

PROFILE OF HOSPITALIZATIONS FOR MALIGNANT NEOPLASMS IN WOMEN AGED 20 TO 49 YEARS IN BRAZIL: AN ECOLOGICAL TIME SERIES STUDY



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ABSTRACT

This study aimed to analyze the profile of hospitalizations for malignant neoplasms among women aged 20 to 49 years in Brazil. This is an ecological time series study, using data from the Hospital Information System of the Unified Health System (SIH/SUS), using Prais-Winsten regression. In the period from 2014 to 2023, 1,880,954 hospitalizations for malignant neoplasms were reported among women aged 20 to 49 years in Brazil, with a mortality rate of 3.4%. The annual coefficient increased in the country, from 386 cases per 100 thousand women in 2014 to 458 per 100 thousand in 2023, showing an increasing trend (9.1%; $p=0.001$). The hospitalization coefficient and the trend were increasing in all regions of the country, with the Northeast presenting the highest rates (576.3 cases/100 thousand) and the highest annual increase (14.9%; $p=0.001$). The hospitalization rate was higher among women aged 40 to 49 years (922, 1 cases/100,000), but it was also increasing among younger women. Malignant neoplasms of the breast, cervix and colon were the most prevalent among the female population evaluated and showed annual growth in all age groups evaluated. Hospitalizations have provided the SUS with high costs, and these have increased every year. Therefore, it is of great relevance to improve public policies to raise awareness about the most prevalent malignant neoplasms among women,

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access to diagnosis and early treatment so that it is possible to reduce the number of hospitalizations, mortality, and hospital costs for these neoplasms.

Keywords: Malignant neoplasms, Hospitalizations, Women, Mortality rate.

INTRODUCTION

Cancer represents one of the main causes of morbidity and mortality on a global scale, exerting a substantial impact on the health of the female population, as indicated by several studies (Axenhus; Schedin-Weiss; Winblad, 2022; Jardim *et al.*, 2022). In Brazil, due to its high incidence, it is characterized as one of the main causes of hospitalization and deaths for the female population and, by 2025, it is estimated that there will be 704 thousand new cases of the disease in the country (INCA, 2024).

According to recent data from the National Cancer Institute (2023), the most frequent cancers among women in Brazil include, in descending order of incidence, breast, colorectal, cervical, trachea, bronchi, lung, and thyroid cancers (Brazil, 2023). The prevalence of these neoplasms highlights their importance from both an epidemiological and clinical point of view, highlighting the urgency of targeted analyses and interventions. Each type of cancer presents specific challenges in terms of prevention, diagnosis, and treatment, which reinforces the need for a multidisciplinary and integrated approach to combat these diseases effectively (Brasil, 2021).

The incidences of these cancers have been increasing among women over the years, due to socioeconomic issues and behavioral patterns that are seen in the Brazilian population and that, added to predisposing factors of the genetic component of these women, end up causing the disease. Among these factors, called carcinogenic factors, are: growing population aging, smoking, alcoholism, sedentary lifestyle, exposure to excessive solar radiation, unprotected sexual intercourse, air pollution, presence of carcinogenic agents in the workplace, exposure to ionizing radiation, contact with industrial chemicals such as benzene and formaldehyde, among others (INCA, 2020).

The epidemiological aspects of cancer cover a wide range of variables related to the incidence, prevalence, geographic distribution, and risk factors associated with the disease. The analysis of these aspects reveals distinct patterns of cancer occurrence in different regions of the country, highlighting the importance of demography, lifestyle, and socioeconomic factors in its etiology (Dominguez; Bierrenbach., 2020). The determination of the most affected groups and the assessment of gender disparities contribute to a comprehensive understanding of the burden of cancer in Brazilian women (Burigo; Porto, 2021). In addition, the temporal investigation of these aspects allows us to identify emerging trends and establish guidelines for preventive interventions and effective control

programs, aiming to mitigate the impact of cancer on the country's public health (Brasil, 2021).

