

#### RESEARCH | PESQUISA



# Knowledge, attitude and practice of nurses in the detection of breast cancer

Conhecimento, atitude e prática de enfermeiros na detecção do câncer de mama Conocimiento, actitud y práctica de enfermeros en la detección del cáncer de mama

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### **A**BSTRACT

**Objective:** To analyze the knowledge, practices, and attitudes about the detection of breast cancer by professional nurses of primary health care in municipalities in the inland of the state of Ceará, Brazil. **Method:** A descriptive, cross-sectional and inferential study with a quantitative approach and use of the Knowledge, Attitude, and Practice Survey, conducted with 62 nurses. The collection took place with the application of a semi-structured questionnaire with 27 items. **Results:** With regard to the nurses' knowledge, 6.4% had an adequate knowledge, requiring improvement. Concerning the attitude, 85.4% had an adequate result, and regarding practice, 50% had a regular result. **Conclusion and implications for practice:** There is a need for permanent education on the detection and control of breast cancer, making the nursing clinical practice effective and resolutive. Implications for practice: the study has contributed to detect gaps in nursing knowledge, attitude and practice in the early detection and screening of breast cancer and the implementation of the health service for the success of public health policies.

Keywords: Breast neoplasms; Health promotion; Health Knowledge, Attitudes, Practice.

#### RESUMO

Objetivo: Analisar o conhecimento, as práticas e atitudes sobre a constatação de câncer de mama por profissionais enfermeiros da atenção primária à saúde de municípios do interior do estado do Ceará, Brasil. Método: Estudo descritivo, de corte transversal, inferencial com abordagem quantitativa e utilização do Inquérito Conhecimento, Atitude e Prática, realizado com 62 enfermeiros. A coleta ocorreu com a aplicação de um questionário com 27 itens. Resultados: No que se refere ao conhecimento dos enfermeiros, 6,4% tiveram conhecimento adequado necessitando do aprimoramento do mesmo. Concernente à atitude, 85,4% tiveram resultado adequado, e atinente à prática, 50% tiveram resultado regular. Conclusão e Implicações para a Prática: Há necessidade de educação permanente sobre a detecção e o controle do câncer de mama, tornando a prática clínica da enfermagem efetiva e resolutiva. O estudo contribuiu para detectar lacunas no conhecimento, atitude e prática da enfermagem na detecção precoce e rastreio do câncer de mama e na efetivação do serviço de saúde para o sucesso das políticas públicas de saúde.

Palavras-chave: Neoplasias da mama; Promoção da saúde; Conhecimentos, Atitudes e Prática em Saúde.

## RESUMEN

Objetivo: Analizar los conocimientos, las prácticas y las actitudes sobre la detección del cáncer de mama por parte de enfermeros profesionales de atención primaria de salud en municipios del interior del estado de Ceará, Brasil. Método: Estudio descriptivo, de corte transversal, e inferencial con abordaje cuantitativo y utilización de la Encuesta de Conocimiento, Actitud y Práctica (CAP), realizado con 62 enfermeros. La recolección de datos se hizo aplicando un cuestionario semiestructurado con 27 ítems. Resultados: En lo que se refiere al conocimiento de los enfermeros, el 6,4% tuvo un conocimiento adecuado con necesidad de perfeccionarlo. En cuanto a la actitud, el 85,4% obtuvo un resultado adecuado, y en la práctica, el 50% obtuvo un resultado regular. Conclusión e implicaciones para la práctica: Se requiere educación permanente sobre la detección y el control del cáncer de mama, para hacer que la práctica clínica de la enfermería sea efectiva y resolutiva. Implicaciones para la práctica: el estudio contribuyó a detectar lagunas en el conocimiento, la actitud y la práctica de la enfermería en la detección precoz y el seguimiento del cáncer de mama y en la efectividad del servicio de salud para el buen resultado de las políticas públicas de salud.

Palabras clave: Neoplasias mamarias; Promoción de la salud; Conocimientos, Actitudes y Práctica en Salud.

