Bushatsky M, Barros MBSC, Cabral LR, et al.

Breast cancer: prevention...



RESEARCH

Câncer de mama: ações de prevenção na estratégia de saúde da família

Breast cancer: prevention actions in the family health strategy

Cáncer de mama: acciones de prevención en la estrategia salud de la familia

Magaly Bushatsky¹, Mariana Boulitreau Siqueira Campos Barros², Luciana da Rocha Cabral³, Juliana da Rocha Cabral⁴, Jéssica Rayanne da Silva Bezerra⁵, Antônio Simão dos Santos Figueira Filho⁶

ABSTRACT

Objective: Surveying the actions for preventing breast cancer, according to the levels set by Leavell & Clark, at the Family Health Strategy in Sirinhaém (PE). Method: This is a quantitative study, carried out with 261 women aged > 18 years old, and enrolled in the FHS. The collection took place in the Family Health Units in the town, from August 2012 to January 2013, through a structured questionnaire. Results: The age extremes were of 18 and 84 years old. Among the interviewed women, 12.6% had received guidance on the theme, 49.4% practice self-examination, and 13.8% indicated they have undergone clinical breast examination. Conclusion: it was observed precariousness regarding the health promotion and protection actions and the early diagnosis services for breast cancer. Descriptors: Breast neoplasms, Breast cancer prevention, Primary health care.

RESUMO

Objetivo: Levantar as ações de prevenção ao câncer de mama, segundo os níveis estabelecidos por Leavell & Clarck, na Estratégia Saúde da Família de Sirinhaém (PE). Método: Trata-se de estudo quantitativo, desenvolvido com 261 mulheres com idades > 18 anos e cadastradas na ESF. A coleta ocorreu nas unidades de Saúde da Família do município, de agosto de 2012 a janeiro de 2013, por um questionário estruturado. Resultados: Os extremos etários foram 18 e 84 anos. Entre as entrevistadas, 12,6% haviam recebido orientação acerca do tema, 49,4% praticam o autoexame e 13,8% indicaram ter realizado o exame clínico das mamas. Conclusão: Observou-se precariedade em relação às ações de promoção e proteção à saúde e aos serviços de diagnóstico precoce do câncer de mama. Descritores: Neoplasias de mama, Prevenção de câncer de mama, Atenção primária à saúde.

RESUMEN

Objetivo: Evaluar las acciones de prevención al cáncer de mama, de acuerdo con los niveles establecidos por Leavell & Clark, en la Estrategia de Salud de la Familia de Sirinhaém (PE). Método: Esto es un estudio cuantitativo, desarrollado con 261 mujeres con edades > 18 años e inscritas en la ESF. La recogida ocurrió en unidades de Salud de la Familia del municipio, de agosto de 2012 a enero de 2013, por cuestionario estructurado. Resultados: Los extremos etarios fueron 18 y 84 años. Entre las encuestadas, 12,6% habían recibido orientación acerca del tema, 49,4% practican el auto-examen y 13,8% indicaron que habían realizado el examen clínico de las mamas. Conclusión: Se observó precariedad con relación a las acciones de promoción y protección a la salud y a los servicios de diagnóstico precoz del cáncer de mama. Descriptores: Neoplasias de la mama, Prevención del cáncer de mama, Atención primaria a la salud.

¹ Nurse. Adjunct Professor, Nursing College Nossa Senhora das Graças, University of Pernambuco (FENSG/UPE). Doctorship in Child and Adolescent Health at the Federal University of Pernambuco. Recife, Pernambuco. Email: magab@hotlink.com.br ²Nurse. Master student in Public Health at the Postgraduate Integrated Program in Community Health, Federal University of Pernambuco (UFPE). Recife. Email: maripernambucana@yahoo.com.br ³Graduate Student of the Nursing College Nossa Senhora das Graças/University of Pernambuco (FENSG/UPE). Recife. Email: lucabral06@hotmail.com ⁴ Graduate Nursing Student at Federal University of Pernambuco (UFPE). Recife. Email: jucabral06@hotmail.com ⁵ Graduate student at the University of Pernambuco / Nursing College Nossa Senhora das Graças (UPE/FENSG). Recife. Email: jeh_rayanne@hotmail.com ⁶ Physician. Regent Professor, University of Pernambuco (UPE). Doctorship in Clinical and Experimental Surgery, Federal University of Pernambuco (UFPE). Recife. Email: imr.figueira@yahoo.com.br.

