



RISK FACTORS FOR BREAST CANCER: KNOWLEDGE BY A GROUP OF OBESE WOMEN

FATORES DE RISCO PARA O CÂNCER DE MAMA: CONHECIMENTO POR UM GRUPO DE MULHERES OBESAS

FACTORES DE RIESGO PARA EL CÁNCER DE MAMÁ: CONOCIENDO POR UN GRUPO DE MUJERES OBESAS

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ABSTRACT

Objective: to describe the knowledge by a group of women in relation to obesity as a risk factor for a breast cancer. **Method:** descriptive cross-sectional study, with 40 obese women. Data were collected through home visits, with a questionnaire between October and November of 2013. The analysis of the data was by simple frequency and percentage. The data was discussed with the literature. **Results:** 55% of the women were not aware of any risk factor related to breast cancer and none of them identify own obesity as a risk factor. About breast auto exams, only one was unaware of this technique and 67.5% periodically performed. The mammography were made annually by 57.5% of women. **Conclusion:** most of the women didn't know or Had restricted knowledge about the risk factors, and mainly did not identify them own obesity as a risk factor for breast cancer. **Descriptors:** Breast Cancer; Factors of Risk; Obesity; Attitudes and Practice of Healthcare.

RESUMO

Objetivo: descrever o conhecimento por um grupo de mulheres em relação à obesidade como fator de risco para o câncer de mama. **Método:** estudo descritivo, transversal, com 40 mulheres obesas. Os dados foram coletados por visitas domiciliares, com um questionário, entre outubro a novembro de 2013. A análise dos dados foi por frequência simples e porcentagem. Os dados foram discutidos com a literatura. **Resultados:** 55% das mulheres não conheciam nenhum fator de risco relacionado ao câncer de mama e nenhuma identificou a própria obesidade como fator de risco. Sobre o autoexame das mamas, apenas uma mulher desconhecia esta técnica e 67,5% a realizavam periodicamente. A mamografia era realizada anualmente por 57,5% das mulheres. **Conclusão:** grande parte das mulheres desconhecia ou tinha conhecimento restrito acerca dos fatores de risco, e principalmente, não identificou a própria obesidade como fator de risco para o câncer de mama. **Descritores:** Neoplasias da Mama; Fatores de Risco; Obesidade; Atitudes e Prática em Saúde.

RESUMEN

Objetivo: describir el conocimiento por un grupo de mujeres en relación a la obesidad como un factor de riesgo para el cáncer de mamá. **Método:** estudio descriptivo, transversal con 40 mujeres obesas. Los datos fueron colectados por visitas domiciliarias, con un cuestionario entre octubre y noviembre de 2013. Los análisis de los datos fueron por frecuencia simple y porcentaje. Los datos fueron discursos con la literatura. **Resultados:** 55% de las mujeres no conocían ningún factor de riesgo relacionado con el cáncer de mamá y ninguna identificó la propia obesidad como un factor de riesgo. Sobre el examen de las mamas, apenas una mujer desconocía esta técnica y 67,5% las hacían periódicamente. La monografía era hecha anual por 57,5% de las mujeres. **Conclusión:** Una gran parte de las mujeres desconocía o tenían el conocimiento restringido acerca de los factores de riesgo, e principalmente no ha identificado la propia obesidad como un factor de riesgo para el cáncer de mamá. **Descriptores:** Cáncer de Mama; Los Factores de Riesgo; La Obesidad; Las Actitudes y las Prácticas de Salud.

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INTRODUCTION

The breast cancer is the second most common type in the world and the principal cause of death on women. Probably the most feared by them, due to high frequency and, specially, for the psychological effects, affecting the sexuality and personal image.¹

The mammary neoplasia when early diagnosed and treated represent a good prognostic, however, even after a good prognostic, the rates of mortality for breast cancer in Brazil still up, due to a later diagnostic.¹ It is estimated that in Brazil on 2014, there was 57.120 new cases and survival of 57%, inferior of developed countries with percentage of 73%.²

Food habits and the development of the mammary neoplasia, frequently had been investigated. High simple carbohydrates diet, industrialized foods, cholesterol, saturated fats and trans, associated with ingestion of low fiber contents, poor in antioxidant and rich in red meat, revealing to important risk factors to develop the disease.^{3,4} Thus overweight and obesity has an important influence for increase the probability to develop the disease on post menopause.^{5,6}