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# INTRODUCTION

Cancer is a public health problem affecting all populations in the world. In Brazil, there is an estimate for the 2018-2019 biennium of approximately 600,000 new cancer cases, excepting non-melanoma skin cancer. Among the various types, mammary neoplasia is the one with the highest incidence and lethality in the female public. Approximately 59.7 thousand new cases of women breast cancer are expected in 2019.

This disease is intensifying in society due to the sociodemographic transition process from infectious to chronic degenerative diseases, increased human development index, lifestyle changes, eating habits, health and medicine advances, among other factors that extend life expectancy but do not contribute to the reduction of aggressive stimuli for cancer development such as aging, exposure to carcinogens agents obesity, stress, and others.<sup>2</sup>

In this context, health professionals must, especially nurses, know this information so that they can act in the prevention of this disease and in health promotion with an integrated view at different levels of health care, meeting the individual in its entirety, focusing on the development of its actions in primary health care.<sup>3</sup>

Primary Health Care (PHC) is the Unified Health System's preferential entry way and the link among the entire health care network. In PHC there is a welcoming to the users, promotion of bonding and accountability between users and health professionals because its facilities surrounding the community enable the knowledge of the social conjuncture and the development of activities collectively and individually.<sup>4</sup>

A solid and consistent knowledge reflects positively on the attitude and professional practice of nurses. Thus, nurses can and should develop practices aimed at breast cancer prevention and health promotion of the adscript population, such as discussion groups, workshops, waiting rooms, among other activities that empower users about breast cancer. In the Nursing Consultation, an effective and legally supported tool, nurses have an opportune space for diagnosis, early detection, treatment of diseases and prevention of preventable conditions. The nurse is a professional with reflexive-critical and humanized capacity, based on scientific and intellectual content, able to intervene in most prevalent health/disease situations and problems in the national epidemiological profile.

Nurses must develop actions to fight mammary neoplasia, know the methods of early detection and perform screening actions for the early identification of breast cancer or precursor lesions in asymptomatic individuals as soon as possible so that effective measures are implemented, reducing its mortality.<sup>6</sup>

The increased incidence and prevalence rates of breast cancer indicate the need to know the performance of the nursing professionals regarding breast cancer. Also, in the municipalities that make up the Maciço de Baturité – CE, there are important weaknesses, such as the delay in diagnosis, which is paramount in the treatment of this pathology. Therefore, the objective of this study was to analyze the knowledge, practices, and attitudes about breast cancer diagnosing by the professional nurses of primary health care in municipalities in the inland of the state of Ceará, Brazil.

Given the above, this research may contribute to the understanding of nurses' knowledge, attitudes, and practices, and thus subsidize a way of nursing care that better meets the population's individual and collective needs.

#### **METHODS**

A descriptive, cross-sectional, and inferential study with a quantitative approach and use of the Knowledge, Attitude and Practice Survey (*Conhecimento, Atitude e Prática*, CAP) survey, conducted with primary health care nurses in the Administrative Macroregion of Baturité – Ceará, Brazil.

The CAP survey makes it possible to measure the knowledge, attitude and practice of a community, allowing for an educational diagnosis of the population under study, and can be adapted to various situations, enabling strategies and interventions aimed at the needs of the individual or the community, as well as improving the planning of health promotion actions.<sup>7</sup>

Knowledge is understood as the ability to remember or understand the learning process aspects and to understand the application of knowledge in problem-solving; the attitude consists in having opinions, beliefs, and feelings linked to certain goals or situations and the practice is to make a decision to implement an action.<sup>8</sup>

The target audience of the study consisted of Family Health Strategy (FHS) nurses from the municipalities that make up the Maciço do Baturité region-CE, namely: Acarape, Aracoiaba, Aratuba, Barreira, Baturité, Guaramiranga, Itapiúna, Mulungu, Pacoti, Palmácia and Redenção. The FHS of these municipalities is composed of a multidisciplinary team, with nurses, doctors, nursing assistants and technicians, dentists and community health agents. The services are held from Monday to Friday.