INTRODUCTION

ecause of the high rate of incidence, cancer appears as an obvious public health problem world total¹. In this context, the mammary tumor shows - is the leading cause of cancer death in Brazil, whose estimates for the year 2013 indicate the occurrence of approximately 53.000 new cases of the disease.¹⁻²

Given this epidemiological relevance, it is important to stress that although the etiology is not fully understood, the age is still the main risk factor, especially before age 50. There are, however, other factors such as conditions related to the reproductive life of women, family history of breast cancer and the presence of high density in breast tissue that predispose to uncontrolled cell growth in the region.¹

It is clear that knowledge of these factors combined with the identification of the tumor at an early stage improves prognosis and increases the chance of cure.² Thus, the care offered to women in relation to breast cancer, should not remain focused only on services high complexity, it must exist at all levels of health care. Thus, the work of professionals of the Family Health Strategy (FHS) in pursuit of suspected neoplasm is crucial for assisting in the early detection, reducing the time for the start of cancer treatment.³

Created by the Ministry of Health in 1994, the FHS is characterized as a strategy to reorient the model of health care, offered to people from primary care, which is the ideal gateway to the public health service entrance.⁴ Therefore, the FHS Figures as initial link access to cancer care, to ensure that interventions prioritize the preventive aspects as a means of providing a safe and humane care for the population.³

The lack of knowledge about the disease, associated with the difficulty of access to diagnostic services favor to late detection of this neoplasm.⁵ Therefore, it is necessary that actions to prevent cancer that contribute to health promotion, early diagnosis, recovery and rehabilitation deserve priority focus, especially for women with limited information on the subject and unfavorable socioeconomic conditions.⁶

Thus, prevention is defined according Leavell & Clark, such as an anticipated action, in order to render unlikely the later progression of the disease. According to the same scholars, prevention is divided into three stages: primary (Promotion and Protection), secondary (early diagnosis and treatment) and tertiary (limiting disability).⁷

Despite the training of health professionals still be focused on enhancing the biomedical model, it is evident that there is need for training of future professionals, as students, to stimulate practices focused on primary prevention, particularly of neoplasms within the primary care health.⁸

Thus, active in the primary care team should be prepared to deploy prevention activities that enable the dissemination of information, the incentive to change behavior and build a critical awareness by women on issues that concern breast cancer. 9 In line,

encouraging breastfeeding, physical activity and healthy eating should be considered important tools of care.¹⁰

Still in this dimension, it is noteworthy that routine screening for the National Cancer Institute (NCI) recommends annual completion of clinical breast examination (CBE) and, when necessary, complementation tests with ultrasonography (USG) and/or make mammography it is indispensable.¹¹

It is important to act on behalf of the female population, with a view in discussions regarding possible issues that result in decision making and encouraging the development of practices that ensure the adherence of a healthier life style. This line of thought, the nurse is presented as a key to the development of educational practices to corroborate both the individual and collective health part, contributing to the transformation of reality. ¹²

Given the above, the present study arose from the need to know the access of women who use the public health service, the northeastern region of Brazil, front to prevention of breast cancer, in order to interest on the part of rulers and primary care professionals, the need for improvement of actions undertaken by the municipality on the subject, in order to encourage the construction of active strategies in improving health practices.

In light of these considerations, the aim of this study was to report the actions to prevent breast cancer, according to the levels established by Leavell & Clark, developed in the area covered by the Family Health Strategy (FHS) in the Municipality of Sirinhaém, Pernambuco.

METHOD

A cross-sectional, descriptive study was conducted using a quantitative approach. The sectional study is characterized as a methodological strategy that aims to direct observation of a particular group of individuals at a single time. While the descriptive research is defined as that exposes the characteristics of a given population through use of standardized techniques for data collection. Have exploratory research has improved the discovery of ideas or intuitions. If

The investigation was conducted with women ascribed the Family Health Units, in the Municipality of Sirinhaém located in the Forest Zone of Pernambuco, distant 90 Km from the capital Recife, in the period August 2012 to January 2013.

