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RESEARCH

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KNOWLEDGE OF WOMEN SEEN IN PRIMARY CARE ABOUT THE EARLY DETECTION OF BREAST CANCER

Conhecimento de mulheres atendidas na atenção primária sobre a detecção precoce do câncer de mama
Conocimiento de las mujeres atendidas en atención primaria sobre la detección precoz del cáncer de mama

Lara Caline Santos Lira¹ 
Laura Xavier de Moraes² 
Juliana Raquel Silva Souza³ 
Francisco Stélio de Sousa⁴ 

ABSTRACT

Objectives: to investigate the knowledge of women assisted in Primary Care about early detection of breast cancer. **Method:** quantitative and cross-sectional study, conducted with 265 women in age for mammographic screening. The collection was performed face-to-face with a validated Breast Cancer Awareness Measure instrument. **Results:** it was found that there is, in general, knowledge about the clinical signs of breast cancer, however there is lack of knowledge about the recommended age for the examination, and there was no consensus about the hereditary factors for breast cancer. The difficulty in making appointments and the lack of transportation were pointed out as barriers that hinder the search for health professionals. **Conclusion:** it is essential to strengthen actions for early detection of breast cancer, with production and dissemination of knowledge and provision of subsidies to ensure rapid and easy access to screening and early diagnosis initiatives.

DESCRIPTORS: Nursing; Breast neoplasms; Primary health care

¹ State University of Paraíba, Paraíba, Campina Grande, Brazil.

² University of Pernambuco, Pernambuco, Recife, Brazil.

³ Federal University of Paraíba, Paraíba, João Pessoa, Brazil.

⁴ State University of Paraíba, Paraíba, Campina Grande, Brazil.

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Corresponding Author: Lara Caline Santos Lira lara.caline@gmail.com

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RESUMO

Objetivo: investigar o conhecimento de mulheres atendidas na Atenção Primária sobre a detecção precoce do câncer de mama. **Método:** estudo de abordagem quantitativa e transversal, realizado com 265 mulheres em idade de rastreamento mamográfico. A coleta foi realizada presencialmente com instrumento validado Breast Cancer Awareness Measure. **Resultados:** verificou-se que há, de um modo geral, conhecimento sobre os sinais clínicos para o câncer de mama, no entanto há desconhecimento sobre a idade preconizada para realização do exame, e não houve consenso sobre os fatores hereditários para o câncer de mama. A dificuldade de marcar a consulta e a falta de transporte foram apontadas como barreiras que dificultam a procura de profissionais de saúde. **Considerações finais:** torna-se fundamental fortalecer as ações para a detecção precoce do câncer de mama, com produção e disseminação do conhecimento e provimento de subsídios que garantam o acesso rápido e facilitado às iniciativas de rastreamento e diagnóstico precoce.

DESCRITORES: Enfermagem; Neoplasias da mama; Atenção primária à saúde.

RESUMEN

Objetivos: investigar el conocimiento de las mujeres atendidas en Atención Primaria sobre la detección precoz del cáncer de mama. **Método:** estudio con enfoque cuantitativo y transversal, realizado con 265 mujeres en edad de tamizaje mamográfico. La recolección se realizó de manera presencial con un instrumento validado Breast Cancer Awareness Measure. **Resultados:** se constató que existe, en general, conocimiento sobre los signos clínicos para el cáncer de mama, sin embargo, existe desconocimiento sobre la edad recomendada para la realización del examen, y no hubo consenso sobre los factores hereditarios para el cáncer de mama. La dificultad para hacer una cita y la falta de transporte fueron identificadas como barreras que dificultan la búsqueda de profesionales de la salud. **Conclusión:** es fundamental fortalecer las acciones para la detección temprana del cáncer de mama, con la producción y difusión de conocimiento y la provisión de subsidios que garanticen el acceso rápido y fácil a las iniciativas de tamizaje y diagnóstico temprano.

PALABRAS CLAVE: Enfermería; Neoplasias de la mama; Atención primaria de salud.