To define the study's participating nurses, 74 nurses were identified. From this information, we considered a 5% estimation error, a 95% confidence level, and a prevalence of 50%, seeking the highest possible variability of the studied event, which resulted in a sample of 62 nurses.

Subsequently, the units and nurses were stratified according to sub-samples proportional to the number of FHS of each municipality, namely: Acarape (05/06), Aracoiaba (09/11), Aratuba (06/07), Barreira (07/08), Baturité (08/09), Guaramiranga (03/03), Itapiúna (05/06), Mulungu (03/04), Pacoti (04/05), Palmácia (03/04) and Redenção (09/11). The choice of the nurses was made at random, and those who refused to participate were replaced by another.

The inclusion criteria adopted were the following: nurses who were responsible for unit's assistance, and as exclusion, those who were on vacation, temporarily removed from service for health reasons, and those who were less than six months in the unit as a recent replacement of another nurse, as they would not have the necessary information to answer part of the instrument.

For data collection, an instrument was applied that details and assesses nurses' knowledge, attitude and practice regarding early detection of breast cancer.9 The interviews were conducted

at the Primary Health Care Units and/or the Municipal Health Secretariat from November 2015 to June 2016.

The applied instrument consisted of a questionnaire with objective and subjective questions. It had 27 items and included variables related to the sample characterization (age, gender, number of children, type of union), professional training (time since graduation, title, time working in the FHS, refresher courses) and knowledge variables (methods and screening tests for female breast cancer; risk factors; and clinical manifestations of breast cancer), attitude (participation in courses on breast cancer; managers' motivation for nurses to perform a quality gynecological nursing consultation; nurse self-report feeling able to perform clinical breast examination) and practice (control of all users over clinical examination and mammography; active search of absentees; health education records; and guidance from nurses to users regarding risk factors and clinical manifestations of breast cancer) about early detection of breast cancer.

The variables of knowledge, attitude and practice were classified as adequate, regular and inadequate. The score was distributed as follows: Knowledge: 8-11 points (adequate), 5-7 points (regular), 0-4 points (inadequate); Attitude: 3-4 points (adequate), 0-2 points (inadequate); and Practice: 5-6 points (adequate), 3-4 points (regular) and 0-2 points (inadequate.)

Data was organized in a *Microsoft Office Excel worksheet®* for *Windows* and submitted to descriptive statistics' analysis applied to the categorical variables of the study, with the estimation of the absolute and relative frequencies, as well as their respective confidence intervals (**CI**<sub>95%</sub>), with the use of the open-access program Epilnfo, version 7.2.1.0 (CDC, Atlanta – USA), and the results are organized in four tables.

The research began after allowance by the Research Ethics Committee of the University of the International Integration of Afro-Brazilian Lusophony, under opinion No. 1,408,622, and respected the ethical precepts of research with human beings following resolution 466/2012 of the National Health Council. All the participants signed the Free and Informed Consent Form.

## **RESULTS**

Most of the interviewed professionals were 30-39 years old (45.2%), followed by age  $\leq$  29 years old (35.5%), female (96.7%), without children (67.7%) and single (56.4%).

Regarding the time of graduation, title, time working in the FHS and whether there was participation in courses that addressed the breast cancer theme, the results showed that most of the nurses (62.9%) have got a degree for more than five years and have some *latu sensu* training (80.6%), of which the percentage of 35.4% was in the Public Health area, with the most recurrent specialization being on Family Health (20.9%), followed by Health Management, Public Health (12.9%), Intensive Therapy Unit (12.9%), Occupational Nursing (9.6%), Obstetrics (6.4%), among others that did not correspond to public health

education. These professionals worked for less than 05 years (58.6%) in the FHS and more than half (58.6%) of them did not attended any breast cancer courses.

Regarding the aspects related to the nurses' knowledge concerning the early detection of breast cancer (Table 1), the result of the nurses who answered the item correctly was presented.

