Breast cancer surveillance: practices identified by managers in Primary Care

Vigilância do câncer de mama: práticas identificadas pelos gerentes na Atenção Primária

Control del cáncer de mama: prácticas identificadas por los gerentes de la Atención Primaria

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Abstract

Objective: To analyze the breast cancer management practices identified by Primary Health Care managers.

Methods: This is a descriptive, cross-sectional study, carried out with 24 Health Units managers in Primary Care, of different configurations (traditional, Family Health Strategy and Basic Health Units with Family Health teams) and contemplating small, medium and large units, located in a city in the countryside of São Paulo. An instrument was used to identify screening and detection actions for breast cancer, with 32 questions and sub-items, according to the actions determined by the breast cancer management program in Brazil. The analysis was based on Donabedian Model's structure and process attributes.

Results: With regard to breast cancer management actions, all managers, 24 (100%), stated that they established priority in referring women with altered mammography and Clinical Breast Examination, and requesting mammography for women in the high-risk group. As for obstacles in the execution of these actions, most, 13 (54.2%), managers pointed out difficulties faced by the services, with a predominance of lack of health professionals and excessive demand.

Conclusion: The Primary Care Health Units have carried out actions to manage breast cancer, but there are behaviors that do not comply with the Ministry of Health's proposals. There is a need for greater implementation of educational actions, as the focus is curative. Also, greater investments are needed to increase preventive measures and enhance access to screening tests.

Resumo

Objetivo: Analisar as práticas no controle do câncer de mama identificadas pelos gerentes da Atenção Primária à Saúde.

Métodos: Estudo descritivo, transversal, realizado com 24 gerentes de Unidades de Saúde na Atenção Primária, de diferentes configurações (tradicionais, Estratégia de Saúde da Família e Unidades Básicas de Saúde com equipes de Saúde da Família) e contemplando unidades de pequeno, médio e grande porte, localizadas em um município do interior paulista. Foi utilizado um instrumento para identificar ações de rastreamento e detecção de neoplasias mamárias, com 32 questões e subitens, segundo as ações determinadas pelo programa de controle de câncer de mama no Brasil. A análise foi baseada nos atributos de estrutura e processo do Modelo Donabediano.

Resultados: Com relação às ações de controle de neoplasias mamárias, todos os gerentes, 24 (100%), afirmaram estabelecer prioridade no encaminhamento de mulheres com mamografia e Exame Clínico das Mamas alterados, e solicitação de mamografia para mulheres do grupo de alto risco. Quanto aos entraves na

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execução dessas ações, a maioria,13 (54,2%), dos gerentes apontaram dificuldades enfrentadas pelos serviços com predomínio de falta de profissionais de saúde e demanda excessiva.

Conclusão: As Unidades de Saúde da Atenção Primária têm realizado ações para o controle do câncer de mama, mas existem condutas que não estão em conformidades com as propostas do Ministério da Saúde. Existe a necessidade de maior implantação de ações educativas, pois o enfoque é curativo. Também, são necessários maiores investimentos para incrementar as medidas preventivas e potencializar o acesso aos exames de rastreio.

Resumen

Objetivo: Analizar las prácticas del control del cáncer de mama identificadas por los gerentes de la Atención Primaria de Salud.

Métodos: Estudio descriptivo, transversal, realizado con 24 gerentes de Unidades de Salud en la Atención Primaria, de diferente configuración (tradicionales, Estrategia Salud de la Familia y Unidades Básicas de Salud con equipos de Salud de la Familia) y tamaño (unidades de pequeño, mediano y gran porte), localizadas en un municipio del interior del estado de São Paulo. Se utilizó un instrumento para identificar acciones de rastreo y detección de neoplasias mamarias, con 32 preguntas y subítems, según las acciones determinadas por el programa de control del cáncer de mama en Brasil. El análisis se basó en los atributos de estructura y proceso del modelo de Donabedian.

