/1939428749184971>

Faculty of Science and Education Sena Aires, GO, Brazil

Email: fellipegomes2008@gmail.com

### Abstract

**Theme:** self-medication in times of a pandemic. **Problem :** What are the challenges of the pharmacy professional in the face of self-medication during the new coronavirus pandemic by the Brazilian population? **Hypothesis :** the indiscriminate use of medicines is a serious problem in times of a pandemic, which threatens the physical and mental health of people who use these procedures. **Objectives :** to analyze the challenges faced by pharmacists in the face of self-medication during the new coronavirus pandemic by the Brazilian population. **Justification :** in Brazil , self-medication represents a risk that can cause serious health problems and the pharmacist plays an important role in education regarding the use of medicines . **Methodology :** This is a literature review. **Results :** during the pandemic , the irrational use of drugs prevailed due to the supposed possibilities of a cure for Covid-19.

**Keywords:** Pandemic. Covid-19. Self-medication.

### Resumo

**Tema:** automedicação em tempos de pandemia. **Problema:** Quais os desafios do profissional em farmácia diante da automedicação durante a pandemia do novo coronavírus pela população brasileira? **Hipótese:** o uso indiscriminado de medicamentos é um problema grave em tempos de pandemia, que ameaça a saúde física e mental das pessoas que utilizam esses procedimentos. **Objetivos:** analisar os desafios dos farmacêuticos diante da automedicação durante a pandemia do novo



coronavírus pela população brasileira. **Justificativa:** no Brasil a automedicação representa um risco que pode causar graves problemas de saúde e o farmacêutico tem papel importante na educação quanto ao uso de medicamentos. **Metodologia:** Trata-se de uma revisão bibliográfica. **Resultados:** durante a pandemia o uso irracional de drogas prevaleceu devido às supostas possibilidades de cura para a Covid-19.

**Palavras-chave:** Pandemia. Covid-19. Automedicação.

## Introduction

Currently, pain is the leading cause of disability and suffering in patients with advanced cancer, and about 80% of these patients experience some form of pain. Effective control of cancer pain in palliative care requires a multidisciplinary team, which must follow the protocol proposed by the World Health Organization (WHO), and use drugs compatible with each specific problem. <sup>1</sup>

In Brazil, malignant neoplasms are increasing in new cases annually. Breast cancer stands out for being the one with the highest incidence among women, and after non-melanone skin. In men, the highest incidence refers to prostate cancer. <sup>two</sup>

The scientific consensus points out that early detection of cancer has been the best way to treat the disease. According to the National Cancer Institute, there were 309,750 new cases of cancer in 2020 (with prostate cancer being the most prominent among men with 65,840, and in women the highest incidence being breast cancer with 66,280). Despite the development of diagnosis and treatment, surgical interventions and complementary therapies such as radiotherapy, chemotherapy and hormone therapy continue to prevail in treatments. <sup>two</sup>

Cancer has a great variety and can represent up to 100 types of differentiated diseases, which have in common the disordered proliferation of cells that invade neighboring tissues and organs. In principle, normal cells that form the tissues of the human body are capable of dividing through an activity considered natural, a large part of normal cells grows and multiplies and dies, but some lose control of their proliferation, instead of dying. keeps multiplying. <sup>two</sup>

Studies have shown that among the types of cancer treatments available, chemotherapy is recognized to some extent for the side effects that patients may experience during treatment, particularly nausea, vomiting, alopecia, diarrhea, or constipation. <sup>1</sup>

Chemotherapy has been demonstrated as a procedure that affects people's quality of life and, consequently, requires special attention from health professionals involved with the treatment. Changes in appearance, difficulties in maintaining jobs and in interpersonal relationships are issues that affect the patient's thinking during his fight against neoplasms for a cure. <sup>3</sup>

Given the difficulty of controlling the progression of diseases such as cancer, it is essential to transform the health care of critically ill patients to minimize the suffering they face. This requires not only greater justice and universal care for these patients, but respecting human rights with personal relationships based on ethical and moral considerations. <sup>3</sup>