The gain of weight along the life and abdominal obesity, mainly in adulthood, are strongly related to higher risk to neoplasia, especially after menopause. In opposition, eating good food, associated with proper weight could prevent 28% of cancer in Brazil.³ Obesity and overweight also can generate hyperinsulinemia and raise the levels of growth factor similar to free insulin, being responsible for the stimulus of cellular proliferation.^{6,7}

Still in relation with the gain of weight, the cancer hospital III, INCA unit specialized in breast cancer, published the prevalence of 36% of obesity in women in treatment of chemotherapy, data found over the general population, showing the association between obesity and breast cancer.⁸

In Brazil, the prevalence of weight excess and obesity in women showed tendency of growth in the period of 2006 to 2011. According to data from the surveillance program of Risk and Factors and Protection for Chronic Diseases Through Telephone Interviews (Vigitel), from Ministry of Health, the percentages of women with excess of weight and obesity were in 2011 of 44.7% and 16% respectively, against 38.5% and 11.4% in 2006.⁹

The hormonal alterations in the period post menopause are responsible too for the

increase of the risk to develop the disease. In this period, there is a higher conversion of androstenedione in estrone (estrogenic hormones) in adipose tissue and higher concentration of free estrogen, as well as low levels of sex hormones binding globulin. These hormonal alterations are responsible to the increase of the estrone in tissues levels, like that, elevating the risk to develop mammary neoplasia.³

Considering the impact that the breast cancer can cause on a women's life, since the breast is a tangible symbol of femininity, maternity and sensuality and interfere on the auto image of the woman, It is necessary to the development of strategies to minimize the physical and psychosocial effects, as well as improve the quality of life of both the woman how much of your social group.

Some early detection strategies used in this days are the auto exams and clinical for breast. The breast auto exams are not indicated like an early isolated method of detection, however we recommend that this type of exam be part of health and education that includes the knowledge of the own body. Like this, if any important alterations is detected by the woman, she will have to looking for a professional of health, for a more precise evaluation, could detect the alterations earlier.⁸

The breast cancer auto exams do not replaces the clinical exam (CEM) held by health professionals, doctor or nurse qualified for this activity, but assist on early detection. The CEM is a proceeding accomplished to evaluated signs and symptoms reported by patients in order to perform differentials diagnosis between presupposed alterations of cancer and conditions.⁹

This early detection strategies are justified and should be carried out as pointed out by the control manual for cancers of the cervix and breast that in studies demonstrate that detection of suspected cases by the basic attention is 10%, sometimes greater than the proportion of detected cases by the way of mammography.¹

Mammography is a more common method of image indicated in tracking situations, diagnostic alteration or breast lesion. Should it be done in women with signs or symptoms of breast cancer, such as nodule, thickening and nipple discharge. The breast pain, although very frequent complaint, is not mammography indication, because the symptom "pain", besides not represent breast cancer, do not have correspondent expression in images.⁹

OBJECTIVES

- To describe the knowledge by a group of women in relation to obesity as a risk factor for breast cancer.
- To identify the knowledge and practice of self-breast examination and mammography.
- To identify the presence of others risk factors for breast cancer.

METHOD

Descriptive cross-sectional study. Data collection took place in the months from october at november 2013 and the participants in the study were women aged between 17 to 59 years who participated in the Program in the Measure.

The program is a multidisciplinary project in the measure of attention to Women's Health, implemented by Multidisciplinary Residency in Women's Health at the State University of Londrina/UEL. The program consists of theoretical and practical multiprofessional interventions to reduce obesity. With the participation of the professionals of physical education, nursing, pharmacy, nutrition and psychology. The disclosure of the program was accomplished through posters, local radio and campaigns for the recruitment of women.

The actions were carried out in two Basic Health Units (BHU), two municipalities in the North of Paraná. The participants of this research belonged only to the area of a BHU. The activities were carried out in groups and individuals, with meetings at least once a week for four months. To participate in the program was necessary to be female, user of BHU, have overweight or obese, have medical condition of locomotion and communication with the professionals, and agree to participate in the program before signing of the informed consent (IC).

Adopted as criteria for inclusion in the study: to be registered in the Program in the Measure and present body mass index (BMI) $\geq 30 \text{ kg/m}^2$ before starting the activities of the program.

There were 114 women registered in the Program to the Extent, of these, 63 had BMI $\geq 30 \text{ kg/m}^2$, therefore included in the study. All the women have been invited through telephone contact and visits, however, 23 women were excluded from the study, four by change of address; 6 lacks of address registry and phone records, not 13 attended the prior telephone contact and were not found at home after three attempts at different dates.