Therefore, understanding the epidemiological profile of this disease is crucial for proper prevention, early diagnosis, and favorable prognosis. It is of paramount importance to observe how neoplasms affect women, whether there is any precocity in the rates, worsening of their incidence over the years, and which impairments reverberate in the health system due to these changes (Brasil, 2023). Thus, in this context, this study aimed to evaluate the evolution of hospitalizations, the mortality rate and the profile of women affected by malignant neoplasms in Brazil, as well as the economic impact of hospitalizations.

METHODOLOGY

This is an ecological time series study. The research universe was secondary data, obtained from the SUS Hospital Information System (SIH/SUS), regarding hospitalizations for neoplasms in women aged 20 to 49 years in Brazil, according to the regions of the country, in the period from 2014 to 2023.

Brazil is characterized by a vast territorial extension located in South America and has an area of 8,510,417.771 km², considered the fifth largest territorial extension in the world. The country has an estimated population of 203,062,512 inhabitants, with a demographic density of 23.86 inhabitants/km². The country is divided into 27 federative units, 26 states and the Federal District, and is divided into five regions, with their respective populations: North (8.54%), Northeast (26.91%), Midwest (8.02%), Southeast (41.78%) and South (14.74%) (IBGE, 2023).

Data were collected in August and September 2024, through the SUS Hospital Information System (SIH/SUS), widely available by the SUS Department of Informatics (DATASUS), at the electronic address (<http://tabnet.datasus.gov.br/cgi/defthtm.exe?sih/cnv/niuf.def>) (Brasil, 2024).

The SIH/SUS is a database in the public domain, standing out as an important tool for epidemiological analysis of hospitalizations. This system, based on the hospital admission authorization form (AIH), provides sociodemographic and clinical data, which make it possible to evaluate the epidemiological behavior and financial costs of the services owned and contracted to the SUS.

Hospitalizations were selected based on the tenth version of the International Classification of Diseases (ICD 10), which groups diagnoses related to neoplasms (C00-C97) in chapter II.

The variables studied were sociodemographic (age range: 20 to 49 years and color/race) and clinical variables (number of hospital admissions by region and per year of care, type of care, hospitalization according to the ICD-10 morbidity list, average hospital stay, mortality rate, average expenditure and total expenditure of hospitalizations).

The data referring to the population estimate are from the Brazilian Institute of Geography and Statistics (IBGE) and were consulted in the institute's statistical table database (IBGE, 2023). The estimate of the female population counted by the Census was used as the denominator for the years 2014 to 2023 of the series.

For the Brazilian level, the hospitalization coefficient was calculated as the ratio between the total number of hospitalizations per annual female population. For the analysis stratified by length of hospitalization (elective and urgent) and outcome of hospitalization (discharge and death), the ratio between the number of hospitalizations in each stratum and the population of women in this age group for each year was considered. The hospitalization coefficients were adjusted for 100 thousand women.

The in-hospital mortality coefficient was calculated by dividing the number of in-hospital deaths due to neoplasms by the number of hospitalizations of these women in the same year, multiplied by 100.

For the analysis of temporal trends, the generalized linear regression model was used using the Prais-Winsten method, with robust variance, with the hospitalization and hospital mortality coefficients being the predictor variables (Y), and time (year) the outcome variable (X). Based on the robust variance, the coefficients of annual variation of the measures were quantified, the respective 95% confidence intervals (95%CI) were estimated, and the p-value was adequate for statistical inference. The trends in the hospitalization and mortality coefficients were interpreted as: increasing ($p < 0.05$ and positive change), decreasing ($p < 0.05$ and negative change) or stationary ($p > 0.05$) (Antunes; Cardoso, 2015).

The tools developed by Datasus – TabWin and TabNet – were used for data tabulation and descriptive analysis, and the *Microsoft Office Excel* 2023 program for the construction of figures and tables, in addition to the data analysis and statistics software *Stata* version 17.0.