INTRODUCTION

Breast cancer is one of the most frequent neoplasms in women, and consequently the leading cause of death by cancer in this specific group. Its characteristics are the rapid and disordered proliferation of breast cells, which can spread to surrounding tissues or distant areas of the body, a process called metastasis. In Brazil, 66,280 new cases of this disease are expected by 2022, making it a public health problem.¹

The main risk factors for the development of breast cancer are related to advancing age, early menarche, genetic changes, family and personal history of cancer. Lifestyle and environmental influences should also be taken into consideration, such as excessive alcohol consumption, overweight or obesity (especially after menopause), no physical activity, breastfeeding, use of contraceptives or hormone replacement therapies.²⁻³

However, although it is important to know the predictors of breast neoplasms, avoiding the factors that can be modified can only reduce the risk of developing this type of cancer by 30% at most.² This makes its rapid and early detection essential for better prognoses, reducing morbidity and mortality rates. Thus, a strategy that is of great value in this regard is opportunistic screening, which aims to detect the presence of cancer before there are signs or symptoms of the disease. It is important that health professionals inform women about their screening options so that together they can choose the best method, in a process called informed and shared decision-making.⁴

In this scenario, the Primary Health Care (PHC) network stands out, seen as the gateway to the Unified Health System (SUS) and which has adequate means to attract the target audience thanks to its proximity to the community. To achieve these objectives, PHC makes use of some extremely important strategies, such as the promotion of actions aimed at health education for breast cancer, active search in the population at risk, request and referral for screening tests (such as mammography and clinical breast examination), monitoring of abnormal results and of users who fail.⁵

According to the latest National Guidelines for the Early Detection of Breast Cancer published by the Ministry of Health, health services should clarify and perform diagnostic tests for the target population. It is also possible to include educational actions in the awareness strategy, aiming to provide knowledge based on scientific literature about breast cancer, as well as to deconstruct myths about the disease.⁶

Given the above, and knowing that access to information is directly related to the prognosis of breast cancer and the empowerment of vulnerable populations, this study aimed to investigate the knowledge of women assisted in Primary Care about the early detection of breast cancer.

METHOD

This is a cross-sectional, descriptive study with a quantitative approach. The setting was Health Units (HU) belonging to PHC in the municipality of Campina Grande, located in

the hinterland of the State of Paraíba. Women who were present at the PHC units on the collection days and who met the following inclusion criteria participated in the research: being between 50 and 69 years old and residing in the city of Campina Grande. Participants with a clinical history of breast cancer and who lived in areas uncovered by the PHC units in the aforementioned municipality were excluded.

Among the 92 PHC units in the city (84 Basic Health Units, 6 Health Centers and 2 Polyclinics), 18 were selected to participate in the study (14 Basic Health Units, 3 Health Centers and 1 Polyclinic). The 7 Health Districts were used for the geographical delimitation in an attempt to guarantee that the final sample would represent the study population, as well as an equivalent distribution. The sampling technique used in this study was defined as non-probability sampling. For organization and greater heterogeneity of the participants, there was a proportional sharing: first the participating PHC units were drawn and then the distribution of the number of users, with approximation to the method applied in conglomerate sampling.

The sample size calculation was performed considering a confidence level of 95%, using the age pyramid of IBGE (2010) to generate the size of the target population in the municipality of Campina Grande, in the age group object of the study. Thus, the study sample was 265 women, who were distributed in the "conglomerates" from another draw (205 women attended in Basic Health Units, 45 in Health Centers and 15 in Polyclinics).

The data were collected between September and November 2020, using the Breast Cancer Awareness Measure - BCAM questionnaire that was translated, adapted, and validated,⁷ being composed of seven domains: knowledge of warning signs; self-confidence, skills, and behaviors regarding the detection of a change in the breast; expected delay in contacting the health professional; perceived barriers to screening; the knowledge of age-related risk; knowledge of the National Program for the Control of Breast Cancer of the SUS; and, finally, the knowledge of risk factors. In addition to the content

presented, the BCAM is composed of nine questions related to the personal and sociodemographic profile.

Thus, the potential participants were approached in the PHC units and invited to join the study after clarification about the research objectives and signing the Informed Consent Form (ICF). Data collection occurred by applying the questionnaires to the participants who were literate or had no difficulties in reading. Otherwise, a trained research member read the entire questionnaire and filled out the instrument for the participant.

Data were double tabulated, entered and described in the Statistical Package for the Social Sciences® (SPSS) 25.0. For analysis, absolute and relative frequencies were calculated, and a 5% significance level was adopted.

