



PROFILE OF WOMEN WITH BREAST CANCER TREATED WITH CHEMOTHERAPY PERFIL DE MULHERES COM CÂNCER DE MAMA TRATADAS COM QUIMIOTERAPIA EL PERFIL DE LAS MUJERES CON CÁNCER DE MAMA TRATADAS CON QUIMIOTERAPIA

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ABSTRACT

Objective: to characterize the sociodemographic, clinical and epidemiological profile of women with breast cancer treated with chemotherapy. **Method:** descriptive-exploratory study, with quantitative approach, developed at the university hospital with 195 women. There was collection of the information from the nursing notes form used in the nursing process, the medical records and the Hospital Information System (HIS). Data were entered in Excel spreadsheet, used the chi-square test, considering $p < 0.05$. **Results:** mean age 54.37 years; Caucasians (69.74%). Gynecological and obstetrical history: (43%) contraceptive use, (87.69%) had children; (15.9%) early menarche, (3.58%) late menopause. Living habits: high incidence of overweight and obesity (45.12%). The late menopause and obesity variables were statistically significant ($p < 0.011$). There was a predominance of adjuvant treatment (59%); FAC chemotherapy regimen with (37.43%); staging levels: IIA (17.43%) and IIIB (17.43%). **Conclusion:** studies like this enable health actions planned at all levels of attention and thus promote better living conditions for the target populations. **Descriptors:** Breast Neoplasms; Risk Factors; Chemotherapy; Oncology Nursing.

RESUMO

Objetivo: caracterizar o perfil sociodemográfico, epidemiológico e clínico de mulheres com câncer de mama tratadas com quimioterapia. **Método:** estudo descritivo-exploratório, de natureza quantitativa, desenvolvido no hospital universitário com 195 mulheres. Foram coletadas informações do formulário de anotações de enfermagem utilizado no Processo de Enfermagem, dos prontuários e do Sistema de Informação Hospitalar (SIH). Os dados foram digitados em planilha do Excel, empregado o teste Qui-quadrado, considerando significância $p < 0,05$. **Resultados:** idade média 54,37 anos; raça branca (69,74%). História ginecológico-obstétrica: (43%) uso de anticoncepcional, (87,69%) tiveram filhos; (15,9%) menarca precoce, (3,58%) menopausa tardia. Hábitos de vida: elevada incidência de sobrepeso e obesidade (45,12%). As variáveis menopausa tardia e obesidade apresentaram significância estatística ($p < 0,011$). Houve predominância de tratamento adjuvante (59%); esquema quimioterápico FAC com (37,43%); estadiamento níveis: IIA (17,43%) e IIIB (17,43%). **Conclusão:** estudos como este, possibilitam ações de saúde planejadas em todos os níveis de atenção e consequentemente promoção de melhores condições de vida para populações-alvo. **Descritores:** Neoplasias da Mama; Fatores de Risco; Quimioterapia; Enfermagem Oncológica.

RESUMEN

Objetivo: caracterizar el perfil sociodemográfico, clínico y epidemiológico de las mujeres con cáncer de mama tratadas con quimioterapia. **Método:** estudio exploratorio-descriptivo, cuantitativo, desarrollado en el hospital universitario con 195 mujeres. Fueron recogidas las informaciones del formulario de notas de enfermería utilizado en el proceso de enfermería, los registros médicos y el Sistema de Información Hospitalaria (SIH). Los datos fueron introducidos en la hoja de cálculo Excel, utilizada la prueba de chi-cuadrado, considerando $p < 0,05$. **Resultados:** la edad media 54,37 años; Caucásicos (69,74%). Historia ginecológica y obstétrica: (43%) uso de anticonceptivos, (87,69%) tenían niños; (15,9%) menarquia temprana, (3,58%) menopausia tardía. Hábitos de vida: alta incidencia de sobrepeso y obesidad (45,12%). Las variables de la menopausia tardía y obesidad fueron estadísticamente significativas ($p < 0,011$). Hubo un predominio de tratamiento adyuvante (59%); régimen de quimioterapia FAC con (37.43%); los niveles de estadificación: IIA (17,43%) y IIIB (17,43%). **Conclusión:** los estudios de este tipo permiten a las acciones de salud previstos en todos los niveles de atención y de este modo promover mejores condiciones de vida para las poblaciones objetivo. **Descriptor:** Neoplasias de la Mama; Factores de Riesgo; Quimioterapia; Enfermería Oncológica.

