

## **CANCER TREATMENT IN ELDERLY INDIVIDUALS AGED 60 IN NORTHERN BRAZIL: CASE HISTORY FROM 2020 TO 2023**

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**Introduction:** Population aging is closely associated with the increasing prevalence of Non-Communicable Chronic Diseases, such as cancer, which highlights the importance of oncological treatments specifically for the 60-year age group. Among the main oncologic treatment modalities, chemotherapy stands out, involving the use of chemotherapeutic agents in the bloodstream to destroy cancer cells; radiotherapy, which utilizes ionizing radiation to eradicate or inhibit the proliferation of tumor cells; and oncological surgery, performed to remove the tumor and serving curative or diagnostic purposes, depending on the stage of the disease. **Objectives:** To evaluate the prevalence of oncological treatments, such as chemotherapy, radiotherapy, and surgery, among elderly individuals aged 60 in Northern Brazil, during the period from 2020 to 2023. **Methods:** The descriptive and quantitative study was carried out using data provided by the Sistema de Informação de Agravos de Notificação (SINAN) of the Departamento de Informática do SUS (DATASUS), using the descriptors “neoplasm”, “year of diagnosis”, “age group”, “region-diagnosis”, “therapeutic modality” in the system search. The collected data were analyzed using Microsoft Office Excel and organized in spreadsheets using the descriptors mentioned, indicating how many elderly people aged 60 had a prevalence of treatment with chemotherapy, radiotherapy and surgery. **Results:** According to DATASUS in the section that includes epidemiological and morbidity data, the northern region of Brazil reported a total of 60,926 cancer diagnoses from 2020 to 2023, of which 255 occurred in elderly people aged 60. Regarding the treatment modality of choice, in 2020, 3,151 elderly people underwent surgical therapy, 5,313 received chemotherapy, and 2,254 used radiotherapy, totaling 10,843 elderly people who used these treatments. It can be seen that in 2021 this number increased to a total of 12,525, with 3,419 undergoing surgery, 6,353 chemotherapy, and 2,601 radiotherapy, while in 2022 it reached 13,528, with 3,889 undergoing surgery, 6,938 chemotherapy, and 2,577 radiotherapy, revealing an increasing number of applications of the aforementioned treatments. The greatest demand for treatment occurred in 2023, with 4,179 elderly people undergoing surgical treatment, 7,004 receiving chemotherapy, 2,485 radiotherapy

and 126 using both non-surgical treatment modalities, totaling 13,794 elderly people.

**Conclusion:** Considering this, it is clear that the therapeutic modality most used in the elderly in the age group analyzed was chemotherapy, given its systemic effects and potential to combat metastases. In addition, the elderly have a higher surgical risk, which, combined with late diagnosis, makes it difficult to choose surgical procedures as the main oncological treatment, a fact evidenced in the description of the study's epidemiological data, which indicated the surgical modality as the least prevalent treatment. Finally, the low uptake of radiotherapy compared to other modalities is notable, as it is limited in large tumors, due to its low precision in systemic sites and a high number of side effects such as fibrosis in the tissue.

**Keywords:** Cancer; treatment; elderly.