Resultados: Con relación a las acciones de control de neoplasias mamarias, todos los gerentes, 24 (100 %), afirmaron que establecen prioridad en la derivación de mujeres con mamografía y examen clínico de las mamas alterado, y la solicitud de mamografía para mujeres del grupo de alto riesgo. Respecto a los obstáculos para ejecutar estas acciones, la mayoría de los gerentes, 13 (54,2 %), señaló las dificultades enfrentadas por los servicios, con predominio de falta de profesionales de la salud y demanda excesiva.

Conclusión: Las Unidades de Salud de la Atención Primaria realizan acciones para el control del cáncer de mama, pero existen conductas que no están en conformidad con las propuestas del Ministerio de Salud. Existe una necesidad de mayor implementación de acciones educativas, ya que el enfoque es curativo. También son necesarias mayores inversiones para incrementar las medidas preventivas y potencializar el acceso a los estudios de rastreo.

Introduction

Chronic Non-Communicable Diseases (CNCDs) are currently the ones that most affect and kill the population, with neoplasms being the second leading cause of death worldwide.[1] Among the neoplasms, breast cancer is a public health problem in developing countries, affecting thousands of women every year.[2]

At the local level, surveillance of CNCDs, such as breast cancer, is carried out through Primary Health Care (PHC), with Family Health Strategy (FHS) being the most appropriate model through which Health Surveillance (HS)[3] seeks to ensure comprehensive care, articulating health promotion, prevention, treatment and rehabilitation actions.[4,5]

HS is a theoretical model understood as the articulation of actions that seek to manage determinants, risks and damages to the health of the population living in delimited territories, from the perspective of comprehensive care, identifying problems that require continuous attention and monitoring by health professionals .[3]

In the case of breast cancer, PHC surveillance involves primary and secondary prevention actions, with screening and early detection through mammography being the main strategy adopted.[2] Such measures in Brazil are based on scientific guidelines, published in 2015, which aim to guarantee the quality of actions and the coverage of the female population with mammography (MMG), in order to reduce the breast cancer incidence and mortality rates.[2]

In this regard, considering that the actions developed in PHC are directly related to the quality of breast cancer surveillance strategies, its choice for the investigation site of this study is justified, in addition to being the care coordinator in the different care points of the Health Care Networks (RAS - *Redes de Atenção à Saúde*).[5]

For PHC to develop breast cancer management actions, there is a need for logistics that involve adequate physical space, communication and integration resources between the various services and qualification of professionals.[6] Furthermore, it requires greater autonomy and decision-making power from Basic Health Unit (BHU) managers, considering the need to organize the work process, articulation with other points of the RAS and management of health workers. [7]

Thus, this study aimed to analyze the practices in breast cancer management identified by PHC managers.

Methods

This is a descriptive, cross-sectional study, and part of a project entitled "*Ações no controle do*

câncer de mama: identificação das práticas na Atenção Básica", a multicenter research carried out in partnership between the *Escola Paulista de Enfermagem* at the *Universidade Federal de São Paulo* (EPE/UNIFESP) and the *Escola de Enfermagem de Ribeirão Preto* at the *Universidade de São Paulo* (EERP/USP), with PHC users, nurses and managers in the cities of São Luís do Maranhão/MA, Diadema, Ribeirão Preto and southeastern São Paulo/SP.

This study was carried out in Ribeirão Preto/SP, with PHC managers. In this city, PHC is structured in traditional BHU and FHS, which develop actions at the individual and collective levels. In some locations, the traditional BHU and FHS make up the same physical space and will be referred to as BHU with FHS.

The population consisted of managers of these health units of both sexes, without age or time restrictions. Managers who worked in more than one unit were interviewed only once, excluding the other units in which they worked.

At the time of data collection, the city had 42 PHC health units. Of these, 30 were selected, randomly, from the health production surveyed previously (small, medium and large units) and contemplating units: Traditional BHU, FHS and BHU with FHS.

The managers of the 30 selected units were invited, but 24 of them made up the sample, considering that two worked in two units each and one manager in three, excluding, therefore, four units. And two managers refused to participate in the research, excluding two more units.

After the managers agreed, the interviews were scheduled and carried out in a private place, in the health units, with an average duration of 40 minutes. Data were collected from August to December 2015.