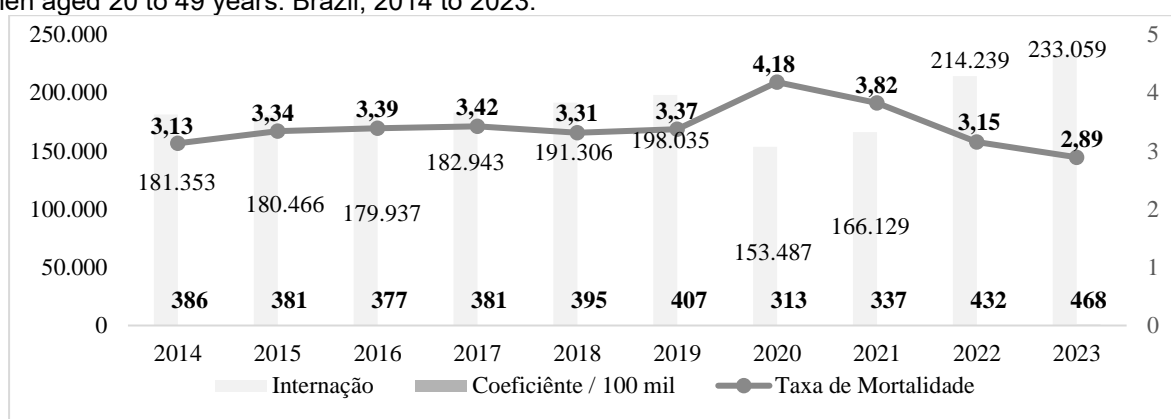
The research, as it collects secondary data in the public domain, made available electronically by the Ministry of Health and, as there is confidentiality about the personal information of the patients involved, does not require appreciation and approval by the Research Ethics Committee, according to Resolution No. 466/2012 of the National Health Council (Brasil, 2012).

RESULTS

From January 2014 to December 2023, 1,880,954 hospitalizations for neoplasms in women aged 20 to 49 years were recorded in Brazil, corresponding to 1.6% of all hospitalizations by SUS in the same period. The number of hospitalizations ranged from 153,487 to 233,059, with an average of 188,095 cases per year (Figure 1).

The number of hospitalizations increased between 2014 and 2023 (28.5%), with a reduction in 2020 (22.5%) and 2021 (16%), the period of the Covid-19 pandemic (Figure 1). The hospitalization coefficient increased, from 386 cases in 2014 to 458 per 100 thousand women in 2023, with an average annual variation of 9.1% ($p = 0.001$) (Figure 1; Table 1). However, the mortality rate remained stationary, with an average annual change of -0.01% ($p=0.789$), with an increase in the period of the covid-19 pandemic (2020 and 2021) (Figure 1).

Figure 1. Number of hospitalizations, coefficient per 100 thousand and mortality rate due to neoplasms in women aged 20 to 49 years. Brazil, 2014 to 2023.



Source. Ministry of Health - Hospital Information System of the SUS (SIH/SUS)

Of the total number of hospitalizations, 59.8% of the women were in the 40-49 age group and 40.2% in the 20-39 age group. Regarding the nature of hospitalization, 67.2% were elective, 3.4% died, and the average hospital stay was 3.7 days.

The total value of hospitalizations for neoplasms in young women in the country in the period from 2014 to 2023 by SUS was 3,361,401,925.27 reais and the average amount spent was 1,787.14 reais.

The analysis of the trend by region was increasing in all regions of the country, with the most significant growth in the North (mean annual change of 14.9%; $p=0.001$) and Northeast (mean annual change of 14%; $p=0.001$) (Table 1).

Analyzing the hospitalization rate according to the profile of the women, it was higher in the age group of 40 to 49 years (794.1 to 922.1/100,000), elective (263.9 to 335.5/100,000) and among patients who progressed to cure (373.7 to 454.6/100,000), with annual coefficients of variation of 14.5%, 7.8%, 0.4% and 8.9%, respectively, and, increasing trend (Table 1).

Table 1. Rate, annual coefficient of variation and trend of hospitalization for neoplasms in women aged 20 to 49 years according to region, age group, character and outcome of hospitalization. Brazil, 2014 to 2023.

