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(Des)conhecimento dos profissionais de saúde acerca das recomendações do ministério da saúde sobre câncer de mama*

Health professionals' (lack of) knowledge about the Ministry of Health's recommendations on breast cancer

(Des)conocimiento de los profesionales de la salud sobre las recomendaciones del Ministerio de Salud sobre el cáncer de mama

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RESUMO

Objetivo: identificar através da literatura o des(conhecimento) do profissional de enfermagem sobre as recomendações do Ministério da Saúde sobre a detecção precoce do câncer de mama. **Método:** revisão de escopo, utilizando-se da estratégia PICo e do PRISMA para busca e seleção dos estudos. A análise foi através de um instrumento já validado e os dados foram caracterizados por meio das informações dos artigos originais. **Resultados:** observou-se lacunas de conhecimento dos profissionais em relação as recomendações do Ministério da Saúde acerca da periodicidade, faixa etária e exames padronizados. **Conclusão:** nota-se a importância na capacitação dos profissionais sobre a temática afim de aprimorar seus conhecimentos para um melhor cuidado em saúde, contribuindo assim para a detecção precoce da neoplasia mamária.
DESCRITORES: Câncer de mama; Cuidado de enfermagem; Enfermagem oncológica; Conhecimento; Detecção precoce de câncer.

ABSTRACT

Objective: to identify, through the literature, the lack of knowledge of nursing professionals about the recommendations of the Ministry of Health on the early detection of breast cancer. **Method:** scoping review, using the PICo strategy and PRISMA to search and select studies. The analysis was carried out using an instrument that had already been validated and the data were characterized by the information from the original articles. **Results:** there were gaps in the knowledge of the professionals in relation to the recommendations of the Ministry of Health regarding periodicity, age group and standardized exams. **Conclusion:** It is important to train professionals on the subject in order to improve their knowledge for better health care, thus contributing to the early detection of breast cancer.
DESCRIPTORS: Breast cancer; Nursing care; Oncology nursing; Knowledge; Early detection of cancer.

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RESUMEN

Objetivo: identificar, a través de la literatura, el desconocimiento de los profesionales de enfermería sobre las recomendaciones del Ministerio de Salud sobre la detección precoz del cáncer de mama. **Método:** revisión exploratoria, utilizando la estrategia PICo y PRISMA para la búsqueda y selección de estudios. El análisis se realizó utilizando un instrumento que ya había sido validado y los datos fueron caracterizados por la información de los artículos originales. **Resultados:** hubo lagunas en el conocimiento de los profesionales en relación a las recomendaciones del Ministerio de Salud en cuanto a periodicidad, grupo etario y exámenes estandarizados. **Conclusión:** es importante capacitar a los profesionales en el tema con el fin de mejorar sus conocimientos para una mejor atención a la salud, contribuyendo así a la detección precoz del cáncer de mama.
DESCRIPTORES: Cáncer de mama; Cuidados de enfermería; Enfermería Oncológica; Conocimiento; Detección precoz del cáncer.

INTRODUCTION

Cancer is understood as a group of more than 100 diseases that have in common the disordered and abnormal growth of cells, with a tendency to invade neighboring tissues and organs, causing functional disorders.[1] It is known that cancer is one of the main public health problems in the world and is among the leading causes of death before the age of 70. According to INCA estimates,[2] in Brazil, excluding non-melanoma skin tumors, breast cancer is the most prevalent in women nationwide, with around 73,610 new cases expected annually for the 2023-2025 triennium.

Early detection of breast cancer is essential for its control and better treatment, as well as screening through mammography or clinical breast exams, mainly due to high morbidity and mortality rates and the late diagnosis present in Brazil.[3] Furthermore, in 2015, the Ministry of Health (MS) approved the new National Guidelines for the Early Detection of Breast Cancer, establishing evidence-based actions with recommendations regarding mammography exams.[4] However, despite the high incidence of breast cancer cases in Brazil and worldwide, women continue to be diagnosed at advanced stages, and professionals remain uncertain about the correct guidance on the prevention and early detection methods recommended by the MS.

According to Law No. 7.498, which regulates the professional practice of Nursing, one of the nurse's competencies and duties is to educate the population about the health-disease process to promote the prevention and control of health issues.[5] Additionally, COFEN Resolution 358/09, which addresses the Systematization of Nursing Care (SAE), establishes that the nursing process should be implemented in all environments where professional care occurs, with care carried out in five stages

comprising the SAE.[6] However, research conducted with nurses has shown that professionals investigate risk factors for the disease, perform Clinical Breast Exams (ECM), and request mammograms (MMG), but most professionals provide guidance to women on the age for these exams in disagreement with the recommendations.[7,8]

Another national study identified that professionals face difficulties in performing ECM and MMG.3 Corrêa et al.9 report in their study that women aged 40-49 underwent more mammograms than those in the recommended age group (50-59, 60-69), with annual frequency. It is observed that the Ministry of Health's recommendations have not been fully followed in health services, necessitating periodic professional training.