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INTRODUCTION

In Brazil, the estimates for 2016, also valid for 2017, indicate the occurrence of approximately 600,000 new cases of cancer, demonstrating the magnitude of the cancer problem in the country. Among the most insidious types of cancer among Brazilian women, there is breast cancer (BC), corresponding to 58,000 new cases, being the predominant type in the Southeast region.¹

Understanding the factors related to the incidence of cancer requires thorough investigation. In breast cancer, those factors relate mainly to the woman's reproductive life, such as early menarche, nulliparity, first pregnancy above 30 years, late menopause and hormone replacement therapy (HRT)². Although some researchers consider the use of contraceptive (CP) a risk factor (RF), other researchers did not show this association³. Age is the most important RF; exposure to other factors are cumulative, thus, the risk of developing cancer increases mainly with age.²

Primary prevention of this malignancy is a promising field of research and interventions, considering that about 30% of cases of BC can be avoided by measures such as a healthy diet, regular physical activity and maintaining ideal weight. In Brazil, the recommendations of the Ministry of Health for early detection and diagnosis base on the control of breast cancer: Consensus Document, 2004.¹

The objective of this study was to characterize and monitor the socio-demographic-epidemiological and clinical profile of patients with breast cancer, of an educational public service, for planning actions at different levels of care, as well as analyze and discuss the data collected with the available scientific literature.

The characterization enables knowing part of a population, allowing the control and monitoring of trends in the incidence of BC, as well as providing information for comparison with other studies relating to geographical variations in the patterns of this neoplasm. The results will serve as a source of information for future research that may interfere with processes related to prevention, development and treatment of the disease, as well as collaborate to the development of health policies for early diagnosis, offering better conditions of treatment and consequent quality of life and health.

For effective planning and implementation of actions that will contribute to that process, it is necessary to know the existing risk factors and those that predominate in certain

population, to then propose changes, for example, in individual and collective aspects dependents of each individual.

Based on these, whereas the Unified Health System (SUS) is responsible for most of the care of cancer patients, one emphasizes the importance of characterizing the population served in specialized public services, investigating the factors associated with the disease, as well as aspects related to the treatment, which will subsidize professional actions aimed at prevention, diagnosis and treatment.

OBJECTIVE

♦ To characterize the sociodemographic, clinical and epidemiological profile of women with breast cancer treated with chemotherapy.

METHOD

Descriptive and exploratory study, with a quantitative approach, related to the medical records of 195 patients with BC, participating in the Extension Project Systematization of Nursing Patient Care in Antineoplastic Chemotherapy Treatment developed from February/2009 to February/2011, at the Oncology department of a university hospital in the state of Minas Gerais/MG.

There was collection of the information in the nursing notes form used in the PE, records and Hospital Information System (HIS), relating to socio-demographic characteristics, risk factors for breast cancer related to reproductive history, comorbidities and lifestyle; age at diagnosis, skin color; origin; clinical and/or surgical stage of the tumor, oncologic therapy and the presence of risk factors.

Data were entered in the Excel spreadsheet. In order to determine the statistical significance level between the distributions of two variables, the chi-square test was used, considering $p < 0.05$. The results are descriptively presented and were discussed with other results in the literature.

The project was approved by the Ethics Committee for Research with Human Beings (CEP), of the the Federal University of Uberlândia (UFU) - Opinion No. 479/11, on 08/12/2011.

RESULTS

The average age of the study population was 54.37 years. There was a higher incidence of BC in the age group between 40 and 69 years, totaling 156 total cases of 195.

The result of the intersection between the variables clinical staging and age revealed $p=0.829$, showing there was no statically significant difference for them. The highest percentage of cases were diagnosed in stages II (81.1%) and III (76%), both prevailing between the age intervals of 24-49 years and 50-59 years.

The stages found, in the period of disease diagnosis, were: IIA (17.43%), IIIB (17.43%), IIIA (16.41%), IIB (14.87%), I (12, 30%), IA (3.58%), II (2.56%), IV (2.56%), and, in 25 (12.82%) records, the there was no information of the staging.