Among the participants, 66.1% answered mammography and clinical breast examination as a recommended method for screening breast cancer in Brazil, answering assertively. Regarding the screening test with a higher ability to point out lesions and cause repercussions in breast cancer mortality, 88.7% of the nurses responded satisfactorily.

About the methods used to screen breast cancer in women aged 40 to 49 years old, which had as correct answer the annual clinical breast exam and, if altered, mammography, 27.4% answered correctly. The fourth comprised women aged 50 to 69 years old and the exact answer was: clinical breast examination and biannual mammography, which obtained 43.5% of the correct answers. The last variable on the screening method in 35-year-old or older women with increased risk, the hit rate was 40.3%.

The population groups with very high-risk factors for breast cancer and their respective response-based indexes were the following: women with a family history of at least one first-degree relative (mother, sister or daughter) diagnosed with breast cancer, under 50 years old (74.1%); women with a family history of at least one first-degree relative (mother, sister or daughter) diagnosed with bilateral breast or ovarian cancer at any age (51.6%); women with a family history of male breast cancer (16.1%); and women with histopathological diagnosis of a proliferative breast lesion with atypia or lobular cell neoplasia in situ (25.8%). To get a satisfactory answer, the nurses should mark the four items, two points, and only 8.6% achieved this score. The percentage of professionals who did not score reached 61.2%.

Another variable evaluated was risk factors, signs and symptoms of breast cancer, presented in Table 2.

They should cite five factors for satisfactory scores, and those who mentioned two or three had the regular answer. Thus, as a result, we obtained: 20.9% with satisfactory answer and 38.7% with regular.

The main factors mentioned by the respondents were the following: family history (83.8%); smoking (50%); age (22.5%); eating habits (22.5%); physical inactivity (22.5%); nulliparity (16.1%); alcoholism (14.5%); not breastfeeding (14.5%) and contraceptive use (14.5%). Linked to these risk factors, we evaluated the clinical manifestations that these professionals tried to detect in the consultation.

The clinical manifestations of the highest search index by the nurses in early detection were nodules (83.8%); breast secretion (40.3%); skin changes (25.8%) and erythema (20.2%). 51.6% was the number of professionals who managed an unsatisfactory response.

Another aspect evaluated in the study was the nurses' attitude about breast cancer, referred to in the Table 3.

Table 1. Nurses' knowledge about early detection of breast cancer, Maciço de Baturité, 2017.

Variables	n	%	CI <sub>95%</sub>
Recommended methods in Brazil for the screening of female breast cancer? (N=62)			
Mammography and Clinical Breast Examination	41	66.1	(52.9 – 77.7)
Screening exam, better able to detect lesions? (N=62)			
Mammography	55	88.7	(78.1 – 95.3)
Breast cancer screening in 40-49-year-old women (N=62)			
Annual clinical breast examination. If altered, mammography.	17	27.4	(16.8 - 40.2)
Breast cancer screening in 50-69-year-old women (N=62)			
Annual Breast Examination and Biannual Mammography	27	43.5	(40.0 - 56.7)
Breast cancer screening in women at age 35 or older at high risk (N=62)			
Annual Breast Examination and Mammography	25	40.3	(28.0 – 53.5)
Population groups with risk factors for breast cancer* (N=62)			
Women with a family history of at least one first-degree relative, diagnosed with breast cancer, under 50 years of age.	46	74.1	(61.5 – 84.5)
Women with a family history of at least one first-degree relative diagnosed with bilateral breast cancer or ovarian cancer at any age.	32	51.6	(38.6 – 64.5)
Women with a family history of male breast cancer	10	16.1	(8.0 - 27.7)
Women with histopathological diagnosis of a proliferative breast lesion with atypia or lobular neoplasia in situ	16	25.8	(15.5 – 38.5)
Population groups with risk factors for breast cancer: Score (N=62)			
00 points	38	61.2	48 [1 – 73.4]
01 point	19	30.6	(19.6 – 43.6)
02 points	05	8.6	(2.7 - 17.8)

<sup>\*</sup> Information extracted from Cervical and Breast Cancer Control. 10

Table 2. Nurses' knowledge about breast cancer risk factors and signs and symptoms, Maciço de Baturité, 2017.