Cancer control encompasses a range of actions, starting from controlling exposure to risk factors, early detection of the disease, and palliative care.[10]

In Brazil, INCA's[2] estimate for the 2023-2025 triennium indicates that 704,000 new cancer cases will occur, 483,000 excluding non-melanoma skin cancer cases, with breast cancer being the most prevalent. In the world, the highest estimated incidence rates were in North America, Oceania, and Western European countries.

Knowing the risk factors for cancer and having accurate and early diagnosis is essential for a good prognosis and quality of life.[11] The World Health Organization (WHO) classifies cancer among non-communicable diseases, being the leading cause of death worldwide.[12]

Thus, this study is justified due to the relevance of the topic, given the increasing number of new cases of the disease, being a public health problem. Moreover, it is essential to know and disseminate correct information about early detection measures for this type of cancer, as early diagnosis significantly increases the survival and cure rates of the affected population. Additionally, the nursing team is fundamental in preventing and screening this type of cancer, guiding patients in primary prevention through gynecological consultations and conversation circles, being trained and having the autonomy to conduct campaigns, lectures, and request exams, among other functions.[13]

However, many professionals have doubts regarding the diagnosis of breast cancer, needing to seek more knowledge on the subject to be alert to breast changes in women, aiming to reduce diagnostic and therapeutic delays.[14] It is known that since 2004, detecting breast cancer early has been a goal of the Ministry of Health, yet the disease is still being

diagnosed at advanced stages.[15] Furthermore, despite the government's proposal, few studies have been conducted on this topic; therefore, understanding the knowledge gaps of nursing professionals is essential to develop measures and tools for their training, aiming for better health care. Given this, the study's objective is to identify through the literature the lack of knowledge of nursing professionals about the Ministry of Health's recommendations on the early detection of breast cancer.

METHODOLOGY

This is a structured scoping review using the PICo strategy based on the research question: what is the nursing professional's knowledge about recommendations on early detection of breast cancer? and the definition of the search strategy. According to Araújo,16 although this strategy has the same set of letters as the PICO strategy, other blocks are considered, differentiated only by the lowercase "o." Unlike the PICO strategy used mostly in the quantitative approach, this strategy aims for a qualitative approach focusing on human experiences and social phenomena. P stands for population/problem/patient, I for the phenomenon of interest, and Co for context.[16] In this study, P: Professional; I: Early cancer diagnosis; Co: Nursing care.

Thus, the descriptors "breast cancer," "oncological nursing," "early cancer detection," "knowledge," and "nursing care" were used for searches. Systematic reviews are considered secondary studies that have primary studies as their data source.[17] According to Pereira, Lacerda, and Cunha,[18] a scoping review (scoping study or scoping review) is a type of study that explores the concepts of the topic, analyzes its dimension and scope, the nature of the study, analyzes data, and observes where there are knowledge gaps useful for identifying possible evidence when it is not yet clear what questions can be synthesized. This review serves to map concepts, clarify topics, summarize evidence, and identify the need for future research.

A search was conducted in virtual databases in Portuguese, English, and Spanish over the past five years with the aforementioned descriptors in Portuguese, correlating them with the Boolean markers "and" and "or." Data were collected in the first half of 2024 through a search form in the databases of the Latin American and Caribbean Health Sciences Literature (LILACS); International Health Sciences Literature (MEDLINE); Nursing Database (BDENF); and the National Library of Medicine National Institutes of Health of the USA (PUBMED).

