## THE IMPACT OF A DAY IN THE DETECTION OF CANCER - CANCER PREVENTION TASK FORCE OF ASSOCIAÇÃO PRESENTE, RESULTS OF THE TEAM OF MASTOLOGY IN 2018

*O impacto de um dia na detecção do câncer – mutirão de prevenção ao câncer da associação presente, resultados da equipe de mastologia em 2018* 

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**Abstract: Objective:** Breast cancer is the second most common cancer type among women. It is also the leading cause of premature mortality in this population, and early detection is reported to be responsible for the reduction in morbidity and mortality from breast cancer. Actions to promote the access of needy populations to the early diagnosis of breast cancer are essential. **Objective:** To describe the epidemiological profile of the population assisted by the mastology team at the 8th Cancer Prevention Task Force in Montes Claros in 2018 and to quantify the post-event developments. **Methodology:** This is a descriptive, quantitative study, carried out with data obtained from the records of the population assisted by the 8th Cancer Prevention Task Force of the Present Association in 2018, presented in frequency tables. For tabulation and analysis, SPSS statistical software was used. **Results:** four hundred and fifty-four individuals were attended by the Breast Cancer team, presenting mean age of 56.4 ( $\pm$  9.0) years and most of them were females (98.9%). More than half of the participants (57.7%) were married or had a stable union and had primary schooling (61.1%). In the post-event, 375 mammograms, 35 breast ultrasounds and 4 patients were submitted to core biopsies. Two patients were diagnosed with breast cancer and referred for specific treatment. **Conclusion:** The Cancer Prevention Task Force of the Present Association is consolidated as an effective strategy, led by the civil society, for the screening and early diagnosis of cancer in Montes Claros.

Keywords: Breast cancer; Diagnosis; Prevention; Health promotion.

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Resumo: Introdução: O câncer de mama é o segundo tipo de câncer mais frequente entre as mulheres. É também a principal causa de mortalidade prematura nesta população, e a detecção precoce é apontada como a responsável pela redução na morbidade e mortalidade pelo câncer de mama. Ações no sentido de promover o acesso de populações carentes ao diagnóstico precoce de câncer de mama são essenciais. Objetivo: Descrever o perfil epidemiológico da população assistida pela equipe de Mastologia no 8º Mutirão de Prevenção ao Câncer em Montes Claros em 2018 e quantificar os desdobramentos do pós-evento. Metodologia: Trata-se de um estudo descritivo, quantitativo realizado com dados obtidos dos registros de atendimentos feitos à população assistida pelo Mutirão de Prevenção ao Câncer da Associação Presente em 2018, apresentados em tabelas de frequências. Para tabulação e análise fez-se uso do software estatístico SPSS. Resultados: quatrocentos e cinquenta e quatro indivíduos foram atendidos pela equipe da Mastologia, apresentando média de idade de 56,4 (±9,0) anos e sendo a maioria do sexo feminino (98,9%). Mais da metade dos participantes (57,7%) eram casados ou com união estável e possuíam escolaridade de até ensino fundamental (61,1%). No pós-evento foram realizadas 375 mamografias, 35 ultrassons de mamas e 4 pacientes foram submetidas a biópsias de fragmento. Duas pacientes foram diagnosticadas com câncer de mama e encaminhadas para tratamento específico. Conclusão: o Mutirão de Prevenção ao Câncer da Associação Presente novamente se consolida como uma estratégia eficaz, liderada pela sociedade civil, para o rastreamento e diagnóstico precoce do câncer em Montes Claros.

Palavras-chave: Câncer de mama; Diagnóstico; Prevenção; Promoção da saúde.

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### INTRODUCTION

Breast cancer is the second most frequent type of cancer worldwide and the most common among women, being that its prevalence has increased since 1990<sup>1</sup>. Approximately 1.7 million women are diagnosed with the disease every year, being the highest incidences recorded in highincome countries<sup>1</sup>. It is also the main cause of premature mortality in the female population, and early detection is pointed as the responsible for a reduction in morbidity and mortality by breast cancer<sup>2</sup>.