Professionals' score on the risk factors related to breast cancer ( $N = 62$ )	n	%	CI <sub>95%</sub>
00 points	25	40.3	(28.0 – 53.5)
01 point	24	38.7	(26.6 - 51.9)
02 points	13	20.9	(11.7 – 33.2)
Risk factors (N=62)			
Family history	52	83.8	(72.3 – 92.0)
Smoking	31	50	(37.0-63.0)
Age	14	22.5	(12.9 – 35.0)
Eating habits	14	22.5	(12.9 - 35.0)
Sedentarism	14	22.5	(12.9 – 35.0)
Nulliparity	10	16.1	(8.0 - 27.7)
Alcoholism	9	14.5	(6.9 - 25.8)
Contraceptive use	9	14.5	(6.9 - 25.8)
Not breastfeed	9	14.5	(6.9 – 25.8)
Early menarche	6	9.6	(3.6 – 19.9)

Table 2. Continued...

Professionals' score on the risk factors related to breast			
cancer (N = 62)	n	%	CI <sub>95%</sub>
Hormone Replacement Therapy	4	6.4	(1.8 – 15.7)
Radiation	2	3.2	(0.4 - 11.2)
Having children aged over 30	2	3.2	(0.4 - 11.2)
Ovary cancer	1	1.6	(0.04 - 8.7)
Race	1	1.6	(0.04 - 8.7)
Female gender	1	1.6	(0.04 - 8.7)
Clinical manifestations (N=62)			
Breast nodules	52	83.8	(72.3 - 91.9)
Breast secretion	25	40.3	(28.0 - 53.5)
Skin changes (orange peel)	16	25.8	(15.5 - 38.5)
Erythema	13	20.9	(11.7 - 31.2)
Breast retraction	9	14.5	(6.7 - 25.8)
Inflammation	2	3.2	(0.4 - 11.2)
Breast tumor	2	3.2	(0.4 - 11.2)
Palpable lymph node	2	3.2	(0.4 - 11.2)
Pain	2	3.2	(0.4 - 11.2)
Professionals' score on the clinical manifestations investigated in the early detection of breast cancer (N=62)			
00 points	32	51.6	(38.6 - 64.5)
01 point	22	35.4	(23.7 - 48.7)
02 points	8	12.9	(5.7 - 23.8)
Classification of the Nurses' Knowledge			
Adequate (08 – 11 points)	4	6.4	(5.7-23.8)
Regular (05 – 07 points)	26	41.9	(23.4 -8.6)
Inadequate (00 – 04 points)	32	51.6	(38.6-4.5)

**Table 3.** The attitude of the Family Health Strategy Nurses, Maciço de Baturité, 2017.

Variables	n	%	CI <sub>95%</sub>
Interest in attending breast cancer courses (N=62)			
Yes	62	100	(94.2 – 100.0%)
Do you believe you can perform the Clinical Breast Examination in the women of your area? (N=62)			
Yes	47	75.8	(63.3 – 85.8)
Do you believe that a proper Breast Self-Examination can dismiss the Clinical Breast Examination and mammography? (N=62)			
No	52	83.8	72 [3 – 91.9]
Is the nurse motivated by the managers to perform a quality nursing consultation in the early detection of breast cancer?			
Yes	44	70.9	(58.0 - 81.8)
Classification of the Nurses' Attitude			
03 – 04 points (adequate)	53	85.4	(74.2 - 93.1)
00 – 02 points (inadequate)	9	14.5	(6.7 - 25.8)

Table 4 – Practice of the Family Health Strategy Nurses, Macico de Baturité, 2017.