Thus, the study population was composed of 40 women.

As data collection instrument was used a questionnaire, which included information on socio-demographic variables, the presence of a family history of breast cancer, knowledge about the risk factors and prevention of this neoplasia. The interviews were conducted through home visits.

The description of the variables was carried out by means of simple frequency and percentage. The data were presented through tables and descriptive measures. The study follows the regulatory norms for research on human beings, according to Resolution 466/2012.¹⁰ It is that it belongs to the research project entitled "Interdisciplinary Intervention in women with cardiovascular and metabolic diseases treated at the primary health care" approved by the Research Ethics Committee of the State University of Londrina/UEL under Opinion nº 127/2013.

RESULTS

It was initially outlined the socio-demographic profile using the following variables: age, skin color, education, labor activity, marital status.

The average age in the studied population was 43 years, with the minimum of 17 and maximum of 59 years, featuring a population formed by young women.

With regard to skin colour, almost all of the women called themselves white with a total number of 23 (57.5%), followed by 15 (37.5%) and 1 (2.5%) brown black and yellow respectively.

The women surveyed had presented low schooling, whereas 19 (47.5%) had primary education incomplete, i.e., had less than nine years of study, 8 (20%) had complete elementary school; 3 (7.5%) had secondary education incomplete and 10 (25%) with secondary education complete.

With respect to the work, 27 of the study participants (67.5%) reported being from home, 7 (17.5%) work informally and 6 (15%) work formally (with record in professional portfolio). This group of women, 28 (70%) are married, 3 (7.5%) are in consensual unions, 4 (10%) reported being divorced, 2 (5%) are widows and 3 (7.5%) are single.

Among the personal risk factors for breast cancer, through family history and personal history, in this study 4 (10%) women reported breast cancer in the family, and in two cases the familiar was the mother. When asked about the presence of lump in breasts, 2 (5%)

reported the presence of lump, while 38 (95%)

reported absence of nodule.

Table 1. Risk factors for breast cancer, gynecological and obstetric history related by a group of obese women in a town north of the Paraná, 2013 (n=40).

Gynaecological and Obstetric Variables	n	%
Parity		
Nulliparous	05	12,5
Multiparous	35	87,5
Menarche		
Less than 12 years	14	35,0
12-14 years	21	52,5
15 or more	05	12,5
Menopause		
Yes	15	37,5
No	25	62,5
>55 years	00	00
Use of birth control		
Yes	08	20,0
No	32	80,0
Hormone Replacement Therapy		
Yes	03	7,5
No	37	92,5

The number of pregnancies, 5 (12.5%) never gestured, while 35 (87.5%) had one or more pregnancies.

In the case of hormonal aspects, in the studied population early menarche occurred in 14 (35%); a significant number considering the population studied; 25 (62.5%) are still menstruating, 15 (37.5%) are menopausal,

however, these no had their reproductive cycle stopped after 55 years.

The data showed that only 8 (20%) women still make use of oral contraceptive and 3 (7.5%) do or have ever done hormone replacement.

Table 2. Risk factors for breast cancer related to lifestyle for a group of obese women in a town north of the Paraná, 2013 (n = 40).

Lifestyle	n	%
Smoker		
Yes	01	2,5
No	39	97,5
Alcoholic		
Yes	00	00
No	40	100
Physical Activity		
Yes	12	30,0
No	28	70,0

When questioned about the knowledge of the risk factors for breast cancer, 22 (55%) reported not knowing any factor, 1 (2.5%) did not reply to the questioning and 17 (42.5%) answered some of the risk factors. The most mentioned were smoking, alcoholism, inadequate nutrition, heredity, physical inactivity, obesity, breast trauma, stress and not performing preventive measures.

It should be noted that no woman participant in the study identified his obesity

as a risk factor for the development of breast cancer.

Considering the variable smoking, only one woman mentioned have the addiction and all reported do not make regular intake of alcohol. In relation to women who claimed to practice physical activity, reported activity as walking at least three times a week.

Table 3. Knowledge and practice of tracking stock for breast cancer by a group of obese women in a town north of the Paraná, 2013 (n = 40).

Information about the knowledge	n	%
Knowledge about SEX		
Yes	39	97,5
No	1,0	2,5
Practice of SEX		
Yes	27	67,5
No	13	32,5
Performs a Mammogram		
Total (40)	23	57,5
≥50 years	11	27,5
40<49 years	17	42,5
<40 years	12	30,0

Most of the women reported knowing the self-examination of the breasts (SEX) and only one woman has no knowledge about the exam. However, when asked about the practice of AEM, 27 (67.5%) said regular and the remainder (32.5%) not performed.