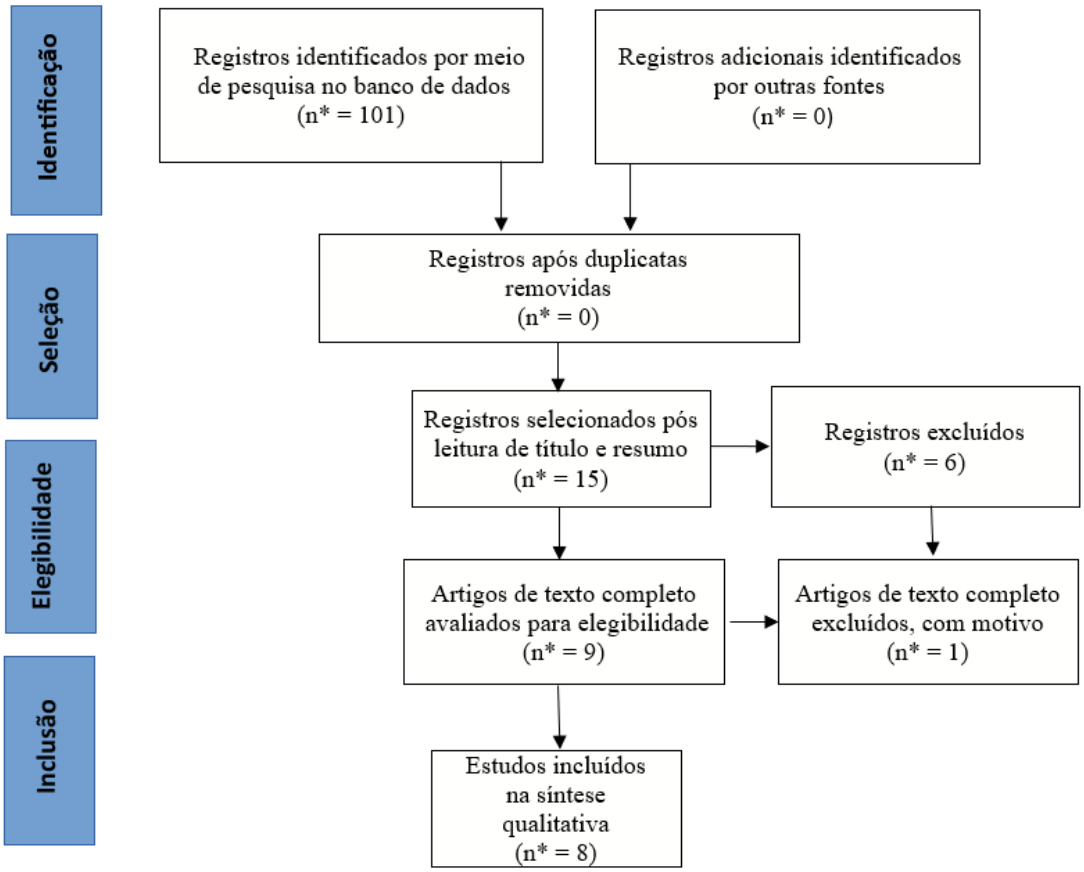
The inclusion criteria for the study were: original articles available in full and free of charge; national and international productions available in Portuguese, English, and Spanish, published between 2019 and 2024. The exclusion criteria were repeated publications (identification), theses, dissertations, experience reports, reflection articles, editorial letters, monographs (selection), and articles that after reading the abstract were not suitable for the study's objective (eligibility).

The analysis process was developed in two different ways: with data related to information on title, year, country, method, and level of evidence analyzed quantitatively characterized by relative and absolute frequency. Data on interventions and outcomes were analyzed thematically both quantitatively and qualitatively.19 Regarding the level of evidence, the research was classified as: 1 – systematic reviews or meta-analysis of relevant clinical trials; 2 – evidence from at least one well-designed randomized controlled clinical trial; 3 – well-designed clinical trials without randomization; 4 – well-designed cohort and case-control studies; 5 – systematic review of descriptive and qualitative studies; 6 – evidence derived from a single descriptive or qualitative study; 7 – opinion of authorities or expert committees including interpretations and information not based on research.[20]

RESULTS

Using the descriptors and crossing them considering the total number of databases, 101 studies were found with the descriptors in Portuguese. After reading the titles and abstracts and applying the inclusion and exclusion criteria, the final sample corresponded to eight studies that met the eligibility criteria. The data search and selection process was based on the Preferred Reporting Items for Systematic Review and Meta-Analys – PRISMA process.[21] As shown in Figure 1.

Figure 1 - Data collection and analysis flowchart according to PRISMA. Rio de Janeiro, RJ, Brazil, 2024



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Fonte: Liberati et al., 2009.