The study respected resolution 466/2012 of the National Health Council of the Ministry of Health and ethical approval of the Ethics Committee of the Paraíba State University, CAAE: 30350620.6.0000.5187 and opinion number: 4.368.313, on October 28, 2020. Confidentiality and anonymity were maintained for the research participants, being requested to sign the TCLE.

RESULTS

The mean age of the participants was 58.72 years, with a standard deviation of 6.51. The most representative portion of women was literate (38.5%), lived in their own house (78.9%) with husbands and/or children (29.1%), declared themselves to be brown (61.5%) and reported that the main source of family income was the salary or retirement (40.4%).

Regarding the knowledge of breast cancer signs, the data revealed that a lump or hardening of one of the breasts, secretion or bleeding from one of the nipples, lump or hardening in the axilla, and pain in one of the breasts or axillae are the signs most recognized by the sample, Table 1.

About the time the participants would take to seek professional help if they found any breast alteration, there was a significant predominance of the option "quickly", and a good

Table 1 – Knowledge of signs of breast cancer by the participants. Campina Grande, PB, Brazil, 2020

Variable	No		Yes		Total	
	N	%	n	%	n	%
Do you know any warning signs for breast cancer	22	8,3	243	91,7	265	100
Change in the position of one of the nipples	156	58,9	109	41,1	265	100
Sinking of one of the nipples	163	61,5	102	38,5	265	100
Pain in one of the breasts or armpits	57	21,5	208	78,5	265	100
Wrinkling or rippling of the breast skin	159	60,0	106	40,0	265	100
Secretion or bleeding from one of the nipples	53	20,0	212	80,0	265	100
A lump or hardening of one of the breasts	29	10,9	236	89,1	265	100
Irritation in one of the nipples	126	47,5	139	52,5	265	100
Redness on the skin of the breasts	109	41,1	156	58,9	265	100
A lump or hardening in the armpit	56	21,1	209	78,9	265	100
Changes in the size of the breast or nipple	95	35,8	170	64,2	265	100
Changes in the shape of the breast or nipple	149	56,2	116	43,8	265	100

part of the women who have already found any alert sign sought professional help (Table 2).

Among the reasons for giving up looking for a health professional, the most frequent was making an appointment. The second most frequently cited reason was "difficulty in finding transportation", presenting a percentage difference of 27.2% in relation to what was indicated as the most frequent reason.

A significant portion of the sample could not answer the correct age at which women are generally advised to have their first and last mammograms by SUS. In fact, the number of women who could not answer (ignored option) was higher when compared with the women who answered the correct age. On the other hand, most women reported having already received a request and having undergone mammography through SUS, according to Table 4. It is important to note that the age of 50 years was considered for the first SUS mammography, and 69 years for the last SUS mammography.

Table 5 points out that the risk factor for developing breast cancer most recognized by the women in the sample was heredity, represented by: "close relative with breast cancer", followed by history of breast cancer. "Having had the first menstruation very young" and "Having had a late menopause" represented factors with the highest discordance to be associated with the risk for developing this type of neoplasm

DISCUSSION

In general, the participants presented stable housing conditions and income sources, besides having some formal education. The social determinants of health show that living and working conditions are closely related to their health status, behavior and personal lifestyles. These factors can interfere

with access to diagnostic tests, including mammographic screening tests.⁸

With regard to knowledge about the signs and symptoms of breast cancer, a significant number of women report having some level of education on the subject. The presence of nodules or the sensation of pain in the breasts or armpits were frequently pointed out as indicative of cancer, probably because these factors are already widely explored in the literature, as well as in health education actions aimed at the female public.⁹⁻¹⁰

However, many of the physical changes caused by this type of cancer have not been signaled as a warning sign. The conditions related to nipples, such as changes in their shape, position, or sinking, should be highlighted. Another indication relatively ignored by the participants was the presence of wrinkling or changes in the breast skin, as well as changes in its shape. It is of great importance that women know their own bodies, aiming to identify the possible warning signs and thus seek a health service. This type of strategy is called awareness and is relevant for early diagnosis.¹¹

Self-examination and the consequent self-confidence to detect any changes in their own breasts are daily preventive activities that should be recommended, since occasional observation and palpation of the breasts and armpits are recommended. It is enough that women are encouraged to know what is natural in their bodies and pay attention to the warning signs.¹¹

