

MORTALITY FROM BREAST CANCER AMONG WOMEN BELOW 40 YEARS OLD*

Crislayne Keretch Sebastião¹, Liliana Müller Larocca², Rosa Helena Silva Souza³,
Marília Daniella Machado Araújo Cavalcante⁴, Viviane Serra Melanda⁵

¹RN. Technician in Medical Radiology. Erasto Gaertner Hospital. Curitiba-PR-Brazil.

²RN. Ph.D in Education. Federal University of Paraná. Curitiba-PR-Brazil.

³RN. M.A in Nursing. Doctoral student in General Medicine. Federal University of Paraná. Curitiba-PR-Brazil.

⁴RN. Undertaking M.A in Nursing. Federal University of Paraná. Guarapuava-PR-Brazil.

⁵RN. Undertaking M.A in Nursing. Federal University of Paraná. Curitiba-PR-Brazil.

ABSTRACT: This is a descriptive documental study aiming to investigate the epidemiological profile of the deaths which occurred among women aged below 40 years old, diagnosed with breast cancer. Data collection was undertaken in the Hospital Records (Cancer) Service of the Teaching Hospital of the Federal University of Paraná, Brazil, including information recorded between January 2003 and December 2011. A total of 638 notifications of breast cancer were identified, of which 68 were of women aged below 40 years old, of whom 21 died. It was ascertained that the survival was, on average, of 40 months; and that 76.2% were at advanced stages (III or IV). It is emphasized that screening for breast cancer in women at high risk allows the detection of tumors at earlier stages, reducing the incidence in the number of deaths and improving the health indicators.

DESCRIPTORS: Breast neoplasias; Hospital records; Nursing.

MORTALIDADE POR CÂNCER DE MAMA EM MULHERES COM IDADE INFERIOR A 40 ANOS*

RESUMO: Trata-se de uma pesquisa documental descritiva cujo objetivo foi reconhecer o perfil epidemiológico dos óbitos ocorridos entre mulheres com menos de 40 anos, diagnosticadas com câncer de mama. A coleta dos dados foi realizada no Serviço de Registro Hospitalar de Câncer do Hospital de Clínicas da Universidade Federal do Paraná-Brasil, compreendendo informações registradas entre janeiro de 2003 e dezembro de 2011. Foram identificadas 638 notificações de câncer de mama, dos quais 68 foram de mulheres com menos de 40 anos e dessas 21 foram a óbito. Verificou-se que a sobrevivência foi, em média, de 40 meses e 76,2% apresentaram estágio clínico avançado (III ou IV). Ressalta-se que o rastreamento do câncer de mama em mulheres de alto risco, permite detectar o tumor mais precocemente, reduzir a incidência no número de óbitos e melhorar os indicadores de saúde.

DESCRIPTORIOS: Neoplasias da mama; Registros hospitalares; Enfermagem.

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RESUMEN: Es una investigación documental descriptiva cuyo objetivo fue reconocer el perfil epidemiológico de los óbitos ocurridos entre mujeres con menos de 40 años, diagnosticadas con cáncer de mama. Los datos fueron obtenidos en el Servicio de Registro Hospitalar de Cáncer del Hospital de Clínicas de la Universidad Federal de Paraná-Brasil, comprendiendo informaciones registradas entre enero de 2003 y diciembre de 2011. Fueron identificadas 638 notificaciones de cáncer de mama, de las cuales 68 fueron de mujeres con menos de 40 años y de esas 21 fueron a óbito. Se verificó que la sobrevivencia fue, en media, de 40 meses y 76,2% presentaron estadio clínico avanzado (III o IV). Se resalta que rastrear el cáncer de mama en mujeres de alto riesgo posibilita detectar el tumor más precozmente, reducir la incidencia en el número de óbitos y mejorar los indicadores de salud.

DESCRIPTORIOS: Neoplasias de mama; Registros hospitalares; Enfermería.

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Corresponding author:

Marília Daniella Machado Araújo Cavalcante
Universidade Federal do Paraná
Av. Prof. Moacir Júlio Silvestri, 644 – 85010-090 Guarapuava-PR-Brasil
E-mail: profmarilia@live.com

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INTRODUCTION

With the changes in the socio-demographic profile of the world and Brazilian population, which consequently altered the epidemiological profile, significant changes were observed in the morbidity and mortality of diseases and health issues, among which the Communicable Infectious Diseases (the main cause of death until the mid-twentieth century) were reduced, and the Chronic Non-Communicable Diseases increased significantly from the 1960s onward. It is possible to recognize factors which contributed to the occurrence of this epidemiological transition, such as the reduction in the birthrate, the change in eating habits, the increase in life expectancy, and the role of these in the frequency of the chronic-degenerative diseases (diabetes, cardiovascular diseases, cancer and respiratory diseases)⁽¹⁾.