For Brazil in 2018, the National Cancer Institute estimates that there will be 59,700 new cases of breast cancer, with an estimated risk of 56.33 cases per 100 thousand women<sup>3</sup>. Excluding non-melanoma skin tumors, it is the first most frequent tumor in women of the regions South, Southeast, Northeast and Midwest regions<sup>3</sup>.

Tumor staging refers to a grouping of patients according to the extent of their disease. Staging in oncology is useful for determining the choice of treatment for a patient on an individual basis, estimate the prognosis and compare the results of different treatment modalities. In the United States, 63-64% of breast cancers are local to the diagnosis for white women and Asian, 28-30% are regional and 5% are metastatic tumors. However, in black women only 53% of tumors are located, 8% and 35% regional metastatic tumors at diagnosis<sup>4</sup>. This fact is particularly important when one observes that 99% of women who have local disease at diagnosis are alive after 5 years of treatment, 85% when the disease is regional and only 26% when metastatic disease is to the presentation<sup>5</sup>.

In a survey conducted in 2016 in Brazil, it

was observed that 9.8% of women are diagnosed with stage I and 29% with stage II, being 44.6% of women with stage III and IV 16.6%, i.e., more than 60% of the women are diagnosed late<sup>6</sup>. There are several factors associated with the late diagnosis of breast cancer in Brazil, you can quote: restricted access to screening mammography, delay in the diagnosis and initiation of treatment, lack of skilled human resources and availability and distribution of services in secondary care, in addition to the low level of education of the population, which presents a distorted knowledge about the disease and its treatments<sup>6</sup>.

In Montes Claros, Minas Gerais, in a study published in 2012, 24% of the patients were diagnosed in stage I, 28.5% in stage II, and 47.6% of the patients in stages III/IV<sup>7</sup>. Stratifying these patients by healthcare coverage (public/private), 43.5% of the patients in the private system were diagnosed in Stage 0/I, and only 14.8% of the patients in the public system had early diagnosis<sup>7</sup>, and alarming scenario and very far from the ideal.

In this sense, Associação Present has been held since 2011, Multirão de Prevenção ao Câncer (MPC-AP) in Montes Claros, whose main objectives are to provide medical assistance free of charge to the public in the region and provide laboratory, imaging and pathology to persons at risk of being or developing some type of cancer, in addition to providing information on the importance of early diagnosis and health care8. Associação Presente, in addition to receiving the needy patients with cancer, promotes numerous actions that involve information and education on the prevention and early diagnosis of cancer. MPC-AP is held once a year in Montes Claros, being its major objective the promotion of health and early diagnosis. More than 400 volunteers from the health area gather in a day care, being 5 expertises involved - mastology, urology, gynecology, Dermatology, Head and Neck Surgery/Dentistry.

The objective of this article is to describe the clinical and epidemiological profile of the population assisted in Joint Effort for Cancer Prevention in the city of Montes Claros - Chapter breast in the year of 2018, as well as to present the outcomes and referrals from the analyzed population.

### METHODOLOGY

It is descriptive and quantitative study whose data were obtained from the records of visits to the population assisted in the 8th Joint Effort for Cancer Prevention in Montes Claros in 2018.

Data were collected using the specific files of Mastology. The data regarding the post-event (mammograms, ultra-sounds and biopsies performed) were provided by the Administration of Associação Presente. The files comprise sociodemographic, epidemiological and clinical variables of the patients.

The information collected was digitized in spreadsheets (Excel) and the results described using frequency tables. Tabulation and analysis were done using the SPSS23.0 statistical software.

All procedures performed in this study were in agreement with the national research ethical standards and with the Helsinki Declaration of 1964 and its subsequent amendments, having been approved by the Research Ethics Committee of State University of Montes Claros in 2018, under the number 2.599.222.