As for color and race, there was a predominance of white women, accounting for 136 patients (69.74%), followed by mulatto, 40 (20.51%), and black,19 (9.74%).

Among the women participating in the survey, most were from Uberlândia, 131 (67%), site of the present study; 64 women (33%) were from other cities.

The assessment related to the occupation of those women was not reliable, given that the medical records of 121 participants (71.3%) had no such information. In the available notes, 40 (20.51%) women were housewives, and 16 (8.2%) women were retired. Thus, one infers that, among the collected information related to labor and income, there was a lack of own financial resources or income from retirement, which

usually relates to a low yield for survival with quality.

The analysis of RF included parity, with average gestation (G) per woman of 3.01. According to the information collected, 171 (87.69%) women had had children.

In relation to menarche, the average age was 13.02 years, occurring in only 15.9% of women; late menarche, in 66.67%, considered after 12 years of age; therefore, early menarche also did not constitute predominant RF for BC.

The average age of the occurrence of menopause was 47.25 years, when the treatment for BC started. The late menopause (from 55 years) is considered a RF for BC, only two (3.58%) women had this RF.

According to the analysis of the variables menarche and menopause, this study showed prevalence of non-late menopause, both for women with menarche before age 12 as for those ≥ 12 years, with no statistical significance ($p=0.169$) for these variables.

Obesity was present in 61 (31.28%) women; and other 27 (13.84%) had overweight. When considering the sum of overweight women and those who were obese, the total was 45.12%.

Table 1. Distribution of the variables menopause and obesity, of the 195 patients participating in the study.

Menopause	Obesity						P*
	Yes		No		Total		
	n	%	n	%	n	%	
Late	1	2.0%	1	8.0%	2	1.2%	0.011
Non-late	40	78.4%	71	59.7%	111	65.3%	
No menopause	10	19.6%	47	39.5%	57	33.5%	
Total	51	100%	119	100%	170	100%	

Table 1 shows statistical significance between menopause and obesity variables, with $p < 0.011$. When analyzing the 51 participants who were obese, we found 40 (78.4%) women with non-late menopause and other 21.6% who, although not presenting late menopause, were also obese.

In relation to alcohol consumption and smoking, 29 women (14.87%) drank alcoholic drinks. As for lifestyle, 26 (13.30%) women were active smokers and 27 (13.80%) other women reported having quit smoking. Smoking was not a predominant RF in this population because only 53 (27.1%) of the study participants had contact with the tobacco, while most number (72.30%) had never smoked.

The analysis regarding the use of CP was also impaired due to the numerical minimum difference between women who did and those who did not use CP. Among women who used CP, the incidence of BC was higher in those who have used CP for 1-5 years, representing 21.02%. Those who used it for over five years, alone, accounted for 12.30%.

When analyzing the information on chemotherapy, 116 (59.48%) women underwent adjuvant treatment and 77 (39.48%), the neoadjuvant treatment.

When analyzing the recorded information of 116 (100%) patients submitted to adjuvant treatment, 76 (65.5%) women were between 50-81 years. Regarding neoadjuvant treatment, carried out by 77 (100%) women, there was also a higher percentage of older

women, whereas 49 (63.62%) were 50-82 years.

As for the chemotherapy regimens, verified in the records to treat patients in the study, the findings were FAC (fluorouracil, adriblastina and cyclophosphamide) in 73 (37.43%) women, AC + TXT (adriblastina, cyclophosphamide and docetaxel) in 50 (25.64%) women, CMF (cyclophosphamide, methotrexate and 5-flouracil) in 49 (25.12%) women, and AC (adriblastina and cyclophosphamide) in 12 (6.15%) women. In minimum percentage and in isolated cases, there was the use of other chemotherapy regimens, totaling 11 cases (5.64%).

In the evaluation of women with BC who had other concomitant diseases, 106 (54.35%) women required treatments for other

diseases. Among the diseases found in this population, we highlight the most frequent: diabetes, hypertension, hypothyroidism, sores, labyrinthitis, heart disease and depression.

Regarding the analysis of the occurrence of risk factors (RF) in the study population, 66.14% of the sample had two or three RF for BC. When correlating the RF individually present, one realizes they appeared, in most women, as isolated cases. Only four participants had the same RF at a higher frequency, as in Table 2.