The Chronic Non-Communicable Diseases increased in importance in the world health setting, as they cause loss of quality of life and limitations on daily activities, as well as being the cause of a high mortality rate. In Brazil, this group of illnesses concentrates 72% of the total of deaths, according to 2009 data from the Mortality Information System; this percentage represents more than 742,000 deaths per year. Those which kill the most are the cardiovascular diseases (31.3%), cancer (16.2%), the chronic respiratory diseases (5.8%) and diabetes mellitus (5.2%). This impact could be reversed through the use of structural measures, social inclusion and recognition of vulnerabilities, as well as health promotion, in addition to universalized healthcare⁽²⁾.

The malignant neoplasias have received greater attention in worldwide epidemiology, as they have a higher rate of incidence, prevalence and mortality, as well as a high social cost⁽³⁾. In addition to this, the malignant tumor has an impact on the entire family, principally if the person who becomes ill is the main or only source of family income. Studies undertaken in partnership with the Pan-American Health Organization and the Brazilian Ministry of Health present a worldwide estimate for the year of 2030 of 27 million new cases, 17 million deaths and 75 million people living with cancer⁽⁴⁾.

In Brazil, according to the Brazilian National Cancer Institute, a body of the Ministry of Health

which is responsible for coordinating the National Policy for Cancer Care, the incidence estimated for the year of 2013 was of 518,510 new cases of cancer. Among men, 257,870 new cases were anticipated, with non-melanoma skin cancers, prostate cancer, lung cancer and cancers of the colon, rectum and stomach having the highest incidence in this group. Among women, on the other hand, the estimate is of 260,640 new cases, mainly of non-melanoma skin cancers, breast cancer, cervical cancer, and cancers of the colon, rectum and thyroid gland⁽⁴⁾.

Worldwide, breast cancer is that which affects women second-most. Among the risk factors are: age (the incidence of cases increases up to 50 years of age and reduces after that age); a family history of breast cancer; early menarche; late menopause; hormone replacement therapy; nulliparity; age at first full-term pregnancy of over 30 years old; use of oral contraceptives and exposure to ionizing radiation, even in small quantities (principally during puberty). Measures such as undertaking physical activity, healthy eating and breast-feeding promote a lower risk of the development of malignant breast neoplasias⁽⁴⁾.

Malignant breast tumors are the second-most frequent type in women, with an estimated 53,000 new cases in 2013, only falling behind non-melanoma skin tumors, which had an incidence of 71,000 in this population group. In the State of Paraná, there was a calculation of 3110 new cases of breast cancer for 2013 (gross rate of incidence of 55.83 per 100,000 women); of these cases, 730 alone were in the state capital, Curitiba, with a gross rate of 75.74 new cases per 100,000 female inhabitants⁽⁴⁾.

Faced with these perspectives, the interest in understanding the social determination of the deaths from breast cancer in young women (below 40 years old) is justified, given that it is the type of cancer which affects women worldwide second-most. As a result, the present study has the following guiding question: What is the objective context of the deaths of the women aged below 40 years old, who had been diagnosed with breast cancer, in the institution where the study took place? It is believed that this knowledge will contribute to health promotion actions and to actions for preventing the health problem investigated.

This study has of the general objective of

investigating the epidemiological profile of the deaths which occurred among women aged below forty years old, who had been diagnosed with breast cancer in the Teaching Hospital of the Federal University of Paraná, Brazil. Its specific objective was: to describe the specific and unique dimensions of the cases investigated, through the structure proposed by Theory of Practical Intervention in Collective Health (TIPESC, in Portuguese)⁽⁶⁾.

METHOD

This is a descriptive documental study, undertaken in the Hospital Epidemiology Service of the Teaching Hospital of the Federal University of Paraná. Data collection was undertaken in the period 6th – 29th May 2013, using the database of the Hospital Cancer Records, with information recorded between January 2003 and December 2011, as well as through consultation of medical records and information from the Hospital Information System.

The inclusion criteria were as follows: notifications of cases of breast cancer in women aged below 40 years old, whose first consultation occurred between January 2003 and December 2011. Among the cases selected, an intentional sample was made, in which the medical records of the service users who died were checked separately.