Variables	n	%	CI <sub>95%</sub>
PHCU* control of all users over 40 years of age for performing the annual Clinical Breast Examination? (N=62)			
Yes	27	43.5	(40.0 - 56.7)
PHCU* control of all women over 50 years old for performing the biannual mammography (N=62)			
Yes	23	37.1	(25.2 - 50.3)
Active search for absent women in breast cancer screening? (N=62)			
Yes	40	64.5	(51.3 – 76.3)
PHCU* Health Education Records on Breast Cancer? (N=62)			
Yes	44	70.9	(58.0 - 81.8)
In gynecological nursing consultations, are a clinical breast exam and guidance on risk factors and clinical manifestations for the early detection of breast cancer conducted? (N=62)			
Always	56	90.3	(80.1 - 96.4)
Almost always	05	8.6	(2.7 - 17.8)
Classification of the Nurses' Practice			
05 – 06 points (adequate)	22	35.4	(23.7 – 48.7)
03 – 04 points (regular)	31	50	(37.0 – 63.0)
00 – 02 points (inadequate)	09	14.5	(6.9 – 25.8)
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<sup>\*</sup>PHCU: Primary Health Care Unit.

An extremely important index that scored 100% was in the attitude towards the interest in attending breast cancer courses. When asked about feeling able to perform the clinical breast examination, 75.8% answered positively. The following question asked whether breast self-palpation, done properly, could dismiss clinical breast examination and mammography and 83.8% answered no. In this item, the nurses obtained a satisfactory index.

Of the respondents, 70.9% of the nurses reported having the support of the managers to conduct a quality consultation to detect breast cancer. In the Table 4, the nurses' practice will be evaluated.

Referring to the nurses' professional practice in their work environment, 43.5% have control in the primary health care unit of all users over 40 years of age regarding the performance of the clinical breast examination, and 37.1% have control in 50-year-old women regarding the performance of the biannual mammography.

Of the professionals interviewed, 64.5% perform an active search for the absent women in relation to breast cancer screening and 70.9% perform health education about breast cancer. It is important to highlight that, although there is no such control, 90.3% of the professionals assert that they always perform the clinical breast examination and provide guidance on the risk factors and clinical manifestations for the early detection of breast cancer.

# DISCUSSION

The data point to a high number of professionals who are seeking professional improvement to perform a differentiated practice in their assistance. The nurse needs the knowledge to perform a method that contemplates the biopsychosocial aspects, ensuring the techniques of promotion, health maintenance and diseases prevention in individual and collective spheres, with a reflective and critical conduct, thus contributing to local and regional development, ensuring access to the health services guaranteed by public health policies.<sup>6, 11</sup>

One of the fields that can be explored is Primary Health Care. It is relevant to know what conduct should be adopted in the detection of breast cancer because the main actions of this policy happen in Primary Health Care and the nurse is responsible for having a broad, integrated and remarkable performance in this level of health care.<sup>6</sup>

An integrative review pointed out that the actions developed by the nurses in the screening and early detection of breast cancer are deficient due to training with gaps and to the lack of awareness of the professionals about it. This study pointed out that this knowledge should be disseminated intensively and constantly, in order to implement and value the public actions and policies.<sup>12</sup> An adequate knowledge about the main forms of detection and screening for breast cancer is essential for the nurses' clinical practice because we believed that it is with this information that they will take action and adopt effective measures.

There are several possibilities for these professionals to improve their knowledge and consolidate their presence in the health services, namely: courses, workshops, online courses, and symposiums, among others. The nurse needs to actively and responsibly contribute to the health services and practices related to individual and collective well-being through safe actions, based on scientific evidence in order to plan, systematize, operationalize and implement actions that minimize care risks. <sup>13, 14</sup>

The professionals have a weak knowledge about the profile of users vulnerable to this disease development. Also, as previously mentioned, they have difficulties to know what type of test should be performed by the user.