An instrument with 32 questions and sub-items was used, organized according to the structure and process dimensions proposed by Donabedian (1988)[8] and according to the actions determined to PHC in the Breast Cancer Management Program, being validated by Marques (2015).[9]

The variables are described in Chart 1.

Chart 1. Description of variables included in the study according to structure and process dimensions

Structure attributes	Process attributes
- Arrangement of physical facilities and equipment: operating time at the BHU, number of offices, space for educational meetings.	- Flows: number of MMG performed breast/month, recording of the time between request and return of the result, factors that make the execution difficult. How to use computerized systems and problems encountered in using the systems.
- Team sizing and qualification: number of teams in FHS, complete teams, presence of specialists in gynecology and obstetrics.	- Presence and execution of protocols: Actions developed at BHU, factors that make these actions difficult.
- Presence and functioning of logistical resources: computerized systems	- Offer of training of health professionals: training on actions recommended by the Ministry of Health (MoH) and time of the last training.

Data were organized in a database and then a descriptive analysis of the data was performed, with the computational support of IBM SPSS 20 (Statistical Package for the Social Sciences).

This study was approved by the Ethics Committee of the EERP/USP (CAAE (*Certificado de Apresentação para Apreciação Ética* - Certificate of Presentation for Ethical Consideration) 16982513.7.1001.5393), and all participants signed the Informed Consent Form (ICF).

Results

The 24 managers were divided into: 15 (62.5%) from traditional BHU, 5 (20.8%) from FHS and 4 (16.7%) from BHU with FHS. Regarding the time of work in PHC, half of interviewees had up to five years of work [12 (50.0%)] and, also, half, 12 (50.0%), were specialists in areas related to public health.

Training in the actions recommended by the MoH for breast cancer management, through the Municipal Health Department (MHD), was mentioned by 15 managers (62.5%) who performed it less than five years ago.

According to the interviewees, ten (41.6%) health units had up to 10 years of operation. For the item number of offices, managers reported that most BHU had up to five offices [15 (62.5%)]; and, in terms of structure and resources, most of them had nursing offices [18 (75.0%)], and in the other six (25%) there was sharing with the doctor.

All units [24 (100.0%)] had an equipped room with adequate space for collecting Pap smears and

18 (75.0%) had space for educational meetings. Considering the FHS [five (20.8%)] and BHU with FHS [four (16.7%)], we obtained a total of 17 FHt (Family Health teams); of these, six (35.3%) were incomplete. In seven (77.8%) FHS or BHU with FHS, there was the presence of a medical professional specializing in gynecology and obstetrics.

The units that did not have FHS totaled 19 (79.2%) [15 (62.5%) traditional and four (16.7%) BHU with FHS]. Among them, 18 (94.7%) had professionals specializing in gynecology and obstetrics, and in 17 (94.4%) of them had doctors, and in one (5.6%) there is a doctor and nurse who specialize in gynecology and obstetrics.

Regarding computerized systems, most health units have implemented the SIAB [20 (83.3%)] and SISCAN [22 (91.7%)]. The main problems reported for using the systems were precarious internet network, many items to be filled in and scarce human resources. Most managers [16 (66.7%)] reported that such technological resources allow the programming of actions, with emphasis on educational actions, 14 (87.5%).

All participants reported that none of the selected units had MMG or breast ultrasound (US) performed, that the reference services in their areas of coverage for performing these exams were public and that there were obstacles in carrying them out, MMG (13 - 54.2%) and US (11 - 45.8%).

Most units [20 (83.3%)] record the number of MMG requested per month in the service and four (16.7%) do not have this information. Regarding the recording of the time of MMG request and the return of results, most BHU [17 (70.8%)] have such a record and seven (29.2%) do not have this control. Two (11.8%) managers reported that the mammographic report is ready in around 20 days; six (35.3%) reported that the return takes, on average, 30 days; another six (35.3%) reported a period of approximately 40 days and one (5.8%) said it took approximately 45 days for the results to be returned.

Regarding the training of health professionals who worked in the units regarding the recommended actions for breast neoplasm management, 22 (91.7%) managers reported that most professionals

were trained, with 12 (54.5%) stated that training took place less than six months ago.