The qualitative analysis of the data originated from the Methodological Bases for Nursing Assistance in Collective Health based in Historic and Dialectical Materialism⁽⁶⁾. In this study, the specific and unique dimensions were categorized. As an analytical framework for the specific dimension, emphasis was placed on the educational level and occupation of the patients aged below 40 years, diagnosed with breast cancer, and who died.

In the unique dimension, the following were highlighted: the patients' age, where they were from, their survival time, clinical stage, the histological type of the tumors, the treatment received, the state of the disease following the first treatment, the laterality of the tumor, the history of death from cancer in the family, and whether guidance was recorded in the patient's medical notes, such that her female family members

should undertake early breast-cancer screening.

This study is part of the project titled "Health promotion and prevention of health problems in the ambit of hospital epidemiology in the perspective of community health", and was approved by the Ethics Committee under n. 0076.0.0091.000.10.

RESULTS

A total of 638 notifications of breast cancer, made between January 2003 and December 2011 were found, of which 68(10.6%) were women aged below 40 years old; of these, 21(30.9%) died. In the specific dimension, in relation to the educational level of the 21 women, it was ascertained that 14.3% had finished junior high school, 14.3% had finished senior high and 4.8% had attended higher education. It stands out that 33.3% of the medical records did not present this information. It was observed that 52.4% (11 patients) stated that they had an occupation and that 47.6%(10 patients) stated that they did not work outside the home.

In relation to the unique dimension, in the group of 21 women who died, the age range varied from 22 to 39 years old, with 85.7% in the age range from 30 to 39 years old. It was observed, in this study, that women from the municipality of Curitiba predominated (52.4%). Survival (taking into account the time from diagnosis to the date of death) was, on average, 40 months.

Of the 68 notifications included in the study, 7.3% were at stage I; 26.4% at stage II; 33.8% at stage III; 13.2% at stage IV; and 10 medical records lacked this information. In analyzing only the 21 deaths, it was observed that 80.9% of the women were diagnosed at stages III and IV and that 14.3% were at stage II. The most frequent histological type was duct cell carcinoma (61.9%).

In relation to the treatment undertaken, 85.4% (18 cases) of the women underwent chemotherapy. Only in two cases (9.5%) was therapy with tamoxifen (hormone therapy) undertaken, as well as another three types of treatment: surgery, radiotherapy and chemotherapy. The majority of those who received chemotherapy also received local treatment (surgery and radiotherapy), and only three cases (14.2%) received systemic

treatment (hormone therapy).

In relation to the stage of the disease, at the end of the first antineoplastic treatment proposed, 28.6% (six cases) were in complete remission, that is, with no evidence of the disease. Regarding the laterality of the breast affected, a frequency was ascertained of 52.4% for the left breast (11 patients) and 38.1% (eight patients) for the right breast; there was only one case of bilateral tumors.

In this study, 66.6% (14 cases) of the women had a positive family history for some type of cancer; of these, six had a history of breast cancer in first degree relatives. Guidance regarding the importance of the patient's first degree relatives (daughters, sisters) initiating early screening for breast cancer was found in only one medical record among the 21 analyzed. One of the limitations for this observation is the fact that information on guidance was checked only in the medical record; it may have been given verbally but not recorded in writing in the records.

DISCUSSION

The study evidenced that, in a group of 68 women, included in the study's inclusion criteria, and who represented 10.6% of the total of 638 cases notified, 30.9% died. A study undertaken in Ribeirão Preto showed that 6.5% of the cases of breast cancer occurred in women below 40 years of age, as opposed to 0.6% in women below 30 years of age⁽⁶⁾.

According to the TIPESC conception, it is considered that educational level and income are determinants for access to any health service. Some studies have demonstrated that illiterate women have 7.40 times more chance of dying from breast cancer when compared with those with higher education; while for those who completed junior high school, the risk is 3.76 times greater⁽⁷⁾. The lack of information and the high percentage of diagnoses made at late phases is a harbinger of high mortality, determined by the low socio-economic condition. The less-favored social classes are more vulnerable, as they have a late diagnosis of the disease and less access to prevention programs⁽⁸⁾.

The survival rate, when related to educational level, shows that the women with higher education have a survival rate, at five years, of

92.2%. As educational level reduces, so does survival, at five years: for women educated to senior high school level, the proportion falls to 84%; for those educated up to junior high school level, it remains at 73.6%, and for illiterate women it is 56%⁽⁹⁾. Age is also a factor for patients' survival. Young women, (less than 35 years old) or those diagnosed after the age of 75 years old have a higher risk of death, possibly because in these age ranges, the cancer presents in a more aggressive form with a worse prognosis; the best survival is found in the age range of 40 to 49 years old⁽⁸⁾. Some studies present a mortality rate in patients below 40 years old of 46.9%, while in patients aged between 50 and 59, this proportion is 26.9%. Although cases of breast cancer are not very frequent in women aged below 40 years old, these must be given special attention given that the mortality rate is high⁽¹⁰⁾.