The selected studies are described below in Table 1:

Table 1 - Characteristics of studies selected in the scoping review. Rio de Janeiro, RJ, Brazil, 2024

TITLE	YEAR/COUNTRY	METHOD	INTERVENTIONS	OUTCOMES	LEVEL OF EVIDENCE
Knowledge, attitude, and practice of nurses in the detection of breast cancer	2020 Brazil	Descriptive cross-sectional study	Analyze the knowledge, practices, and attitudes on the detection of breast cancer by primary care nurses in municipalities in the interior of the state of Ceará, Brazil.	Regarding nurses' knowledge, 64% had adequate knowledge needing improvement. Concerning attitude, 85.4% had adequate results, and regarding practice, 50% had regular results. Professionals have fragile knowledge with difficulties knowing which exam to perform on the user.	VI
Knowledge of breast cancer in nursing students	2019 Chile	Descriptive cross-sectional study	Evaluate knowledge about breast cancer among nursing students from universities in the city of Chillán (Chile).	Most students demonstrated knowledge to distinguish signs, symptoms, treatments, and diagnoses of breast cancer as future health professionals.	VI

				Concerning risk and protection factors related to breast cancer, difficulty recognizing them was observed. Regarding mammography, 80.7% indicated it should be performed before age 30.	
Participatory education with nurses: potentialities and vulnerabilities in breast and cervical cancer screening	2020 Brazil	Systematized report according to Holliday in five stages. Action research	Systematize the experience of permanent participatory education with primary care nurses on breast and cervical cancer screening, identifying potentialities and vulnerabilities.	The potentialities relate to the nurse's work implementing the principles of the Unified Health System. The difficulties are complex and expose individual, contextual, and programmatic vulnerabilities in the screening practice.	VI

Early detection of breast cancer in Basic Health Units	2021 Brazil	Cross-sectional cohort study	Analyze actions for the early detection of breast cancer performed by primary care nurses according to different configurations of basic health units.	Of the 133 nurses in the study, 46.6% worked in Family Health Strategy units, 31.6% in mixed units, and 21.8% in traditional units. Better performance was observed in the Family Health Strategy model, with statistically significant results for the following actions: investigation of risk factors (p=<0.001); guidance on the ideal age for clinical breast exams and the importance of their performance (p=0.002 and p=<0.001 respectively); educational meeting on breast cancer (p=<0.001); active search for women with suspected reports (p=0.002), and referral to the	IV

				reference unit (p=<0.001).	
Breast cancer screening program for risk groups: facts and perspectives	2022 Brazil	Cross-sectional study	Measure the frequency and conformity of breast cancer	67% had high risk and 93.3% standard risk respectively. In these groups, the	VI

			screening according to risk for this disease.	frequency and conformity of clinical breast exams were 40.3% and 37.1%, and 43.5% and 43.0% (frequency p=0.631 conformity p=0.290). Mammography performance reached 67.7% and 35.5% for high risk, and 57.4% and 25.4% for standard risk (frequency p=0.090 conformity p=0.000). In the groups, the frequency and conformity of clinical breast exams were similar, but mammography was higher in the high-risk group with compliance below the 70% agreed in SUS.	
Breast cancer surveillance: practices identified by managers in Primary Care	2022 Brazil	Descriptive cross-sectional study	Analyze breast cancer control practices	Regarding breast cancer control actions, all	VI

			identified by primary health care managers.	managers 24 (100%) stated that they prioritize referring women with altered mammograms and Clinical Breast Exams and requesting mammography for women in high-risk groups. Regarding obstacles to these actions, most 13 (54.2%) managers pointed out difficulties faced by services, predominantly lack of health professionals and excessive demand.	

Breast cancer and analysis of factors related to detection methods and disease staging	2022 Brazil	Cross-sectional study	Describe the profile of women affected by breast cancer and evaluate aspects related to detection and staging methods and their associations.	40.3% of the sample was <50 years old. Self-examination was the prevalent detection method (74.9%) in all age groups with a significant association for more advanced stages of the disease >70% of the sample. Detection by self-examination was significant and related to more advanced stages of breast cancer, especially in younger age groups. Based on the results, those involved in women's health can develop new strategies to intensify population screening.	VI
Actions for the early detection of breast cancer in two municipalities of the Western Amazon	2021 Brazil	Cross-sectional study	Evaluate the implementation of early breast cancer detection actions	The frequency of mammography was 42%. Of women with standard risk for	VI

			in Primary Care and verify the adequacy of these actions with Ministry of Health recommendations.	breast cancer, only 58% adequately performed mammography. Low compliance with early detection actions with Ministry of Health recommendations was evidenced. Therefore, the need for measures to increase professional adherence to government proposals and continuous evaluation of actions is highlighted.	

Source: Prepared by the author (2024)

In terms of studies, Brazil is first with seven (87.50%) studies, followed by Chile with one (12.50%). The predominant language is Portuguese with seven (87.50%) studies, followed by Spanish with one (12.50%). The studies are recent, with three (37.50%) in 2022, two studies (25.00%) in 2021, two researches in 2020 (25.00%), and one in 2019 (12.50%). Regarding the level of evidence, one (12.50%) study corresponds to evidence level IV, and seven (87.50%) to level VI, indicating that most of the found studies are descriptive cross-sectional.