	Hospitalization Rate per 100 thousand women		Trend analysis from 2013 to 2022			
Variables	2014	2023	Coefficient annual change	CI95% ^b	p	Tendency
Region						
North	262,3	392,2	14,9	10,2 a 19,6	0.001	Crescent
Northeast	448,6	576,3	14,0	9,2 a 18,9	0.001	Crescent
Southeast	346,4	399,9	5,9	2,2 a -9,5	0.007	Crescent
On	469,6	531,7	6,7	3,5 a 9,9	0.002	Crescent
Central- West	352,5	412,8	6,8	0,3 a -13,4	0.042	Crescent
Brazil	385,8	468,1	9,1	5,1 a 13,1	0.001	Crescent
Age group						
20-39	221,6	256,0	4,5	2,0 a 6,9	0.004	Crescent
40-49	797,1	922,1	14,5	5,4 a 23,5	0,007	Crescent
Character						
Elective	263,9	335,5	7,8	3,3 a 12,3	0.005	Crescent
Urgency	121,9	132,6	1,3	0,5 a 2,1	0.008	Crescent
Denouement						
Loud	373,7	454,6	8,9	4,9 a 13,0	0,001	Crescent
Death	12,1	13,5	0,2	0,1 a 0,2	0,003	Crescent

Source. Ministry of Health - Hospital Information System of the SUS (SIH/SUS)

The most prevalent malignant neoplasms among women aged 20 to 49 years and with the highest rates of hospitalizations were malignant neoplasms of the breast, changing from 66.1 in 2014 to 86.4 per 100 thousand in 2023 (growth trend of 1.6% per year; $p=0.002$); malignant neoplasms of the cervix, which went from 23.3 in 2014 to 31.8 per 100 thousand in 2023 (annual change of 0.9%; $p=0.001$); and colon cancer, which went from 10.2 to 11.9 per 100 thousand in 2023 (annual change of 0.1%; $p=0.001$) (Table 2).

However, malignant neoplasms of mesothelial/soft tissue (annual variation of -0.1%; $p=0.010$), brain (annual variation of -0.03%; $p=0.018$) and mouth/pharynx (annual variation of -0.1%; $p=0.001$) showed a decreasing trend (Table 2).

Table 2. Hospitalization rate for malignant neoplasms in women aged 20 to 49 and trend analysis by diagnosis. Brazil, 2014 to 2023.

	Hospitalization Rate per 100 thousand women		Trend analysis from 2013 to 2022			
CID Neoplasia Maligna	2014	2023	Coefficient annual change	IC95% ^b	p	Tendency
Mama	66,1	86,4	1,6	0,7 a 2,6	0.002	Crescent
Cervix	23,3	31,8	0,9	0,6 a 1,2	≤ 0.001	Crescent
Out. malignant genitals	11,0	11,8	0,0	-0,1 a 0,1	0.559	Stationary
Colon	10,2	11,9	0,1	0,1 a 0,2	0.001	Crescent
Leukaemia	6,7	9,0	0,2	0,2 a 0,3	0.028	Crescent
Mesothelial tissue and moles	5,8	5,3	-0,1	-0,2 a 0,03	0,010	Descending
Challenge	4,2	5,1	2,0	-2,2 a 6,2	0.308	Stationary
Stomach	3,8	5,6	0,2	0,1 a 0,2	≤ 0.001	Crescent
Out. malignant skin	4,2	5,1	0,1	-0,02 a 0,2	0.077	Stationary
Non-Hodgkin's lymphoma	3,8	4,9	0,1	0,1 a 0,2	0.001	Crescent
Brain	4,1	3,7	-0,03	-0,1 a -0,0	0,018	Descending
The 2016-2016 U.S.	3,4	2,9	-0,1	-0,1 a -0,04	0,001	Descending
Bone and Cartilage	3,0	2,7	-0,01	-0,1 a 0,03	0,437	Stationary
Bronchus and Lung	2,9	2,7	-0,02	-0,1 a 0,0	0.073	Stationary
Pancreas	1,3	2,1	0,1	0.1 to 0.2	≤ 0.001	Crescent

Source. Ministry of Health – Hospital Information System of the SUS (SIH / SUS).