Table 1 characterizes breast cancer management actions that were identified by the managers of the researched health units.

Table 1. Characterization of breast cancer management actions developed in basic health units, and the difficulties in carrying them out, according to managers

Characterization	n(%)
Actions	
Identifying women in the prioritized age group	19(79.2)
Implementation of the women's agenda	2(8.3)
Clinical breast examination (CBE)	23(95.8)
Active search for women who have never underwent CBE	8(33.3)
Priority in referring women with altered CBE	24(100.0)
Routine follow-up in normal and low-risk CBE	23(95.8)
MMG request for high-risk women	24(100.0)
Active search of women with MMG report suspicious for malignancy and no return to seek the result	15(62.5)
Priority in referring women with altered MMG results	24(100.0)
Active search for women who missed MMG	4(16.7)
Measures for referring suspected cases of breast cancer to the referral unit	23(95.8)
Educational meetings on measures to manage breast cancer	11(45.8)
Difficulty	
Lack of equipment	1(4.2)
Lack of health professionals	7(29.2)
Excessive demand	7(29.2)
Users' beliefs	5(20.8)
Exam scheduling and/or return	6(25.0)
Other	7(29.2)

*Note: Each frequency was calculated on the total number of the sample (n=24). The total does not correspond to 100%, as each individual could cite more than one response category

Discussion

Regarding the structure attributes, most managers were qualified, trained and had management experience. Most units had space for nursing care, with a private room for gynecology consultation and physical examination, including CBE and Pap smears, as well as space for educational meetings. Almost all units had a medical professional specializing in gynecology and obstetrics. The training of managers is compatible with other studies that also pointed out the search of professionals to improve their qualification and consequent appreciation of their area of work.[4,5,10]

Computerized systems were implemented in the units; however, they were usually fed by a professional other than the manager. This action would not be an obstacle if managers used the consoli-

dation of data to plan HS actions in breast cancer management in their assigned area, through the analysis of indicators. Thus, authors reinforce that a good structure does not determine a quality standard; however, good structural conditions contribute to an adequate care process and more favorable outcomes.[11,12]

Thus, the absence of an adequate structure that favors the development of collective interventions often compromises the change from the care model to the HS perspective. However, to estimate the quality of services, Donabedian (1988)[8] recommends the joint analysis of the structure, process and result, instructing that the study of the process is the best indicator to investigate the content of the attention offered in the first point of care. The best structural conditions can be misused, but professional excellence can result in beneficial effects, even in adverse conditions, i.e., a good process can generate positive results; however, an adequate structure being misused will never bring good results. Thus, it is possible to have quality health care in a situation of structural precariousness.

Regarding the process attributes, although imaging tests for breast cancer screening are not performed in the units, the period between MMG request and the return of the results to the health units was considered adequate by the managers. There are, however, obstacles such as greater control of absent women to perform the exams and access to information by the contracted provider, without which the maintenance of surveillance in the periodicity of carrying out MMG is compromised, which constitutes the main strategy for the early detection of cancer.[2]

Managers believed that computerized systems are important for planning cancer management actions. However, they pointed out that difficulties such as lack of human resources and excessive demand compromise the execution of preventive actions, not using these systems as a management tool can make it difficult to access useful information for monitoring interventions for the early detection of breast cancer.[6]

Regarding breast cancer management actions, all managers stated that referral activities for women with altered MMG were developed at the BHU as a priority and MMG request for women in the high-risk group and priority in referring women with altered CBE. These results are important for women who need care when there is a suspicion or a confirmed diagnosis of breast cancer. However, there is a predominance of curative actions in the units studied, based on the complaint-conduct, focusing on the problem and not on prevention, which makes it difficult to reach early diagnosis, recommended in the guidelines for disease management.[2]

It is worth mentioning that the HS model, when considered from the perspective of health promotion, advocates the development of actions that precede the damage, with emphasis on problems that require continuous attention and monitoring and approach to risk assessment, such as breast cancer.[13]

Almost all managers reported that most professionals were trained in relation to breast cancer management actions, and a little more than half said that the training took place less than six months ago. Thus, comparing the results of this study with the results of another study carried out with nurses working in the same health units, it is worth noting that about half of the nurses interviewed said they had not received training for breast cancer management actions.[5] Thus, there is a contradiction between the statements of nursing professionals and their managers in relation to such training. Therefore, the importance of training and sensitization of professionals involved in woman care and the fundamental role of management of health services in promoting continuing education to their teams can be seen.