It is undeniable that the hospital model in Brazil plays important roles in the provision of health care, considering the needs and specificities of oncological treatments, however, in the treatment of malignant neoplasms, interventions go beyond the focus only on the disease and opens the range to the care of the human person.<sup>4</sup>

In every oncological treatment, one of the first problems for the medical team, nurses and multidisciplinary teams refers to the use of truth in communication with family members. The question is whether or not the act of revealing the diagnostic truth about bad news constitutes a beneficial action for the patient.<sup>5</sup>

So the guiding question is the following: what are the challenges for pharmacists in pain management in cancer patients?

The pharmacist who works in hospital units, especially those that provide oncology services, must know the etiology of the disease and the forms of treatment of the neoplasm, using an approach that ensures integrity and safety. This, so that the actions of the pharmacy in the care of cancer patients are participatory and resolute, minimizing painful sensations, at all levels of action.

Given this reality, the objective is to assess the relevance of knowledge and interventions by pharmacists in controlling pain in cancer patients undergoing treatment. It was also sought to analyze the role of the pharmacist in the face of the psychosocial difficulties of the patient undergoing cancer treatment.

The research in question is a systematic review with a qualitative research approach. A detailed search was carried out in the databases of the Virtual Health Library (BVS), in the Scientific Electronic Library Online (SCIELO) and Brazilian Digital Library of Theses and Dissertations (BDTD).

The inclusion criteria established can be understood as follows. The articles that had the most affinity with the objective proposed in this study, complete articles, randomized or not, between the years 2010 to 2021, were accepted. All articles underwent selection, identification and eligibility in a pre-selective reading, which allowed eliminate the expendable, to focus on what is of real interest, that is, information about oncology, pain, pharmacy and treatments.

The exclusion criteria had as a prerogative, the articles that did not contribute to the discussion of the topic in question, and those that had their duplicity verified. Articles published prior to the year 2010, articles and monographic works of conclusion of courses and texts without authorship were also discarded.

### **cancer pain**

Cancer treatment in patients with metastasis has to be specialized based on metabolism, tumor biology and therapeutic approaches, reaching the goals of offering qualified treatment to children and/or adults, intervening when necessary with lenitive and tranquilizing actions, minimizing late effects of treatment. The therapeutic success depends on the local and systemic control of the disease and the management of the effects caused. Chemotherapy, specific surgeries, radiotherapy and all clinical support are part of the treatment. Sometimes, radiotherapy and chemotherapy used in the treatment are perceived as factors that unbalance the lives of individuals undergoing treatment in the struggle with painful symptoms.<sup>6</sup>



Pain is considered one of the most persistent symptoms of generalized cancer. Pain control is considered a principle for the patient's quality of life, and pain management is essential, as it is difficult to determine and assess the dimension of human suffering.<sup>6</sup>

Pain is a worrying factor for humanity, which has always sought to clarify the causes that cause it and also the procedures to control it. In the case of newborn children, it is not an easy task, that is, measuring the pain that affects newborns. It is suggested to observe parameters that allow an assessment of pain, so that the mitigating measures are applied with a therapeutic approach that minimizes the suffering of newborns.<sup>7</sup>

Pain assessment is complex due to the multiplicity of aspects that constitute it. Tools are needed that "decode" this language. The degree of progression, assessment and physiological pain are one-dimensional and multidimensional tools that include a combination of subjective parameters and characteristics related to children's response to this problem. Functionally, it is evident that in the cases of children they have a large repertoire of cardiorespiratory, hormonal and behavioral changes in response to nociceptive stimuli. There is, therefore, no doubt about their ability to perceive pain and respond to it.<sup>8</sup>

Pain assessment is a difficult and complex process because many of them are unable to communicate verbally because they are passed out or sedated. It is up to the pharmacist to corroborate with science, especially in the reduction of pain in the face of oncological diseases in advanced stages.<sup>6</sup>