DISCUSSION

The results presented showed a significant increase in the rates of hospitalizations for malignant neoplasms among women aged 20 to 49 years in the country over the period analyzed, with an annual variation of 9.1%, highlighting a growth rate lower than that of the general population (10.7%) (Machado *et al.*, 2021). The increase in national rates may be related to the difficulty of access of the female population to health services; low population coverage; the low percentage of screening of the female population in the recommended age group and the availability of health services, despite the improvement in diagnosis and the quality of information for the population (Kock; Righetto; Machado, 2020).

However, there was a reduction in rates (20.1%) in 2020 and 2021, the period of the Covid-19 pandemic, and an increase in mortality. The reduction evidenced through this study may be directly related to the reduction in clinical care during the Covid-19 pandemic

and reduction in elective procedures, which directly affected hospitalizations of cancer patients in the country. In addition or fear of contamination by the Covid-19 virus by the population, provided the search for medical care only in emergency situations. Finally, the overcrowding of hospitals for the treatment of patients infected by the Covid-19 virus caused a reduction in cancer hospitalization rates in this period, culminating in an increase in diagnosesOf treatments and a greater progression of malignancies in subsequent years (Buhrnheim *et al.*, 2023).

The analysis of the rate by region showed that the Northeast region had the highest rates and the highest annual increase in hospitalizations. The South region stood out as the second region with the highest annual rate. The data in this study are similar to those highlighted by the study carried out by Machado *et al.* (2021), with the general population and diverge from those highlighted by Santos, Maciel and Oliveira (2020), which highlights the Southeast region with the highest rate. The regional pattern of distribution of hospitalizations for neoplasms in the five regions of the country tends to be influenced by the degree of development of each region and to be associated with social factors.

Thus, the more developed regions (such as the South and Southeast regions) have greater availability of specialized services, which increases access to diagnosis, treatment and hospitalization. On the other hand, the less developed regions, such as the North and Northeast, have a lack of oncology care, favoring the search for specialized services in other locations (Machado *et al.*, 2021), providing a later diagnosis, more severe conditions, and more significant annual increases in hospitalization rates.

In the present study, although the hospitalization rate was more expressive among women aged 40 to 49 years, it showed an average annual growth of around 4.5% in the younger population (20 to 39 years). Thus, young women who experience cancer at this stage of life face great challenges, since they are in a stage of full productive activity, from the biological, social and economic point of view, starting a family and consolidating their work career. In addition, cancer treatment can cause important internal and external changes, which often imply difficulties for self-recognition and satisfaction with oneself (Monteiro *et al.*, 2024).

Comprehensive care for cancer patients must consider not only the physical and medical dimensions, but also the emotional, social, and spiritual aspects. These factors influence the patient's well-being, allowing a more balanced and dignified coping with the disease. A robust and multidisciplinary support network, combined with an accessible and

efficient health system, is essential for promoting a full quality of life, even in the face of the challenges imposed by cancer (Souza *et al.*, 2024).

Thus, it is critical to consider the psychosocial implications of cancer diagnosis on women, who often face unique stigmas and challenges in their treatment pathway. Issues such as fertility preservation, the impact on body image, and disruptions to professional and family life are critical aspects that need specialized attention (Oliveira *et al.*, 2021). Therefore, the inclusion of psychological and social support in cancer care plans is essential to ensure holistic and empathetic care, promoting not only survival, but also the quality of life of patients.

The malignant neoplasm with the highest rates of hospitalizations was breast cancer, corroborating national estimates that show that this type is the most common among the female population (Brasil, 2023; Machado *et al.*, 2021; Sung *et al.*, 2021). The epidemiological profile of breast cancer is influenced by multiple variables, such as age group, education level, occupation, ethnicity, among others (Brasil *et al.*, 2019). Age is one of the preponderant risk factors, and women between 50 and 60 years of age have a higher incidence of this neoplasm, but younger women are more likely to have malignant tumor characteristics, a worse prognosis, and a chance of developing other primary cancers (Erić *et al.*, 2018; Souza *et al.*, 2021).