Table 2. Occurrence of risk factors related to the investigated period - Uberlândia, MG, 2015.

Risk Factors	No. of patients	%
Age	26	13.33
Age + CP	22	11.28
Age + CP + Obesity	15	7.69
Age + Obesity	27	13.84
TOTAL	90	46.14

Table 3. Distribution of the variables related to the risk factors and age group of the patients from the extension project - Uberlândia, MG, 2015.

No. RF	Age Group								P*
	24-49		50-69		≥70		Total		
	n	%	n	%	n	%	n	%	
1	16	27.1%	14	15.2%	13	15.8%	33	19.4%	0.174
2	20	33.9%	35	38%	9	47.4%	64	37.6%	
3	19	32.2%	25	27.2%	3	15.8%	47	27.6%	
4	2	3.4%	16	17.4%	4	21.1%	22	12.9%	
5	2	3.4%	2	2.2%	0	0%	4	2.4%	
Total	59	100%	92	100%	19	100%	170	100%	

Although Table 3 did not present statistical significance, there was prevalence of two or

three RF in the age groups 24-49 years and 50-69 years.

Table 4. Distribution of the variables of the amount of risk factors and staging, of the 195 patients participating in the study - Uberlândia, MG, 2015.

No. RF	Staging										P*
	I		II		III		IV		Total		
	n	%	N	%	n	%	N	%	n	%	
1	5	16.1%	14	20.6%	13	19.7%	1	20%	33	19.4%	0.960
2	9	29%	29	42.6%	24	36.4%	2	40%	64	37.6%	
3	13	41.9%	17	25%	16	24.2%	1	20%	47	27.6%	
4	3	9.7%	7	10.3%	11	16.7%	1	20%	22	12.9%	
5	1	3.2%	1	1.5%	2	3%	0	0%	4	2.4%	
Total	31	100%	68	100%	66	100%	5	100%	170	100%	

Women classified with more advanced stages, II and III, had two or three RF, as Table 4. It is noteworthy that there was no statistical significance, but such observation is interesting, since, in a larger population, there may be differences in these results, taking statistical significance.

DISCUSSION

A study conducted in Brazilian public education institution, in the south of the

country, with a sample of 142 patients, showed that 133 (97.7%) were 40 years or more, and nine (6.3%) were younger than 40 years, the average being 57.7 years⁴. Analyzing this information and comparing it with the data found in this study, average ages were similar; currently, the age is quite wide, which leads to reflection on the urgent need for implementation of policies to early detection of BC.

Another study with women with breast cancer assisted in referral services of northern Minas Gerais showed the predominance of ages over 50 years (54.5%)⁵. A significant portion of those women were not in the age group advocated for performing mammograms (50-69 years), according to the Consensus Document for BC⁶, both in the found studies, as in this study. Thus, it is extremely important to perform an individual thorough assessment, regular monitoring and examinations requests, in accordance with the protocols, or according to the individual history, when opportune.

A study in the city of Campos dos Goytacazes found that clinical staging at diagnosis was clinical stage I, with 24 (11.4%), 114 (54%) clinical stage II, 66 (31.3%) clinical stage III, and seven (3.3%) clinical stage IV.⁷

Although having a relatively good prognosis when diagnosed and treated early, the BC mortality rates remain high in Brazil, most likely because the disease is still diagnosed in advanced stages¹, proved with the results of this study and the data presented in the literature.

In a study aiming to analyze the women's ethnic, the white race was predominant; of the 175 women, 155 (88.6%) were white and 20 (11.4%), non-white⁸. The literature provides no data to discuss the prevalence of BC in any race; one only observes its higher prevalence in Caucasians. Another example was a study on the prevalence of risk factors for BC, in which 81.1% of the population were white.⁹

Early menarche is the one that occurs before age 12 and is considered an RF for CM, in view of the larger amount of times that the woman is exposed to hormone changes that occur during the menstrual cycle.¹⁰

The data mentioned above are similar to those of another study with women with BC assisted in an oncology outpatient, in which only eight (13.79%) participants had early menarche, while other 50 (86.21%) women had menarche after 12 years. It is important to emphasize the possibility of late menopause as RF for the CM, as those participants had greater exposure time to hormonal variations during the menstrual cycles.¹¹