Most cancer patients experience pain and often need powerful and effective pain relievers. Opioids are one of the most powerful pain relievers available and are the mainstay of cancer pain management for moderate to severe pain. Although powerful pain relievers are available, most cancer patients still have inadequate pain control and can adversely affect their quality of life. One of the biggest challenges is to have pharmacists aware of the entire oncological process, providing support and assistance to patients in the most diverse situations of hospitalization and stages of the disease.<sup>9</sup>

Therefore, the humanization of the entire care process for patients with pain involves more than techniques and devices, as the professionals of the multidisciplinary team must show their human side in each intervention and, above all, demonstrate that they have feelings and sensitivity. In the humanization process, it is important that a team is aware of the challenges and limits to be overcome. It is known that family members, especially mothers and fathers, are increasingly present in the care of small patients, but they are not well integrated into this intense reality, so it is up to health professionals to mediate the relationship between family members and patients.<sup>10</sup>

Small actions by health professionals can indicate the process of humanization and protect human dignity, often shaken by the hospital situation.<sup>11</sup> Pain is considered one of the most important aspects of humanized care. According to the studies reviewed, humanized care in intensive care units should include comprehensive care, expanded care and the promotion of comfort to the newborn in a holistic way.<sup>7</sup>



Pain is considered one of the most persistent symptoms of generalized cancer. Pain control is considered a principle for the patient's quality of life, and when dealing with children, pain management is essential, as it is difficult to determine and assess the extent of pain in this age group. Pain assessment is a difficult and complex process because many of them are unable to communicate verbally because they are passed out or sedated. The nurse mainly deals with the reduction of pain in the face of oncological diseases.<sup>6</sup>

### **cancer patients**

Cancer is considered a public health problem, especially in developing countries, due to its incidence, magnitude and national epidemiological profile. Patients using antineoplastic drugs should be accompanied by a multidisciplinary team, especially pharmacists, who must be extremely trained and attentive, especially regarding the knowledge and care of cancer patients. In view of this, it is understood the importance of investigating pain management through the pharmacy in front of patients undergoing cancer treatment.

Health professionals, through, seek to alleviate suffering and pain, in what may be the last moments of life for cancer patients. The family members of cancer patients also lack attention from pharmacists and medical staff, in order to deal with the disease and its consequences for quality of life.

People with cancer are faced with imminent death and ominous feelings all the time. When the impression that something serious is happening due to the physiological changes of the cancer patient, the thoughts that the imminence of death is near, ends up leaving the whole family in a desolate situation. Not even chemotherapy treatments and therapies considered more assertive for each specific cancer will be able to minimize family members' anxiety and apprehensions.<sup>12</sup>

Individuals with cancer in a critical condition are dealing with the topic of imminent death all the time. In cancer treatment, patients perceive through the general situation of cancer treatment that something serious is happening, especially as a result of changes in their body.<sup>12</sup>

It is known that many patients have relapses during cancer treatment, others, however, have health severities after its completion. The disease returns many times and becomes more difficult to treat.<sup>12</sup>

Therapeutic advances in the diagnosis and treatment of cancer have advanced in recent decades. It is known that in cases of neoplasms in children, when diagnosed early, the possibility of complete cure is 70% of those affected by the disease. It should be noted that the ideal is that the treatments are carried out in specialized centers. Despite this data and technological advances, childhood cancer is the second leading cause of death in young people and adolescents.<sup>13</sup>

Cancer leads people to sudden and drastic changes in everyday life. From diagnosis, treatment and the possibilities of cure or not, patients and family members are taken by distress and anxiety. This causes suffering for patients and their families and sometimes affects professionals. Cancer requires, among other things, specialized and assertive care with regard to the etiology of the disease and medical history.<sup>14</sup>