The Brazilian Ministry of Health recommends that strategies for early diagnosis should be formed by: individuals attentive to cancer-related clinical manifestations; health workers also attentive to cancer-indicative clinical manifestations and qualification for the filing of suspected cases; and health services equipped and organized to ensure adequate diagnostic ratification, with effective conditions, and with the precaution of ensuring care integrality and continuation at all levels of health care.<sup>6</sup>

Nurses must be the professionals capable of modifying the context in which they are inserted, and for this, it is essential that their training provides the development of skills and abilities for the practical performance of assigned activities. <sup>14</sup> Applying these factors results in innovating in learning probabilities that provide the necessary subsidies for critical and creative thinking about the health conditions and processes located in the nursing services and in other nursing acting panoramas in order to respond to the principles of the Unified Health System in a metacognoscent perspective and modification of the health practices. <sup>15</sup>

The constant updating of the nurses working in the FHS is paramount because at this level of care is where nurses have autonomy to perform various activities. However, this field may be compromised due to inconsistent knowledge. Longitudinal actions that encompass individuals and communities can be developed, including access actions and health care, precaution about health problems, diagnosis, therapy, rehabilitation, harm reduction, and health conservation in order to broaden the repercussion in the context of health care enabling the protagonism of people in the health-disease factors of the community.<sup>4</sup>

A study conducted with nurses showed that these professionals perceived the permanent health education as a method for the professional to develop and improve competences and skills, contributing to the subject's training process, resulting in the personal-professional-intellectual aggrandizement and making the professionals reflective-critics, involving them with the community.<sup>1</sup>

Continuing education is a strategic act, as it contemplates aspects of thinking and doing, stimulating the reflection and criticality of the professionals in their practice, stimulating the individual to evaluate how the activities are being performed, where they need to improve and the responsibility to be performing them so they can have practices with scientific and technical excellence articulating theory and practice.<sup>16</sup>

Management support in conducting quality consultations provides teamwork, encouraging practices in the services to achieve the desired goals, taking into account the objectives of managers and the population, and also generate good indicators for the municipalities reflecting on the competence of all the actors involved in this process.<sup>17</sup>

These data are disturbing because a small portion of these professionals has the systematized knowledge of the users who perform the tests recommended by the Ministry of Health for breast cancer screening. A reflection and the incentive for such practice among professional nurses are required.

A study pointed out that the systematization of cancer-related data plays a relevant role since this data can generate important cancer-related information, enabling subsidies to help administrative planning and consequently improving the care level and achievement of public policy goals.<sup>18</sup>

In this perspective, the professionals need to be aware of the importance of having systematic data in the health units so that they can develop their activities in a rational and organized manner, as nurses come to know the local reality and the vulnerabilities of the population. In this sense, the professionals were asked about the search for absentees and about health education practices.

The search for absentees and health education are configured as a mechanism to improve users' autonomy, tightening the relationship between education, service, and community, in order to stimulate health promotion and disease prevention practices, as well as tightening users' ties with health facilities.<sup>18</sup>

### CONCLUSIONS

We can conclude from this work that the nurses' knowledge is deficient. This can hinder the early detection of breast cancer cases, causing harm to women such as increased morbidity and mortality.

The attitude of the nurses was classified as adequate, showing that these professionals have an interest in performing effective actions regarding breast cancer screening and detection, contributing to the confrontation of this public health problem. Regarding the practice, a regular result was obtained, showing the need for the implementation of strategic and regular monitoring of women to direct actions to combat breast cancer.

Given this, studies such as this one are of importance, as they can contribute to show gaps in nursing knowledge, attitude and practice in the early detection and screening of breast cancer, providing subsidies on the state of the nursing performance and the aspects that need to be improved through training, courses, seminars, among other activities.

For the studies to contribute, the participation and support of nursing in research is necessary, which happened under much resistance due to the numerous attributions and activities in the health unit, which are the main difficulties in the study.

The results of this research point to the need to focus attention on the discussion of the theme and training on breast cancer detection and control in the Maciço de Baturité FHS, for a better effectiveness of the health service. The need urges to organize and systematize more efficiently the records and implementation of the activities developed as well as higher investment in the knowledge of nurses that will positively reflect on the attitude and practice in early detection of breast cancer, cooperating for the success of public health policies. In this sense, the importance of training nurses for a qualified professional practice is urgent; however, the challenges related to knowledge, attitude and practice need to be overcome.

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# **AUTHORS' CONTRIBUTIONS**

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