The research included the nine FHSs in the city in question, which had the participation of 261 women attending the service in the days of data collection. Among the selection criteria for the job included the age from 18 years old, be resident in the city and are registered in the area covered by the Family Health Strategy.

Regarding the health service, the city is structured currently, with a Hospital / Maternity nine Family Health Units (FHUs) and the Support Center for Family Health (NASF).

The selection of the city was based on the lack of information on the part of women, and the difficulty of access to the same diagnostic breast cancer services. Initially there was the presentation of the project managers involved in health, then being granted clearance for implementation of the same by consent.

To obtain information, a structured questionnaire was used for research. This instrument aims to socio-demographic characteristics of the subjects (age, education, marital status, family income, occupation and employment), identification of factors associated to women with breast cancer and raising of prevention, as the phases established by Leavell & Clark.⁷

After the invitation to participate in the study was requested by the users signing of the Instrument of Consent, for those who could not sign his name, a fingerprint impression of his thumb was performed. The identity protection was maintained throughout the process of data collection and dissemination of results. Data were stored in Microsoft Office Excel 2013, and tabulated with the help of EPI INFO version 3.5.2 software. In all findings was considered the level of significance of 5%.

The study complied with the standards and guidelines of Resolution 196/96 of the National Committee of Ethics in Research - CONEP involving humans, having been submitted to the Ethics Committee (CEP) of the Hospital Complex Oswaldo Cruz / Emergency Hospital of Pernambuco - HUOC/PROCAPE, and approved on July 6th, 2012, from CAAE number: 51627 04226612.5.0000.5192/2012, protocol and opinion.

RESULTS AND DISCUSSION

The research involved 261 female subjects. Table 1 shows the main sociodemographic characteristics of the researched, this becomes evident that the extremes were age 18-84 years old and the mean age was 39,09.

The study shows that 56,30% (147) of users in FHUs in the municipality in question are married or remained stable union. Regarding education, 68,60% (179) of the respondents have not completed high school.

With regard to employment, 41% (107) receive some monthly income. As to occupation, most of them perform activities that do not require a high level of education. The group most often consisted of such activities as domestic services as housewife/maid with 49,42% (129). Also stood out the number of women working as professor 6,13% (16) and farmer 3,83% (10).

Regarding the organization of the services offered by Primary Health Care, there are three FHUs located in the urban area and six in rural, so, the percentage of women interviewed was higher in the rural area, with 61,30% (160).

Table 1. Frequency distribution on the use of the Family Health Strategy, according to socio-demographic variables, Sirinhaém-PE, 2012/2013.

Socio-demographic variables	N	%
Total	261	100
Age (in years)		
18 - 35	124	47,5
36 - 45	52	19,9
46 - 55	41	15,7
56 and older	44	16,8
Race/Color		
Brown	168	64,4
White	63	24,2
Black	25	9,6
Other	5	1,9
Education		
Illiterate	26	10
From the 1 st to the 5 th Year	66	25,3
From the 5 th to the 9 th Year	66	25,3
High School Incomplete	21	8
High School Complete	66	25,2
Complete Higher Education	16	6,1
Employment		
Maid	46	17,6
Retired	24	9,2
Autonomous	25	9,6
Pensioner	12	4,6
Unemployed	104	39,8
Never worked outside the home	50	14
Family income		
Until 3 Minimum Salaries	243	93,1
More than 3 Minimum Salaries	18	6,9

Sequentially, were raised in Table 2 the primary prevention actions offered by the basic health care. It was evident that the activities of health education aimed at empowerment of the population for membership of a healthier life style are underdeveloped in USFs.

It is known that physical exercise contributes in a positive way in preventing some diseases, including cancer. Through the data obtained it was found that 23,40% (61) of the women who use the service practiced some type of physical activity, walking among these was the most reported with 81,96% (50). The most prominent frequency with which respondents-was exercised five days a week, appearing with 29,50% (18).

As for the smoke, it was revealed that 7,66% (20) of the surveyed were smokers, and mean duration of cigarette use was 27,9 years. When evaluating the performance of the FHS for these women to abandon the habit, it was observed that only 21,6% (8) were instructed to quit smoking.

About breastfeeding it was found that 80,85% (211) of respondents practicing/ or have practiced this act.