## Cancer pain care

The cancer patient is submitted to several procedures that can be distressing, and health professionals are not always aware of the pain that this patient feels. With this in mind, patients who are unable to communicate, gesticulate, or express emotional changes are at greater risk for untreated pain. The International Association for the Study of Pain (IASP) has recently redefined the concept of pain as something empirical for the patient that is linked to actual or potential harm interfering with sensations, emotions, and cognitive and social aspects ". management, prevention and control of pain are measures that must be considered daily in the care of cancer patients. Therefore, therapeutic actions, whether pharmacological or non-pharmacological, are proposals that aim to prevent and minimize pain in newborns. pharmacists and nurses are professionals responsible for care and interventions with these patients, and they must be aware of these strategies and use them for pain relief, prevention and treatment.<sup>16</sup>

Not recognizing pain as a variable to be analyzed in daily clinical practice is worrying, since, according to the current state of knowledge production on the topic of pain, there is a contingent of specialists who are unaware of the deleterious effects of pain in life. of a cancer patient. It is certain that invasive and potentially painful procedures need to have interventions for the relief of the painful process.<sup>17</sup>

Cancer treatment in patients with metastasis has to be specialized based on the child's metabolism, tumor biology and therapeutic approaches, achieving the goals of offering survival and/or curing disseminated disease, minimizing the late effects of treatment.

It is known that pain is one of the main causes of disability and suffering in patients with cancer progression. About 80% of these patients will experience some form of pain. An important aspect is that about 50% of cancer patients in all stages of the disease and 70% in advanced neoplasms are affected by chronic pain.<sup>18</sup>

Studies indicate that in 20% of people with cancer, pain can be caused by surgery, chemotherapy and radiation therapy, but it can also be caused directly by the tumor or by causes unrelated to cancer, such as metabolic, infectious and degenerative changes.<sup>18</sup>

Thus, it is worth noting that therapeutic success depends on the local and systemic control of the disease and the management of pain and the effects caused. Chemotherapy, surgery, radiotherapy and clinical support are part of the treatment. Sometimes, radiotherapy and chemotherapy used in the treatment are perceived as factors that unbalance the life of the cancer patient.<sup>6</sup>

## Final considerations

After analyzing the texts on the topic in question, the research identified that the painful experience in cancer patients is an individual and non-transferable phenomenon, and pain assessment in cancer patients must have recognized scientific criteria.

It was noticed that in any case, the treatment of neoplasms must be individualized according to the patient's needs and, if possible, focused on the



triggering cause of pain and suffering. In oncology and other pathological situations, pain scales in combination with the protocol recommended by the WHO have proved to be an essential tool for the rational use of medicines. In this way, it is possible to define the most appropriate drug therapy for the patient and ensure that what the patient is experiencing is being evaluated and not what the doctor thinks he is feeling.

It is concluded that the management of pain in cancer patients requires a special look from the pharmacy, which goes beyond pharmacological issues, since every patient is an ontological being with different needs, and one of them in the case of cancer is extreme physical pain.