In Brazil, the fact that breast cancer is the most common type among women represents an important public health issue. The Unified Health System (SUS) offers screening and treatment programs for this neoplasm, including free access to mammograms, cancer treatments, and post-mastectomy breast reconstruction (Brasil, 2023). Despite the advances, there are still significant challenges related to inequality in access to health services and delays in diagnosis, which reinforces the need for effective public policies and awareness campaigns for early detection and appropriate treatment of the disease (Gomes; France, 2021).

Epidemiological research on breast cancer emphasizes the importance of considering population density and socioeconomic factors as significant determinants of disease incidence and outcomes (Chão *et al.*, 2024). Regions with higher population density and limited socioeconomic resources often exhibit higher rates of breast cancer mortality, due to the difficulty of accessing quality health services and effective screening programs (Fayer *et al.*, 2020).

This translates into delayed diagnoses and less efficient treatments, exacerbating the disparity in health outcomes between different social strata and geographic regions. Therefore, it is essential that public policies and health initiatives are adapted to address these inequalities, improving access to and quality of health care for all women, regardless of their location or socioeconomic status (Fayer *et al.*, 2020).

Malignant neoplasm of the cervix stood out as the second with the highest rate of hospitalizations among women aged 20 to 49 years, showing an increasing trend in this age group. However, in other studies carried out in the country and around the world with women of all age groups, a downward trend is noted (Machado *et al.*, 2021; Arbyn *et al.*, 2020). The decline in rates may be a result of the implementation of prevention and early diagnosis policies for this type of cancer, but difficulties in accessing preventive measures and early diagnosis in less developed regions have still contributed to the growth of cases of the disease, especially among younger women (Tsuchiya *et al.*, 2017).

Studies have revealed that cancer has been the second leading cause of death in adolescents and young adults aged 15 to 29 years (Feliciano *et al.*, 2018). If we consider only diseases, cancer is the leading cause of death in this age group. Data released by INCA on incidence: carcinomas of the genitourinary tract (genital and urinary tracts) affect about 41.28 per million women between 15 and 29 years of age, with uterine tumors being the main one. And among women aged 25 to 29 years, this tumor has represented the main cause of death from cancer (INCA, 2020).

Risk factors for cervical cancer include early initiation of sexual activity, multiple sexual partners, smoking, long-term use of oral contraceptives, and the presence of other sexually transmitted infections, such as human immunodeficiency virus (HIV) (Pinheiro *et al.*, 2018). These factors can contribute to a compromised immune environment, allowing HPV infections to persist and eventually lead to carcinogenic cellular changes. In addition, there is a clear socioeconomic inequality in cervical cancer-related risk and mortality, with women in less developed regions experiencing significantly higher incidence and mortality rates, due to a lack of effective screening and vaccination programs (Usyk *et al.*, 2020).

In Brazil, cervical cancer is a relevant public health concern because it has a high mortality rate among women. National HPV vaccination campaigns for girls are implemented as part of a primary prevention strategy, in addition to the availability of Pap smears as a component of screening programs. However, considerable challenges remain related to coverage and equitable access to health services. This situation calls for

continued efforts to improve health education and medical infrastructure, especially in less developed regions of the country. However, despite these advances, cervical cancer still represents a significant challenge in many parts of the world, especially where resources are limited (Brazil, 2022).

Integration of health services, community education on sexual and reproductive health, and strengthening health infrastructures are vital to improving access to and effectiveness of prevention and screening programs. In addition, it is crucial that public health policies include measures to address the cultural and socioeconomic barriers that prevent many women from seeking or accessing preventive care. Therefore, continuous efforts adapted to the cultural and economic specificities of each region are needed to reduce the burden of cervical cancer globally (Brazil, 2022).

Colorectal cancer is the third most frequent neoplasm in the world, screening is based on early detection and prevention, colonoscopy is an exam that allows biopsy and subsequent removal of these lesions (Pareja *et al.*, 2024). In the present study, this neoplasm stood out as the third leading cause of hospitalizations among women aged 20 to 49 years. In Brazil, this neoplasm is among the most common and lethal for the female population, with several public health initiatives focused on increasing awareness and improving early diagnosis rates (Brasil, 2023). In Brazil, detection tests and treatments at no cost to patients through the Unified Health System are included. However, challenges related to coverage and access to health services persist in less developed regions, which requires more effective policies to ensure an adequate response to the incidence of this disease throughout the national territory (Brasil, 2023).