The interventions demonstrate the knowledge of nursing professionals responsible for care and their relevance to cancer patients. Additionally, there was a scarcity of studies on the topic, necessitating new research development.

Thus, it was possible to form a single thematic category according to Bardin's content,22 with three analysis stages: 1) pre-analysis 2) material exploration 3) results treatment, inference, and interpretation. From this, a single category emerged: 1- The (lack of) knowledge of nursing professionals about early breast cancer detection and the impacts on health actions with the population.

DISCUSSÃO

Trained professionals with knowledge about early breast cancer detection measures are essential for better quality care. They are responsible for health education and nursing consultations, contributing to disease prevention and health promotion. Having solid and consistent knowledge will positively reflect on professional practice, allowing the professional to disseminate knowledge to other professionals and users, promoting health education.[23]

It is known that the Nursing Consultation is an important tool regulated by legislation, allowing the nurse to approach this clientele at an opportune moment about breast cancer and its recommendations.[24]

Given the role and importance of nurses in primary care, it is essential for professionals to know and develop actions to address breast cancer to implement effective measures reducing its mortality.[25]

However, a cohort study conducted in Ceará showed that most professionals interviewed (60%) reported not participating in breast cancer courses. This study noted that professionals know the exams and methods recommended for cancer screening and early diagnosis but do not recognize the periodicity concerning each group.[23]

An integrative review points out that the actions in the professional practice of nurses for early breast cancer detection are deficient due to gaps and lack of sensitization of professionals on the topic during their training. Thus, it is valuable for this knowledge to be intensely and constantly disseminated to concretize and value public actions and policies.[26]

Adequate knowledge about recommendations for early cancer detection is crucial for professional practice, allowing for assertive decisions with effective measures for patients.

However, professionals' knowledge is lacking, as studies show, leading to difficulties in early breast cancer detection, causing harm to women.[23]

Additionally, before the COVID-19 pandemic, an estimated 32 million new breast cancer cases per year were projected for 2050.[27] However, with the expenses to tackle the pandemic, investment in cancer control programs decreased, worsening early detection, increasing health costs, and deteriorating patients' quality of life.[28]

Another study conducted with users in São Paulo showed that professionals guided most women to start ECM and MMG after 40 years, regardless of risk, and the exams were more performed on women with standard risk than those with high risk. Therefore, users' responses indicate that professionals lack updates and knowledge about the Ministry of Health's recommendations.[29]

Moreover, in 2013 and 2014, a multicentric study conducted in several Brazilian cities showed that most nurses assess risk factors, perform ECM and MMG without following a protocol, nor age recommendations, with annual indication from 40 years prevailing.[30-33]

These findings show that after more than ten years of consensus on early detection, screening and diagnostic exams have not been widely implemented.[29] Screening and early detection in Brazil through mammography are the main measures adopted, with guidelines published in 2015 aiming to guarantee the right and quality of screening to treatment actions.[34]

A study conducted in a São Paulo municipality found that better-trained nurses offered better educational actions on breast cancer to the population,[31] and another conducted with women in Pernambuco showed that they identified breast changes through self-exams already at an advanced stage of the disease, leading to a worse prognosis with a young portion without a disease history investigated.[35]

The early diagnosis strategy is based on a triad, requiring aligned strategies such as the population's knowledge, professionals' knowledge, and efficient health services. The presence of signs and symptoms is already related to advanced disease with a worse prognosis.[36]

Furthermore, Dourado et al.[35] state that even with recommendations for cancer screening and early diagnosis, women continue to be diagnosed late, often with ulcerated breasts and metastases, leading to worse prognosis and quality of life.

In Brazil, research shows that while the Southeast region has decreased mortality rates since the 1990s, there has been an increase in the North and Northeast regions,37,38 closely related to late diagnosis and access difficulties.[39]

Scientific evidence has shown that guidelines for early breast cancer detection helped reduce mortality by 30% to 50% when screening is performed every two years in women aged 50 to 69.[40]

Screening is a procedure that must always be carried out, and professionals need to know all recommendations. By 2030, the 2018-2030 Sustainable Health Agenda for the Americas aims to reduce premature mortality by one-third due to non-communicable diseases, including breast cancer.[41]

Thus, research like this is important as it contributes to knowledge gaps on this topic, providing insights into nursing parameters and elucidating the flaws that need improvement.[23] Additionally, nurses should be professionals who have the competence to disseminate important health information, but for that, they need to have this knowledge, which can be acquired in various ways with scientific support.