### RESULTS

In the 8th edition of Joint Effort for Cancer

Prevention 2,655 people was met. Of these, 454 individuals were treated by the team of mastology, with an average age of 56.4 ( $\pm$ 9.0) years and being most females (98.9%). More than half of the participants (57.7%) were married or under common wealth and had schooling up to basic education (61.1%) (Table 01).

# Table 1 - Demographic profile of individuals<br/>assisted in the Joint Effort for CancerPrevention /Mastology. Montes Claros, Minas<br/>Gerais, 2018.

	101	
Variables	n*	%
Sex		
Male	5	1.1
Female	445	98.9
Age range		
Less than 40 years	20	4.4
40 to 59 years	256	56.8
60 years or more	175	38.8
Marital Status		
Single	75	16.7
Married / Common-low	259	57.7
Marriage		
Divorced/separated	53	11.8
Widow	62	13.8
Schooling		
Illiterate	22	4.9
Elementary School	254	56.2
High School	147	32.5
Upper Education	29	6.4

\*The totals vary due to loss of information

Among the participants, 65.2% reported a positive family history for cancer. There was a higher prevalence of individuals who do not smoke (72.3%) or use of alcoholic beverages (66.5%) and most women declared to have one or more children (82.4%) (Tables 02 and 03). It was also observed the practice of physical activity in three or more times per week in 34% of the participants (Table 02). GONÇALVES, R. C. R.; MENEZZI, P. T. S. D.; SOARES, P. M.; SILVEIRA, M. F.; XAVIER, A. R. E. O.; COELHO, B. A.

#### Table 2 - Characteristics of individuals assisted in the Joint Effort for Cancer Prevention/ Mastology according to family history of cancer and life habits. Montes Claros, Minas Gerais, 2018.

2010.				
Characteristics	n*	%		
Cancer Family History				
No	154	34.8		
Yes	289	65.2		
Tabagism				
Yes	29	6.4		
No/never smoked	327	72.3		
Former smoker	96	21.3		
Alcoholism				
Yes	100	22.0		
No/never drank	302	66.5		
Ex-alcoholic	52	11.5		
Weekly physical activity				
None	214	47.6		
Once	29	6.4		
Twice	54	12.0		
Three or more times	153	34.0		

\*The totals vary due to loss of information

# Table 3 - Characteristics of women assisted inJoint Effort of Cancer Prevention/Mastologyaccording to reproductive variables. MontesClaros, Minas Gerais, 2018.

Variables	n*	%
Parity		
None	52	11.5
1 - 2 children	142	31.3
3 - 4 children	164	36.1
$\geq$ 5 children	68	15.0
Did not answer	28	6.1
Menarche		
9 - 11 years	56	13.3
12-14 years	261	62.1
$\geq$ 15 years	104	24.6

Continuation of Table 3

Variables	n	%
Menopause		
$\leq$ 40 years	45	9.9
41 to 50 years	187	41.2
$\geq$ 51 years	106	23.3
Not applicable	116	25.6

\*The totals vary due to loss of information

During the MPC-AP, 350 mammograms were requested for women aged 50 to 69 years and 44 mammograms after the evaluation of Mastologist for women outside the age range covered by Sistema Único de Saúde (50 to 69 years), making a total of 398 mammograms requested. In the post-event 375 mammograms were performed, with a rate of nonattendance of 5.77%. The results of mammograms were subsequently evaluated by a Mastologist of this Association, having been requested 35 ultrasounds, and 41 patients were forwarded to the secondary system of care for clinical and image follow-up in a semester basis. Of the 35 patients subjected to ultrasound, 04 were subjected to breast cancer biopsies. Two patients had a diagnosis of breast cancer and were forwarded for specific treatment, one was diagnosed with giant fibroadenoma and referred for surgical resection, and another is monitored by a positive result for injury marker of risk.