The search for a professional in case of the identification of any warning signs and the time ability for this search reveal that the participants, in general, express care for their own health and are in a situation for a good prognosis, once the cancer is diagnosed early. Delays in the detection of breast cancer and the beginning of its treatment are important pre-

Table 2 – Description of the variables regarding self-palpation and identification of breast modifications. Campina Grande, PB, Brazil, 2020

Variable	n	%
Frequency you examine your breasts	Don't know/doesn't remember	6 2,3
	Rarely or never	70 26,4
	At least once every six months	33 12,4
	At least once a month	57 21,5
	At least once a week	99 37,4
Confidence to feel changes in the breasts	Don't know	11 4,1
	Not a bit	54 20,4
	A little confident	23 8,7
	Reasonably confident	80 30,2
Have you noticed any changes in your breasts	Very confident	97 36,6
	No	174 65,7
In case of the alteration found, sought a health professional	Yes	91 34,3
	Ignored/Don't know/No memory	175 66,0
	No	80 30,2
Time to seek professional help if you found any breast changes	No	10 3,8
	Don't Know	2 0,8
	I wouldn't look for	3 1,1
	It would take	10 3,8
	Quickly	250 94,3
Total	265	100

dictors for high rates of mortality and comorbidity, and it is extremely important that the diagnosis be made within 60 days after the detection of breast alterations.¹²⁻¹³

Even though there are public policies aimed at early detection of breast cancer, barriers are still encountered with regard to access to health services, a fact corroborated by the report of difficulty in making an appointment by a significant portion of the respondents. The establishments that offer PHC should be the gateway for these women, facilitating and speeding up possible diagnoses, but it is admitted that there are organizational problems that end up hindering access to the service and often discourage women from seeking qualified help.¹³

With regard to the age range for the first and last mammograms, most women could not answer correctly, showing that there is still a lot of misinformation about this aspect. This phenomenon is probably due to the divergence between the medical guidelines that still prevail in our country.¹⁴ According to the Brazilian Society of Mastology, the examination should be performed in women aged 40 to 75 years, and annually,¹⁵ while INCA and WHO recommend mammography screening for women aged 50 to 69 years, once every two years.¹⁶⁻¹⁷ It is noteworthy that the scientific evidence on the subject points

to recommendations against screening with mammography in asymptomatic women aged less than 50 years, as well as recommendations in favor of biennial periodicity.¹⁸

Even so, the opinions coming from local medical societies have greater diffusion among the population and health professionals, creating barriers in the implementation of guidelines for breast cancer detection.¹⁴ It is of great importance that there is standardization and consensus about which age group should be the target of campaigns, early detection actions, and opportunistic screening by all competent bodies. It is admitted that there are weaknesses that deserve to be discussed by public policy makers, managers, and health professionals so that the guidelines are correctly followed.¹⁹

It is interesting to observe that, in Brazil, the percentage of women aged 50 to 69 years who never had a mammography exam was 24.2%, and this proportion was even higher in the Northeast, at 33.7%,²⁰ somewhat converging with the reality evidenced in the present study. The access to health services tends to be better in centers with a larger urban area, demonstrating inequality regarding mammography. Furthermore, a possible overestimation of this data must be considered, justified by the biases belonging to types of surveys in which data collection depends basically on self-reporting and on the

Table 3 – Description of the barriers perceived in screening. Campina Grande, PB, Brazil, 2020

Reasons that would make you give up looking for a health professional	Don't know n (%)	Often n (%)	Sometimes n (%)	No n (%)	Total n (%)
Ashamed	4(1,5)	18(6,8)	18(6,8)	225(84,9)	265(100)
Fear	2(0,7)	28(10,6)	15(5,7)	220(83,0)	265(100)
Spending Money	3(1,1)	2(0,8)	10(3,8)	250(94,3)	265(100)
Talking to a health professional	4(1,5)	30(11,3)	33(12,5)	198(74,7)	265(100)
Make an appointment	4(1,5)	107(40,4)	62(23,4)	92(34,7)	265(100)
Very busy	2(0,8)	15(5,7)	20(7,5)	228(86,0)	265(100)
Other daily concerns	2(0,8)	16(6,0)	20(7,5)	227(85,7)	265(100)
Difficulty in arranging transportation	3(1,1)	35(13,2)	20(7,6)	207(78,1)	265(100)
Talking about my symptom	3(1,1)	7(2,6)	11(4,2)	244(92,1)	265(100)
Concern about what can be found	3(1,1)	23(8,7)	23(8,7)	216(81,5)	265(100)

Note: The category "don't know" was considered missing.