CONCLUSION

Research on cancer and breast cancer has been conducted over the years, bringing better and more efficient updates and recommendations on its characteristics, but these updates are not always accompanied by specific training for professionals in clinical practice, often turning what should be a facilitator into a complicator of care.

This study observed that professionals need updates on the proposed topic as they are unaware of the main Ministry of Health recommendations on early breast cancer detection despite knowing the means for such as screening mammography.

It is known that trained and updated professionals contribute to early breast cancer detection being carried out correctly and effectively, aiding in a higher chance of cure and better survival for the population suffering from this disease.

Moreover, it is evident that more studies like this one are needed to identify other knowledge gaps of professionals, allowing the creation of measures aimed at better professional training, directly reflecting in care, teaching, and research, contributing to the improvement of

health practices and care, impacting the quality of life of patients with this neoplasia, which is one of the main causes of death in women.

REFERENCES

1- Brasil. Instituto Nacional de Câncer José Alencar Gomes da Silva. ABC do câncer: abordagens básicas para o controle do câncer. Rio de Janeiro: rev. atual, INCA- 6 ed; 2020. [acesso em 9 jul 2023]. Disponível em: https://www.inca.gov.br/sites/ufu.sti.inca.local/files//media/document//livro-abc-6-edicao-2020.pdf.

2- Instituto Nacional de Câncer. Estimativa 2023: incidência de câncer no Brasil. Rio de Janeiro: INCA, 2022.

3- Teixeira MS, Goldman RE, Gonçalves VC, Gutiérrez MG, Figueiredo EN. Primary care nurses' role in the control of breast câncer. Acta Paul Enferm. 2017;30(1):1-7.

4- Brasil. Ministério da Saúde. Instituto Nacional de Câncer José Alencar Gomes da Silva. Diretrizes para a detecção precoce do câncer de mama no Brasil. Rio de Janeiro: INCA; 2015. [acesso em 09 jul 2023]. Disponível em: https://www.inca.gov.br/sites/ufu.sti.inca.local/files//media/document//diretrizes_deteccao_precoce_cancer_mama_brasil.pdf.

5- Brasil. Lei 7.498, de 25 de junho de 1986. Dispõe sobre a Regulamentação do Exercício da Enfermagem e dá outras providências. Brasília: Ministério da Saúde; 1986. [acesso em 09 jul 2023]. Disponível em: http://www.planalto.gov.br/ccivil_03/leis/l7498.htm.

6- Conselho Federal de Enfermagem. Resolução COFEN n° 358, de 15 de outubro de 2009. Dispõe sobre a Sistematização da Assistência de Enfermagem e a implementação do Processo de Enfermagem em ambiente públicos ou privados, em que ocorrer o cuidado profissional de Enfermagem, e dá outras providências. [acesso em 10 jul 2023]. Disponível em: http://www.cofen.gov.br/resoluo-cofen-3582009_4384.html.

7- Barbosa YC, Rabêlo PPC, Aguiar MIF, Azevedo PR, Cortês LSL. Early detection of breast cancer: how do the nurses in Primary Health Care perform? Rev. APS. [Internet] 2018 jul/set; 21(3): 375 - 386. [accessed on 12 jul 2023]. Available from: DOI 10.34019/1809-8363. 2018.v21.16505

8- Moraes DC, Almeida AM, Figueiredo EN, Loyola EAC, Panobianco MS. Opportunistic screening actions for breast cancer performed by nurses working in primary health care. Rev Esc Enferm USP. [Internet] 2016;50(1):14-21. [accessed on 12 jul 2023]. Available from:https://doi.org/10.1590/S0080-623420160000100002 28.

9- Corrêa CSL, Pereira LC, Leite ICG, Fayer VA, Guerra MR, Bustamante-Teixeira MT. Breast Cancer screening in Minas Gerais: 22 assessments of data from information health systems of the Brazilian National Health System. Epidemiol Serv Saúde. [Internet] 2017 jul.-sep.; 26(3). [accessed on 14 jul 2023]. Available from: DOI:10.5123/S1679- 49742017000300006.

10-Instituto Nacional de Câncer. Controle do Câncer de Mama. Rio de Janeiro, 2023. Disponível em: Controle do Câncer de Mama — Instituto Nacional de Câncer - INCA (www.gov.br)

11-Costa LS, *et al*. Fatores de risco relacionados ao câncer de mama e a importância da detecção precoce para a saúde da mulher. Revista Eletrônica Acervo Científico, 2021: 31: e8174-e8174.