Since 2008, Brazilian statistics have indicated that approximately 70% of diagnoses of breast cancer were made at advanced tumoral stages (III and IV)^(8,11). With the disease being more advanced, it is necessary to undertake more radical treatments, which increase morbidity and cause a worsening of the quality of life⁽⁷⁾. According to the literature in the area, the classification of the histological type is based in the cellular characteristics and the growth pattern, without taking into account the neoplasia's place of origin. The majority of mammary carcinomas are of the ductal type, followed by the lobular type. These two types, together, constitute more than 70% of the carcinomas. The unfavorable prognosis is found in the invasive ductal carcinoma and lobular carcinoma of non-classical types (variants). The carcinomas with a poor prognosis are the metaplastic and the invasive micropapillary types⁽¹¹⁾.

In its initial phase, the cancer can be controlled and even cured through surgical treatment. Normally, the treatments proposed associate two or more therapeutic approaches: radiotherapy, chemotherapy, hormone therapy (tamoxifen) for patients with positive hormonal receptors, and surgery⁽¹²⁾. The choice depends on the stage of the disease and individual characteristics (clinical and psychological) so as to obtain the best quality of life for the patient following the treatment, higher rates of cure, and lower toxicity. The treatments associated may be described in terms of the surgical period as neoadjuvant therapy, if undertaken prior to the surgery, or adjuvant if

undertaken after the surgery⁽¹²⁾.

It is not easy to determine what the first treatment is and when it is concluded, given that complications occur in many cases. As a general rule, it is considered that the first treatment is that which was proposed at the time of diagnosis; should this information not be available, the set of antineoplastic therapies applied is taken into account. However, if the patient should not have initiated treatment up to eight months after the diagnosis, the treatment is considered as not having been undertaken, even if it is done later⁽¹³⁾.

The term "complete remission from the disease" is used for those cases in which, after the first treatment for the cancer, the patient no longer present signs of the disease (which does not mean cure). "Partial remission" refers to those cases in which although there was a response to the treatment, the patient continues with the tumor. The option of "disease stable" is applied when the patient receives treatment and the disease neither progressed nor regressed, that is, remained stable⁽¹³⁾. When the individual's response to the treatment is not satisfactory and the tumor continues to grow, it is said to be in "progression". Therapeutic oncological support is provided for persons with tumors who, after treatment, continue with the disease in activity, and for whom there are no therapeutic resources indicated for treating the tumor, the patient receiving only support treatment⁽¹³⁾.

Although there are various aspects related to the risk of developing breast cancer, the family history is one of the most important. Women with first degree relatives with breast cancer have an increased risk^(8,14); this is two times greater in cases of a family history of breast cancer prior to 40 years of age in first degree relatives⁽⁸⁾. This being the case, it is possible to indicate to the multi-professional breast cancer care team the importance of promoting actions with the patients and also with their family members, providing advice on the importance of the patient's first degree relatives (daughters, sisters) initiating early screening for breast cancer.

FINAL CONSIDERATIONS

In spite of breast cancer not being very frequent in women below 40 years of age, when

it occurs, special care must be given, given that epidemiological data demonstrate that the diagnosis occurs at advanced stages, and that there is a high rate of mortality, the worse prognosis being in the group of women aged 35 years old or younger.

It is necessary for health professionals to recognize the importance of early screening for breast cancer in women who are at high risk, so as to initiate the treatment as soon as the diagnosis is established, thus making possible a significant improvement in the prognosis, and a reduction in the number of deaths and the later impact on the health indicators. In addition to advising and monitoring the patient and family members with individualized actions, considering their personal and social characteristics, it falls to the nurse to provide guidance regarding the early detection of breast cancer, especially for the group of women who are at high risk of developing this type of cancer.

It is hoped that the present study will contribute to studies which, in addition to analyzing the epidemiological profile of the mortality of women with a diagnosis of breast cancer aged below 40 years old, will provide opportunities for capturing the objective context of this phenomenon, with the later elaboration of proposals for confrontation and intervention, identifying vulnerabilities and promoting reflection regarding the organization of Brazilian public policies for confronting NCD.

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