Table 4 – Mammography: knowledge, request, and execution. Campina Grande, PB, Brazil, 2020

Variável		n	%
Age at which women are advised to have their first mammogram by SUS	Were wrong	228	86,0
	Got it right	15	5,7
	Ignored	22	8,3
Age at which women are advised to have their last mammogram by SUS	Were wrong	211	79,6
	Got it right	1	0,4
	Ignored	53	20,0
Did you receive any request from your health care provider to have a mammogram	Don't know/Don't remember	1	0,4
	Yes	252	95,1
	No	12	4,5
Have you ever had mammography through SUS	Yes	232	87,5
	No	33	12,5
Total		265	100

memory of the respondent.²¹ It is important to stress that the success of breast cancer screening actions depends on several factors, including access to information and mobilizing the population, reaching the goal of coverage for the target population, and facilitating early diagnosis.²²

Regarding risk factors, it is admitted that genetic changes are significant and widespread, a fact that can justify the high percentage of women who considered family history as a predisposing factor for this type of malignancy, but hereditary breast cancer corresponds to only 5% to 10% of cases.²³ Risk factors that can be modified were also frequently mentioned, such as being overweight (66%) and drinking too much alcohol (65.3%), but the practice of physical activity was mistakenly seen as a predictor by 67.2% of the participants. Knowing these factors is extremely important, because avoiding them can help prevent cancer, and it is estimated that through healthy habits it is possible to reduce the risk of cancer by up to 28%.²³⁻²⁴

CONCLUSION

The findings of this study outlined a situational diagnosis about the knowledge of women assisted in Primary Care regarding breast cancer. It is concluded that there are weaknesses to identify which breast signs and changes are warning signs of this type of cancer, which can delay the diagnosis and reflect negatively on the therapeutic prognosis. Most of the risk and protection factors were also ignored by the participants of the study, which expresses the need for actions aimed at health education and empowerment of the target audience.

The search for professional help was a consensus among women if they find any abnormal findings in their breasts, but the difficulty in making an appointment seems to be one of the main barriers. Finally, screening mammography was strongly adopted by the participants, but many were unable to inform at what age this exam should be performed according to the guidelines of the national guidelines. The data presented here aim to provide information for managers and health professionals to create, implement and implement screening and health education strategies for breast cancer.

As limitations, we point out that the cross-sectional cut-off prevents us from inferring the casual relationships of the variables studied, and that time and memory vices must be taken into consideration. In addition, the interviews were conducted with women who were present in health units and who probably use to frequent these environments and thus receive more guidance on the subject in question.

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Table 5 – Description of the items related to breast cancer risk factors. Campina Grande, PB, Brazil, 2020

Risk Factors for Breast Cancer	Totally Disagree	Disagree	Don't know	I agree	Totally agree	Total
	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)
Have had breast cancer in the past	7(2,6)	9(3,4)	21(8,0)	92(34,7)	136(51,3)	265(100)
Uses hormones for menopause	7(2,6)	12(4,5)	81(30,6)	63(23,8)	102(38,5)	265(100)
Drink too much alcohol	9(3,4)	26(9,8)	57(21,5)	59(22,3)	114(43,0)	265(100)
Being overweight	6(2,3)	28(10,6)	56(21,1)	49(18,5)	126(47,5)	265(100)
Close relative with breast cancer	10(3,8)	14(5,3)	7(2,6)	52(19,6)	182(68,7)	265(100)
Having had children in old age or never having had a child	34(12,8)	51(19,3)	75(28,3)	58(21,9)	47(17,7)	265(100)
Having had your first period too young	35(13,2)	65(24,5)	110(41,5)	30(11,3)	25(9,5)	265(100)
Having had a late menopause	28(10,6)	72(27,2)	98(37,0)	42(15,8)	25(9,4)	265(100)
Practice moderate physical exercise less than 30 minutes, 5 days a week	21(7,9)	37(14,0)	29(10,9)	77(29,1)	101(38,1)	265(100)

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