### DISCUSSION

Cancer or malignant neoplasia, although is a pathology that has been known for centuries, it has occupied a prominent position in the studies relating to health throughout the world, since it became a public health problem due to the epidemic character with which it has been presented. The demographic and epidemiological transitions indicate a growing impact of the disease in the coming decades, and information about the cancer occurrence and its outcome are essential requirements for national and regional programs for cancer control<sup>3</sup>.

In global terms, excluding non-melanoma skin cancers, breast cancer is the most frequent malignant tumor among women, corresponding to 25.2% of all malignant tumors in women<sup>3</sup>. Although it is considered a cancer of relatively good prognosis if diagnosed and treated in a timely manner, the mortality rates for breast cancer remain high, especially in developing countries<sup>9</sup>, probably because it is still diagnosed in advanced stages. Therefore, the early detection continues to be the cornerstone for the proper treatment and timely of breast cancer.

It is estimated that one in eight women will develop breast cancer during their lives<sup>10</sup>. This neoplasm is considered a serious public health problem worldwide, not only by the increasing number of cases diagnosed each year, but also by the financial impact related to the diagnosis and treatment of the disease<sup>10</sup>. Several factors are involved in the etiology of breast cancer: early menarche, late menopause, nulliparity, first pregnancy after 30 years, the use of contraceptives or hormone therapy for a prolonged time, exposure to ionizing radiation, alcohol consumption and smoking, sedentary lifestyle and genetic predisposition<sup>3.10</sup>. Therefore, education and information measures may reduce the risk of a woman develop breast cancer, since several risk factors are modifiable.

In a previous study published by the President of Associação Presente, it was demonstrated that the interval of time between the clinical suspicion and diagnostic confirmation of breast cancer was greater than 6 months in almost half of the women in Montes Claros, demonstrating the slowness of the system of health<sup>7</sup>. This fact, together with the difficulty of access to mammography and negative family history for breast cancer have been highlighted in the study as relevant factors associated with late diagnosis for breast cancer. It is important to highlight that when breast cancer occurs in more advanced stages, the morbidity related to treatment is increased, thus compromising the quality of life and reducing the survival of patients<sup>3</sup>.

In its eighth edition, MPC-AP has enabled countless people to have the course of their life changed and increased chances of cure by means of tracking. Rastreamento, or *screening*, comprises a set of exams or tests that are carried out in an apparently healthy population so that latent diseases or in early stage can be diagnosed. In principle, they must be effective actions and low cost, accessible to the entire population. However, the fact that 2,655 people have appeared during 12 hours in a public square in 2018 to receive specialized medical shows that, at a minimum, the population has difficulty accessing specialists and medical examinations.

The data over the years show that the MPC-AP is part of a strategy for the screening of early cancers of breast, cervix, prostate, mouth and skin. In 2018, 454 individuals were evaluated by Mastologists, being that 4 women, two of them with positive diagnosis, were forwarded for specific treatment. However, we need effective programs and permanent early diagnosis and institution of treatment in adequate time to ensure that the scenario of cancer can be modified in Brazil.

### CONCLUSION

Early diagnosis and timely treatment are fundamental points when it comes to breast cancer. Joint Effort for Cancer Prevention of Associação Presente promotes education, access to specialists GONÇALVES, R. C. R.; MENEZZI, P. T. S. D.; SOARES, P. M.; SILVEIRA, M. F.; XAVIER, A. R. E. O.; COELHO, B. A.

and diagnostic tests for patients, in addition to forwarding those diagnosed for specific treatment.

In 2018 the team of Mastology evaluated 454 individuals, the majority were forwarded to the realization of complementary examinations (mammography, ultrasound and breast biopsy). Two patients were diagnosed with breast cancer and are undergoing treatment. MPC-AP is an isolated action, as its own name says, but that achieves great impact for the population of the region, unfortunately historically unassisted.

### **CONFLICTS OF INTEREST**

The authors declare not having interest conflict.

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