This type of cancer is especially prevalent in developed countries, where high-fat, low-fiber diets, along with sedentary lifestyles and obesity, are well-established risk factors (Birth; Red-haired; Tancredo, 2024). Epidemiologically, the incidence of colorectal cancer tends to increase with age, being more frequent in individuals over 50 years of age (Hossain *et al.*, 2022; Campos *et al.*, 2023; Birth; Red-haired; Tancredo, 2024). The incidence in women remains significant and deserves special attention due to its specificities, including hormonal factors that may influence disease progression (Shakil *et al.*, 2022).

Early detection of colorectal cancer is crucial for improving treatment outcomes and increasing survival rates. Screening programs, such as colonoscopy and fecal occult blood

tests, are recommended for women from the age of 50, or earlier for those with elevated risk factors (Sawicki *et al.*, 2021).

Hospitalizations for malignant neoplasms among women aged 20 to 49 years provided the SUS with a total cost of R\$ 3,361,401,925.27 and an average cost of R\$ 1,787.14 . According to INCA (2022), more than R\$ 3.4 billion will be spent by 2040, with the three most prevalent types of cancer among women (breast, colorectal and cervix). The expenses related to these neoplasms include hospital and outpatient procedures performed in the SUS in cancer patients aged 30 years or older.

According to the WHO, for every 1 dollar invested in public policies and prevention measures in 9 years, it could generate savings of 230 billion dollars. In Brazil, research indicates that for every R\$ 1.00 spent on prevention, another R\$ 4.00 would no longer be spent on treatment. Like this poor management can generate waste due to the inertia of services, which do not carry out preventive, screening, or regular follow-up procedures, failing to prevent the main chronic diseases or minimize the complications of these conditions, which impacts on high costs of hospitalization, procedures, and medications (Brasil, 2022).

The importance of national awareness campaigns, such as Pink October, Blue March, Lilac March, and White November, is also highlighted to inform the population and encourage them to seek preventive medical care (Assis *et al.*, 2020). Thus, the power of disseminating relevant information to attract the female target audience towards municipal neoplasm prevention programs is undeniable (Baquero *et al.*, 2021), promoting early diagnosis and treatment, reducing complications of the disease, hospitalization rates, and consequently hospital costs.

Checking how much is spent on the treatment of the neoplasms that most affect the female population in Brazil is important to impact managers and society to assess how important it is to prevent and screen for cancer in the country. Thus, early detection remains the key to ensuring more promising treatment results and improving patients' quality of life (Melo *et al.*, 2024).

This research may have limitations in relation to the reliability of the information, due to the use of secondary data. The SIH-SUS data portray only the public sector, not showing the totality of cases that occur in the Brazilian female population. Despite this, the platform is extremely important to enable epidemiological monitoring, contributing to the production of health planning and management strategies.

CONCLUSION

In view of the above, it is concluded that the coefficient of hospitalizations for neoplasms in women aged 20 to 49 years in Brazil has increased in recent years, with a reduction in the period of the Covid-19 pandemic and an increase in mortality. The hospitalization rate was higher among women aged 40 to 49 years, but it was also increasing among younger women. The Northeast region had the highest rates and the highest annual increase and the South region stood out as the second region with the highest annual rate. Malignant neoplasms of the breast, cervix and colon were the most prevalent among the female population evaluated and showed annual growth in all age groups evaluated. Hospitalizations have provided the SUS with high costs, and these tend to increase every year.

Therefore, it is of great relevance to improve public policies to raise awareness about the most prevalent malignant neoplasms among women, access to early diagnosis and treatment so that it is possible to reduce the number of hospitalizations and mortality due to these neoplasms. Consequently, complications from the disease will be reduced, as well as improved quality of life of affected women and consequently there will be cost savings for the Brazilian public health system.

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