Results of a study on the anthropometric profile of women who overcame BC showed a high prevalence of overweight/obesity.⁸

Studies show that women in postmenopausal overweighted or obese have a higher risk of developing BC.² Although obesity before menopause does not relate to BC,

women who get to that stage with overweight have more difficulty to lose weight and thus become exposed to obesity as a risk factor.²

In another study, it was not possible to consider smoking as RF for BC, given that 38 (66.7%) women had never smoked¹¹. Besides contributing to the development of other types of cancer, smoking is one of the main causes of early mortality and limitations from ischemic heart disease, cerebrovascular disease and chronic obstructive pulmonary disease². Therefore, even though the literature does not establish a direct relationship between BC and smoking, this habit should be discouraged, given its harmful effects on health.

The consumption of alcoholic drinks remains controversial as RF for BC. Alone, this study considers this RF of low representation in the sample. Previous research found that 18 (31.6%) participants reported drinking alcohol, an index higher than the one found in the sample of this study¹¹. Another study indicated that, even in small amounts, alcohol consumption might increase the risk of BC, in which, at each dose consumed per day, the risk increases by about 7% to 11%². Alcohol increases estrogen levels in the body, which, in quantities greater than normal, could cause Bc.²

A study in Thailand involving women with BC, which correlated data with the use of oral contraceptives (OC), showed no evidence between both variables.³

It is still controversial the association between CP and increased risk for BC, pointing to certain subgroups of women, such as those who used CP in high estrogen doses, those who used the medication for a long period and those who used contraceptive at an early age, before the first pregnancy.¹²

The indication of the chemotherapy protocol depends on several factors: prior assessment of tumor characteristics, patient's conditions to undergo the treatment, also considering comorbidities present prior to the BC diagnosis. Therefore, the use of intrinsically protocols depends on each case, on the behavior and characteristics of the tumor.

A multidisciplinary team should address the BC, aiming at the patient's full treatment⁶. Therefore, it is essential to investigate and collect appropriate data, in order to know the patient and the co-morbidities presented, in addition to offering information on the need for continuation of pre-existing treatments or other viable procedures for each case, not harming the proposed cancer treatment.

Based on these data, one can see the importance of addressing specific population groups in order to identify the existence of RF and propose interventions in an attempt to decrease the chances of developing this cancer.

The findings of this study indicated that age was one of the most important RF for BC, corroborated by the scientific population and the literature². Regarding the use of CP, even with a controversial relationship with BC, when associated with other risk factors such as smoking, obesity, among others, the chances of developing this cancer increase.¹³

Several articles discuss the importance of the study of risk factors for BC, but until now, researches do not clearly elucidate the relationship between the multiple RF known and the incidence of BC.⁹

Although one cannot estimate the influence of each RF on the genesis of BC, the minimization of those factors can certainly contribute to a healthier life¹⁴. Therefore, health policies to prevent BC should consider the inclusion of effective strategies and interventions for actions focused on modifiable and preventable RF, enabling further promotion of health protection against BC.

CONCLUSION

Some RF for BC, such as early menarche and late menopause, were not evident in this population, as well as the use of CP, smoking and alcohol consumption. Furthermore, the literature presents them as still controversial RF. This aspect reflects the importance of studies to characterize populations, in order to know better the relation between the RF and BC.

Characterizing the age and the EC of the disease are essential for the construction and evaluation of early detection policies and tracking of BC, and for this study, the results related to the EC were not favorable for the good prognosis of patients, since more advanced stages (II and III) predominated. This analysis leads to a reflection of reality and what proposals exist to prevention, health promotion, and early diagnosis, related to BC.

As for the characteristic related to the occupation, it was difficult to collect information. Other studies of this nature also had this same difficulty. This finding proves to be indispensable to record information correctly for implementation and reliability of research using data from the records.

It is also noteworthy the importance of working with a specific population and RF that

are relevant. For the study population, it would be essential to change lifestyle, which would include, for example, a healthy diet and exercise, in order to contribute to reduction of excess weight and consequently a healthier life.

Characterizing a population, treated at a public health service, and knowing the RF, can provide important information for the existing health policies, as well as collaborate to educational activities more objectively. Studies such as this one enable health actions planned at all levels of attention and thus promote better living conditions for target populations.

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