When asked why the women perform self-examination, they reported it was due to health care, awareness of prevention and the importance of early diagnosis, also reported doing just because they were targeted by health professionals.

The question women who do not, the reports denounced the fear of the diagnosis, the rush of everyday life, the lack of habit, the difficulty in differentiating what is normal for possible amendments and the replacement for mammography.

With regard to mammography, 23 (57.5%) of women were annually the examination, while 17 (42.5%) women were not. It is worth noting that the participants of the study, only 11 (27.5%) are within the recommended age for mammography, while for the rest it's recommended only the clinical examination of the breast.

DISCUSSION

Referring to the demographic data, research shows that having this average age, found in this study, it was 43 years, contributes to the genesis of breast cancer, reporting that in Brazil between 1996 and 2000, in the States of São Paulo and Goiânia, Manaus, 60 to 70% of new cases occurred between the ages of 40 and 69 years of age.⁹

The women surveyed had presented low schooling, which is often associated with low socioeconomic status can influence access to health services, the adoption of measures and practices of early tracking, knowledge of their own body and self-care, and in turn risk factor for the health-disease process.^{5,11,12} The higher the level of education, greater knowledge about prevention methods for breast cancer due to the field of reading and

better opportunities to access health services.¹³⁻⁴

With respect to knowledge about the risk factors for breast cancer, the majority (55%) of the women didn't know inform no factor. It should be noted that all the women participating in the study were obese, being the common variable between them, and none had the knowledge that present this risk factor for the development of breast cancer.

For the study was considered as BMI 30.0 kg/m², characterized as having obesity then moderate risk for comorbidities.¹⁵ From 30.0 kg/m² the degree of obesity increases until the level III, increasing so the risk for comorbidities.¹⁶ Average found in the study population was 35kg/m², and therefore classified in class II obesity. The World Health Organization/WHO considers this obesity as high risk for development of other morbidities 16, such as hypertension, diabetes mellitus, dyslipidemia, osteoarticular, gastrointestinal diseases and to the development of cancer.¹⁷

On the overweight woman promotes the increased level of circulating estrogen, because adipose tissue is the main place of production of estrogen in postmenopausal women and promotes an increase in insulin and insulin-like growth factor circulating. Such substances, associated with other Pro elements, such as the inflammatory tumor necrosis factor, interleukin and C reactive protein, induce cell cycle advance and inhibition of apoptosis, raising the risk of cancer development.¹⁸

Although only 10% of the women interviewed present relatives of the first degree with the disease, this number should not be disregarded and triggers concern new studies on the subject.

The family history is an important risk factor for breast cancer, especially if the mother and/or sister were involved premenopausal. The relationship rises at twice the risk of developing cancer.⁹ The report of family history of breast cancer is of

fundamental importance to determine prevention interventions, early tracking measures to the patient and his family. From the data found in this population, infers that the family history in this group does not constitute important risk factor.

In addition to the family history, other factors also are considered at risk for developing breast cancer as age, early menarche, and late menopause, and null parity, occurrence of first pregnancy after 30 years, sedentary lifestyle, obesity, education, smoking and alcoholism.¹

In the case of hormonal and reproductive aspects, more relevant to the etiology of breast cancer, in the studied population the null parity occurred in only 5 (12.5%) women, inferring that the null parity not record prevalent risk factor for this population.

Early menarche occurred in 14 (35%) women. A significant number considering the population studied, 25 (62.5%) are still menstruating, 15 (37.5%) are menopausal, however, these no had their reproductive cycle stopped after 55 years.

Early menarche, below the age of 12 years and late menopause, after 50 years have in common the prolonged exposure to the hormone estrogen as a risk for breast cancer.⁹

Only 8 (20%) women still make use of oral contraceptive and 3 (7.5%) do or did hormone replacement. Estrogen has an important role in breast cancer, since it induces the growth of breast tissue cells, increasing the potential for genetic changes and, consequently, the development of cancer.¹⁹

Considering the risk factors related to lifestyle of women participants only one mentioned being smoker, all reported do not ingest alcohol and 70% don't engage in physical activity regularly.