The health unit managers stated that an active search was carried out for women with a suspected MMG report for malignancy and with no return to seek the result. This monitoring and active search is carried out by a qualified professional from the Program for Integrated Women's Health Care (PAISM) of the city.

In the assumptions of HS, monitoring women who did not show up for examination is essential, since the follow-up of those who underwent MMG and presented alterations is important, despite the curative approach. Once absentee women "get lost"

in the network, they may be picked up again only when there is already a change in place, compromising early diagnosis.[2]

In Ribeirão Preto, SP, most managers claimed that there is no way to monitor the control of absentees, as it is the users who keep the referral guide for examination. However, they also stated that the health unit has a record of the request time and the return of the result. Therefore, managing women who do not attend her exams would be easily detected, since, when they are absent, the exam is not performed and, therefore, there is no report to be issued.

Still mentioning the importance of an active search, it is known that this is a strategy capable of increasing compliance of women with mammographic screening, contributing to the effectiveness of breast cancer management program actions, since there is a need to comply target population coverage targets and avoid over-screening only one segment of women.[14]

Thus, it is confirmed that surveillance actions are essential for an effective management of breast cancer screening/management strategies, as they promote coverage for the population at greater risk and point out ways to reduce morbidity and mortality rates from this disease.[2,6]

In this study, the implementation of health education meetings on breast cancer for users was mentioned by less than half of the managers, although, at another time, most of them have stated that they use the data generated in the computerized systems to plan educational actions. When discussing the obstacles to practices in breast cancer management, they pointed out difficulties faced by the services, with a predominance of lack of health professionals and excessive demand.

PHC professionals must develop educational actions, individually or collectively, to promote community mobilization and participation, in breast cancer management.[4,5,10] In Ribeirão Preto, regarding the performance of educational activities in PHC health units, most nurses reported not carrying them out.[5] This data corroborates another study carried out with users, in which 95.4% of the 631 women investigated said they had never participated in health education activities in the health units they attend in the municipal health network.[15]

Diadema's study, on the other hand, draws attention to the educational meetings carried out by only 52.9% of the 70 nurses investigated, highlighting that it is a city with 100% FHS coverage, a model that prioritizes, within the concept of health promotion, preventive activities. The authors signaled the importance of health education in PHC for acquisition of knowledge by users, with a view to early detection of the disease,[4] prioritizing the proposal of guidelines that are based on the tripod: population alert to signs and symptoms; sensitized and trained health professionals; prepared health services.[2] It is interesting to note in this same study that, among the nurses who carried out educational activities, a little more than half received training regarding MoH norms for breast cancer management.[4]

In addition to this, the actions for early detection of breast cancer carried out by nurses differed in relation to the arrangement of the health units, and those of the FHS model were closer to MoH recommendations.[16]

Thus, these data are in line with those identified in studies with nurses in which lack of time, a direct reflection of the lack of professionals, and excessive demand, which can generate work overload, constituted obstacles to the implementation of actions for breast cancer management in PHC.[4,10]

Another study of this research, carried out with 133 nurses from 38 BHU in southeastern São Paulo, found a statistically significant association for carrying out educational activities with training for the recommended actions for breast cancer management, in which trained nurses promoted more health education activities for users.[10]

Thus, strategies to improve PHC and health education quality for the population should be considered by public policies to reduce breast cancer.[17]

Therefore, the structure and process attributes are partially met in relation to women's health care in breast cancer surveillance in the PHC of the studied city.

As a limitation of this research, it is possible to consider that the methodological design does not allow a long-term follow-up of health units, not al-

lowing to analyze the attributes of results, i.e., the impact of actions for breast cancer management in the city, signaling the need to continue carrying out studies like this one.