12-World Health Organization (WHO). eHealth at WHO [Internet]. Geneva, SW: World Health Organization, 2018. [accessed on 15 jul 2023]. Available from: http://www.who.int/ehealth/about/en

13-Rodrigues JRG, et al. Importância do enfermeiro para o controle do câncer de mama: revisão narrativa. Revista Eletrônica Acervo Saúde, 2020, 55: e3668-e3668. [acesso em 15 jul 2023]. Disponível em: DOI http://dx.doi.org/10.33448/rsd-v9i12.11077

14-Da Cruz IL, et al. Câncer de Mama em mulheres no Brasil: epidemiologia, fisiopatologia, diagnóstico e tratamento: uma revisão narrativa. Brazilian Journal of Development, 2023; 9 (2): 7579-7589.

15-Lages RB, Oliveira G da P, Simeão Filho VM, Nogueira FM, Teles JBM, Vieira SC. Inequalities associated with lack of mammography in Teresina-Piauí-Brazil, 2010- 2011. Rev bras epidemiol. [Internet] Dezembro de 2012;15(4):737–47. [accessed on 18 jul 2023]. Available from: DOI 10.1590/S1415- 790X2012000400006.

16-Araújo WC. Recuperação da informação em saúde: construção, modelos e estratégias. [Internet] 2020. [acesso em 28 abr. 2024]. Disponível em: https://seer.ufs.br/index.php/conci/.

17-Galvão TF; Pereira MG. Revisões sistemáticas da literatura: passos para sua elaboração. Epidemiol. Serv. Saúde, Brasília, 2014, 23(1):183-184.

18-Pereira R.; Lacerda L.; Cunha C. Competências do líder em um Mundo VUCA: Uma revisão de Escopo. [Internet] 2021. [acesso em 12 ago 2024]. Disponivel em: https://www.researchgate.net/profile/Ricardo-Pereira-39/publication/357200966_COMPETENCIAS_DO_LIDER_EM_UM_MUNDO_VUCA_UMA_REVISAO_DE_ESCOPO/links/61c139e5a6251b553ad30ceb/COMPETENCIAS-DO-LIDER-EM-UM-MUNDO-VUCA-UMA-REVISAO-DE-ESCOPO.pdf.

19- Minayo MCS. Pesquisa Social: Teoria, Método e Criatividade. 6 ed. Petrópolis: Editora Vozes, 1996.

20-Mendes KDS, Silveira RCCP, Galvão CM. Revisão integrativa: método de pesquisa para a incorporação de evidências na saúde e na enfermagem. Texto contexto – enferm, 2008, 17 (4):758-764.

21-Liberati A, et al. The PRISMA statement for reporting systematic reviews and metaanalyses of studies that evaluate healthcare interventions: explanation and elaboration. BMJ, 339:b2700. 2009.

22-Bardin L. Análise de conteúdo. 70 ed, Lisboa; 2009.

23-Ferreira D da S, *et al*. Conhecimento, atitude e prática de enfermeiros na detecção do câncer de mama. Escola Anna Nery,2020, 24,:e20190054.

24-Oliveira SKP, Queiroz APO, Matos DPM, Moura AF, Lima FET. Temas abordados na consulta de enfermagem: revisão integrativa da literatura. Rev Bras Enferm. [Internet] 2012 jan-fev;65(1):155-61. [acesso em 19 set 2023]. Disponível em: http://dx.doi.org/10.1590/ S0034-71672012000100023.

25-Brasil. Ministério da Saúde. Diretrizes para a detecção precoce do câncer de mama no Brasil. Brasília: Ministério da Saúde; 2014.

26-Cavalcante SAM, Silva FB, Marques CA, Figueiredo EN, Gutiérrez MGR. Ações do enfermeiro no rastreamento e diagnóstico do câncer de mama no Brasil. Rev Bras Cancerol. [Internet] 2013 jul;59(3):459-66. [acesso em 22 set 2023]. Disponível em: http:// dx.doi.org/10.1590/0034-7167-2016-0155.

27-Bray F, Ferlay J, Soerjomataram I, Siegel RL, Torre LA, Jemal A. Global cancer statistics 2018: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries. CA Cancer J Clin. 2018;68(6):394-424. [acesso em 05 mai 2024] Disponível em: https://doi.org/10.3322/caac.21492

28-Vanni G, Pellicciaro M, Materazzo M, Bruno V, Oldani C, Pistolese CA, et al. Lockdown of Breast Cancer Screening for COVID-19: Possible Scenario. In Vivo. [Internet] 2020;34(5):3047-53. [accessed on 25 jul 2023]. Available from: https://doi.org/10.21873/invivo.12139.