The unhealthy living habits as a sedentary lifestyle, smoking and alcoholism can also relate to the development of breast cancer.²⁰ The intake of alcohol presents itself as a strong risk factor for the development of breast cancer in both premenopausal and postmenopausal.²¹

Some factors involved in the development of breast cancer have been cited by women, such as smoking, alcoholism, inadequate nutrition, heredity, physical inactivity, obesity, breast trauma, stress and not performing preventive measures, however, most participants did not know inform no factor, i.e., were not aware that they had as a risk factor obesity and sedentariness, demonstrating also have little knowledge about the risk factors.

Despite so much information about the breast cancer published in the media, mostly information about early detection and tracking methods, signs and symptoms, but is still failure to disclosure of factors involved in the genesis of the disease, factors that contribute to the development of this neoplasia. Studies show that the risk factors are poorly known for little women and also addressed in educational activities by the population.¹³

Despite the existence of modifiable risk factors, prevention should be carried out in order to fight the modifiable elements such as life habits. As for the knowledge of participants about tracking measures for breast cancer, most reported meet breast self-examination (SEX), however, only 27 (67.5%) conduct periodically examination.

The goal of breast self-examination elementary is to make the woman know in detail their tits²¹, however, this technique should be deepened so that the woman has the knowledge of the various clinical signs of normal possible pathological changes.²²

As already mentioned, if not encourages self-examination of the breasts as the only measure of prevention or early detection, but recommends another instrument that provides self-body and be added other measures early tracking, resulting in higher rates of cure.

It should be remembered that all women from 40 years must be submitted annually to the clinical examination of the breast (CEB) and women aged between 50 and 69 years mammography with maximum interval of two years between exams. Case report a high risk for breast cancer, the implementation of CEB and mammography should be anticipated for 35 years with annual periodicity,²³ however, in that study was not conducted research on the periodicity of the clinical examination of the breast. However, we pointed out the fact of women using mammography, as isolated method for the early tracking of breast cancer.

Mammography is an x-ray of the breast that enables the early detection of cancer, by the fact of capturing images of initial lesions, very small (mm). The unit used is called mammographer; the breast is compressed in order to achieve better images, and therefore better diagnostic effectiveness.¹

The discomfort provoked is bland and bearable, yet women struggling to join the method.¹ mammography is considered the main method of diagnosis of mammary neoplasia on initial stage, allowing the detection of palpable changes and promoting a more efficient and less aggressive therapy,²³

however, it was possible to identify women who practice early tracking measures, incorporated into your routine exactly that understood that this attitude can change their lives, making it possible to identify early-stage lesions resulting in increasing the chances of cure. And, above all, understood that they're not looking for nodules, or cancer, are just identifying the structures that are normal, physiological, that perchance one day come across something that wasn't there, they know the difference.

Developing countries are for more resources directed to the treatment of diseases and primary and secondary prevention of degenerative diseases and cancer. Some barriers to examination not are related to the health system, but also to knowledge and education, characterized by cultural determinants outside the health concept, personal characteristics of education, age and gender, social class and education. Factors such as education, culture, age, principles and beliefs interfere with the health/disease process of a population.²³

Studies on socioeconomic elements and practice of preventing breast cancer, show that women with higher educational level and income are the ones that adopt measures to trace and have more knowledge about breast self-examination.^{11,12} It is necessary, therefore, that health professionals are most active, in order to meet the community's population with whom you work and it is through home visits that this approach takes place, and after the contact is essential to think about strategies that reach all socio-cultural levels.

CONCLUSION

Most women are unaware or have restricted knowledge about the risk factors for breast cancer, and especially not identified obesity as a risk factor present in their lives. In relation to the self-exam, only one woman was unaware of this technique, although the practice of self-examination as preventive action be known and used, a considerable number of women do not, perhaps because they realise the importance of a simple gesture, or by fear to understand a change that needs to be investigated. Most women performs early detection through mammography.

As limitation of the study emphasized the low population number and the need to expand the investigative issues about the clinical examination of the breast. However corroborates with so many other studies that address this subject, revealing that despite

the disclosed information about breast cancer, your early tracking, the factors involved when high risk, many women still need to assign a meaning to these practices so that these will be incorporated into your routine. In this context, health education actions are the way to change this reality, however, the way we do that education should be reconsidered.

It is important that health professionals, bet in most dynamic pipes, not only in the delivery of informational material or media, but in active interventions such as women's groups, with debates on the subject, dynamics, workshops, training for which they feel empoderadas and are instruments of change in their midst. A strategy for a comprehensive care is the multidisciplinary work, which seeks to promote changes in health practices, and integration among them, in order to ensure assistance and reduce the harms of the population. So, who knows, this scenario is modified.

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