Conclusion

The PHC Units have carried out actions to manage breast cancer, but there are some of them that do not comply with MoH proposals. Thus, it is concluded that there is a need for greater implementation of educational actions, as the focus is still curative. Also, greater investments are needed to increase the measures and minimize the repressed demand, enhancing access to screening tests.

Collaborations

Loyola EA, Goldman RE, Figueiredo EN, Almeida AM and Panobianco MS participated in study design, data analysis and interpretation, article writing, critical content review and approval of the final version to be published. Tintori JA participated in content critical review and approval of the final version to be published.

Acknowledgments

References

1. Malta DC, Bernal RT, Lima MG, Araújo SS, Silva MM, Freitas MI, et al. Noncommunicable diseases and the use of health services: analysis of the National Health Survey in Brazil. Rev Saude Publica. 2017;51(Suppl 1):4s.

2. 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. 2018;34(6):e00074817.

3. Teixeira CF, Paim JS, Vilas Boas AL. SUS, modelos assistenciais e Vigilância da Saúde. In: Rozenfeld S, org. Fundamentos da Vigilância Sanitária. Rio de Janeiro: Editora FIOCRUZ, 2000, p. 49-60.

4. 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.

5. Moraes DC, Almeida AM, Figueiredo EN, Loyola EA, Panobianco MS. Opportunistic screening actions for breast cancer performed by nurses working in primary health care. Rev Esc Enferm USP. 2016;50(1):14-21.

6. Goldman RE, Figueiredo EN, Fustinoni SM, Souza KM, Almeida AM, Gutiérrez MG. Brazilian Breast Cancer Care Network: the perspective of health managers. Rev Bras Enferm. 2019;72(Suppl 1):274-81.

7. Oliveira SB, Soares DA. Acesso ao cuidado do câncer de mama em um município baiano: perspectiva de usuárias, trabalhadores e gestores. Saúde Debate. 2020;44(124):169-81.

8. Donabedian A. The quality of care. How can it be assessed? JAMA. 1988;260(12):1743-8. Review.

9. Marques CA, Figueiredo EM, Gutiérrez MG. Validation of an instrument to identify actions for screening and detection of breast cancer. Acta Paul Enferm. 2015;28(2):183-9.

10. Melo FB, Marques CA, Rosa AS, Figueiredo EN, Gutiérrez MG. Ações do enfermeiro na detecção precoce do câncer de mama. Rev Bras Enferm. 2017;70(6):1119-28.

11. Zanin LE, Albuquerque IM, Melo DH. Speech, language and hearing sciences and the Family health strategy: implication of structural dimension in the quality of speech, language and hearing care. Audiol Commun Res. 2015;20(3):255-61.

12. Oliveira JL, Gabriel CS, Fertonani HP, Matsuda LM. Management changes resulting from hospital accreditation. Rev Lat Am Enfermagem. 2017;25:e2851.

13. Pallarés EC, Alves GG, Aerts D, Câmara S, Tovo M. Atenção primária em saúde: a adequação ao modelo da vigilância da saúde em município do sul do Brasil. Aletheia. 2016;49(2):89-109.

14. Ohl IC, Ohl RI, Chavaglia SR, Goldman RE. Public actions for control of breast cancer in Brazil: integrative review. Rev Bras Enferm. 2016;69(4):746-55.

15. Ferreira SM. Controle do câncer de mama no município de Ribeirão Preto, SP: panorama das ações na perspectiva da usuária [tese]. 134 p. Ribeirão Preto (SP): Escola de Enfermagem, Universidade de São Paulo; 2016 [citado 2021 Set 17]. Disponível em: https://www.teses.usp.br/teses/disponiveis/22/22133/tde-25012017-171112/publico/SIMONEMARADEARAUJOFERREIRA.pdf

16. Melo FB, Figueiredo EN, Panobianco MS, Gutiérrez MG, Rosa AS. Early detection of breast cancer in primary care center. Acta Paul Enferm. 2021;34:eAPE02442.

17. Figueiredo FW, Almeida TC, Schoueri JH, Luisi C, Adami F. Association between primary care coverage and breast cancer mortality in Brazil. PLoS One. 2018;13(8):e0200125.