29- Marques CAV, Figueiredo EN DE, Gutiérrez MGR DE. Breast cancer screening program for risk groups: facts and perspectives. Revista Brasileira de Enfermagem, 2022, 75 (3): e20210050.

30-Moraes DC, Almeida AM, Figueiredo EN, Loyola EAC, Panobianco MS. Opportunistic screening actions for breast cancer performed by nurses working in primary health care. Rev Esc Enferm USP. [Internet] 2016;50(1):14-21. [accessed on 12 nov 2023]. Available from: https://doi.org/10.1590/S0080-623420160000100002 28.

31-Melo FBB, Marques CAV, Rosa ADS, Figueiredo EN, Gutiérrez MGR. Actions of nurses in early detection of breast cancer. Rev Bras Enferm. [Internet] 2017;70(6):1119-28. [accessed on 12 jan 2024]. Available from: https://doi.org/0.1590/0034-7167-2016-0155 29.

32-Teixeira MS, Goldman RE, Gonçalves VC, Gutiérrez MGR, Figueiredo EN. Primary care nurses´ role in the control of breast cancer. Acta Paul Enferm. [Internet] 2017;30(1)1-7. [accessed on 12 fev 2024]. Available from: https://doi.org/10.1590/1982-0194201700002 30.

33-Barbosa YC, Rabêlo PPC, Aguiar MIF, Azevedo PR, Cortês LSL. Early detection of breast cancer: how do the nurses in Primary Health Care perform? Rev APS. [Internet] 2018;21(3):375-86. [accessed on 20 fev 2024]. Available from: https://doi.org/10.34019/1809-8363.2018.v21.16505

34-Migowski A, Silva GA, Dias MB, Diz MD, Sant'Ana DR, Nadanovsky P. Guidelines for early detection of breast cancer in Brazil. II - New national recommendations, main evidence, and controversies. Cad Saude Publica. [Internet] 2018;34(6):e00074817

35- Dourado CAR DE O, et al. Câncer de mama e análise dos fatores relacionados aos métodos de detecção e estadiamento da doença. Cogitare Enfermagem, 2022; 27: e81039.

36-Gonçalves CV, Camargo VP, Cagol JM, Miranda B, Mendoza-Sassi RA. Women's knowledge of methods for secondary prevention of breast cancer. Cien Saude Colet. [Internet]. 2017 ;22(12):4073-82. [accessed on 09 mar 2024]. Available from: http://dx.doi.org/10.1590/1413-812320172212.09372016.

37-Girianelli VR, Gamarra CJ, Azevedo e Silva G. Os grandes contrastes na mortalidade por câncer do colo e de mama no Brasil. Rev Saúde Pública. [Internet] 2014;48: 459-67. [accessed on 12 set 2023]. Available from: https://doi.org/10.1590/S0034-8910.2014048005214

38-Azevedo e Silva G, Bustamante-Teixeira MT, Aquino EML, Santos-Silva I. Acesso à detecção precoce do câncer de mama: uma análise a partir dos dados do sistema de informação em saúde. Cad. Saúde Pública. [Internet] 2014;30(7):1537-50. [acesso em 12 jul 2023]. Disponível em: https://doi.org/10.1590/0102-311X00156513

39-Romeiro-Lopes TC, Gravenab AAF, Dell'Agnoloc CM, Pires IHV, Rocha-Brischiliarie SC, Borghesana DHP, et al. Cobertura estimada de mamografia no estado do Paraná. Ciênc Saúde. [Internet] 2015;8(2):48-53. [acesso em 12 nov 2023]. Disponível em: https://doi.org/10.15448/1983-652X.2015.2.20219.

40-Bushatsky M, Lima KD, Moraes LX, Gusmão LT, Barros MB, Figueira Filho AS. Breast cancer: prevention of shares in primary health care. Rev Enferm UFPE. [Internet] 2014;8(10):3429-36. [accessed on 12 out 2023]. Available from: https://doi.org/10.5205/reuol.6039-55477-1-ED.0810201422.

41-Organização Pan-Americana da Saúde. Organização Mundial da Saúde. Agenda de saúde sustentável para as Américas 2018-2030: um chamado à ação para a saúde e o bem-estar na região [Internet]. 2017 [cited 2019 Mar 12]. Available from: http://iris.paho.org/xmlui/bitstream/handle/123456789/49172/CSP296por.pdf?sequence=1&isAllowed=y.