## References

1. Rabelo ML, Borella MLL. Role of the pharmacist in the pharmacotherapeutic follow-up for the control of cancer pain. *Rev. Pain*, 2013 [http://www.scielo.br/scielo.php?script=sci\\_arttext&pid=S1806-00132013000100014&lng=en](http://www.scielo.br/scielo.php?script=sci_arttext&pid=S1806-00132013000100014&lng=en). <https://doi.org/10.1590/S1806-00132013000100014> .
2. INCA – National Cancer Institute. What is Cancer? 2020. Available at: <https://www.inca.gov.br/o-que-e-cancer> Accessed on April 20, 2021.
3. Saito DYT, Zoboli ELCP. Palliative care and primary health care: scopingreview . *Rev. bioeth* . 2015, vol.23, n.3, pp.593-607.
4. Santos NAR, Santos ATC, Silva RP. Coping strategies of nurses in the care of patients with head and neck cancer. *Rev. esc. sick \_ USP*, Sao Paulo, v. 50, no. 4, p. 569-578 , Aug. 2016 .
5. Geovanini F, BRAZ Marlene. Ethical conflicts in the communication of bad news in oncology. *Rev. bioeth* . Brasilia, v. 21, no. 3, p. 455-462, Dec. 2013
6. Monteiro ACR, Rodrigues BMRD, Pacheco STA. The nurse and the care of children with cancer without the possibility of a current cure. *Esc. Anna Nery* , Rio de Janeiro, v. 16, no. 4, p. 741-746, Dec. 2012 .
7. Eduardo LS, Barreto, AMM, Oliveir , LCS, Bezerra TRM, Vieira LMV. Nursing actions in the face of newborn pain: integrative literature review. *Cobracis*, 2017.
8. Balda RCX, Ruth G. The language of newborn pain. Scientific Document of the Department of Neonatology. Brazilian Society of Pediatrics, 2018. v. 1, no. 1, pp.01-16. Available at: [https://www.sbp.com.br/fileadmin/user\\_upload/DocCient-Neonatal-Linguagem\\_da\\_Dor\\_atualizDEz18.pdf](https://www.sbp.com.br/fileadmin/user_upload/DocCient-Neonatal-Linguagem_da_Dor_atualizDEz18.pdf) Accessed on: 25 Feb. 2021.



9. Reck MSM. The importance of pharmaceutical guidance in the management of cancer pain with the use of opioids : experience report. *Clinical and surgical oncology*, 2020.
10. Fialho FA, Vargas IM, Santos RS et al. Humanization permeating neonatal nursing care. *Rev enferm UFPE online*.2016 .
11. APS fields. Neonatal pain: knowledge, attitude and practice of the nursing team. *BrJP \_ Brazilian Society for the Study of Pain*. 2018, vol.1, n.4, pp.354-358.
12. Fernandes LMS, Souza AM. Meanings of childhood cancer: death taking care of life in childhood. *Psychol. Study* 2019, vol.24, e39521.
13. Costa R, Padilha MI. The Neonatal Intensive Care Unit enabling new practices in newborn care. *Rev. Gaúcha Enferm .* 2011, vol.32, n.2, pp.248-255.
14. Costa, DD, Gonçalves, JC, Cantino , RC G, Moura, RS (2021) On interdisciplinarity as a concept. **Scientific Collection Magazine**, vol. 5, no. 9, p. 119–134
15. Mendes LC, Fontenele FC, Dodt RCM, Almeida LS, Cardoso MVLML, Silva, CBG. Pain in newborns in the neonatal intensive care unit, *Rev enferm UFPE online*.2013 .
16. Kawagoe CK, Matuoka JY, Salvetti MG. Pain assessment instruments in critically ill patients with verbal communication difficulties: scope review. *Rev. pain .* 2017, vol.18, n.2, pp.161-165.
17. Santos GC, Lima LM, Oliveira GB, Souza ARS, Freitas VS. Nursing intervention in the control of pain in neonates: effectiveness of non-pharmacological actions. *Rev infirm UFPE on line* , 2015.
18. Deves A, Santos A, Palavro JR, Delatorres LST, Flor J, Jacoby LC. The identification and treatment of pain in newborns; *cesuca \_* 2015. Available at: <http://www.sbp.com.br/institucional/a-sbp/>. Accessed October 13, 2018.
19. Rabelo MLB, Márcio LM. Role of the pharmacist in the pharmacotherapeutic follow-up for the control of cancer pain. *Pain Magazine*. 2013, v. 14, no. 1, pp. 58-60. Available at: <https://doi.org/10.1590/S1806-00132013000100014> .
20. LIU, Jun; ZHAO, Chaoyue ; YANG, Song; DONG, Chen. LncRNA SNHG1 promotes the development of oral cavity cancer via regulating the miR-421/HMGB2 axis. **Cellular And Molecular Biology** , [SL], v. 66, no. 8, p. 14-19, 31 Dec. 2020. CMB Association . <http://dx.doi.org/10.14715/cmb/2020.66.8.3>.