With regard to health education about prevention actions to breast cancer, the results showed that minority women had participated in informational activities on mammary neoplasm in the city in USF's study also revealed that 11,49% (30) of the sample were present in some educational time on the subject, but in other municipalities.

Also in the context of primary prevention include access of the population to information about self-examination; it was identified in 50,95% (133) that television is the primary means of guidance in this theme, and the health service was mentioned by only 13,40% (35) of women.

Table 2. Distribution of frequency of primary prevention actions carried out by the Family Health Strategy of the municipality of Sirinhaém-PE, 2012/2013.

Primary prevention	N	%
Total	261	100
Guidance on healthy eating		
Yes	52	20
No	208	80
Guidance on obesity		
Yes	37	14,2
No	222	85,1
Do not remember	2	0,8
Guidance on alcohol consumption		
Yes	26	10
No	66	25,3
Do not remember	66	25,3
Guidance on breast cancer		
Yes	33	12,6
No	227	87
Do not remember	1	0,4
Ever heard of self-examination		
Yes	226	86,6
No	34	13
Do not remember	1	0,4

According to the data shown in Table 3, which refers to the actions developed for secondary prevention in Primary Health Care (PHC), one can show that despite the knowledge of self-examination they do not correspond with their practice. Asked how often that users exercise self-examination, the result of higher numerical value was to annually cited by 44,96% (58) of the women, the monthly appeared with 7,2% (19).

Clinical examination, even though effective and easily accessible, was hardly mentioned by the interviewees, among those who have already performed this examination, it was found that 87,5% (14) were examined by doctors and only 12,5% (2) by nursing professionals.

Among women who have taken the breast ultrasound, we found that 35,21% (25) of them received FHUs referral of its catchment area. The others received from private practice and outpatient service of capital.

Regarding access to mammography, it was noticed that 51,87% (14) of the female population in the age range recommended by the National Cancer Institute (INCA), 50 to 69 years, had conducted the exam in the past two years. Of these, only 29,62% (8) were the routing of FHUs of the Municipality. The state capital, far from the city under study 90Km, was the most referenced for the purposes of local practice.

Table 3. Distribution of frequency of secondary prevention actions carried out by the Family Health Strategy of the municipality of Sirinhaém - PE, 2012/2013.

Secondary prevention	N	%
Self-examination		
Yes	129	49,4
No	132	50,6
Total	261	100
Clinic examination*		
Yes	16	13,8
No	99	85,3
Do not know	1	0,9
Total	116	100
Ultrasonography		
Yes	71	27,2
No	189	72,4
Do not know	1	0,4
Total	261	100
Mammography **		
Yes	27	52
No	25	48

Finally, in tertiary prevention was identified that 31,41% (82) of the study population were unaware of rehabilitation services to which the FHS would forward those diagnosed with the cancer in question.

The northeastern population of Brazil faces marked regional disparities that reflect the socioeconomic inequalities and access to health care. Correspondingly, the literature shows that mortality rates for breast cancer are increasing throughout Brazil, particularly in rural areas of the North and Northeast, for being the poorest regions of the country, have restricted access to screening and detection services early neoplasia.¹⁵

From the results obtained, there was a deficit of basic guidelines on physical activity, adopting healthy eating habits and no use of legal drugs like alcohol and tobacco, capable of providing an improved quality of life for users. In order to achieve a continuous improvement of actions undertaken by USF's and provide maintenance assistance is necessary to conduct practices that focus on primary prevention. From this, it is possible that the multidimensional approach to human being, considering it as a single, integral being, with different needs, community member. ¹⁶

It is known that a healthy diet and exercise contribute to promoting well-being. Moreover, these habits promote a relationship with the health-disease process quite evident, since they are carried out in order to obtain positive implications for health care. Therefore, the reality, then, requires thinking and attitudes towards professional FHS to that from paradigm shifts include the human being in its entirety, based on scientific principles. The principles is a scientific principle of the principles in the promoting well-being.

According to the World Cancer Research Fund increased intake of alcohol increases the risk for developing breast cancer, since this chemical may interfere with cellular metabolism and hormonal people. According to the same study, the consumption of red and preserved meat in salt foods also favor the emergence of cancer. Thus, there is the importance of encouraging health education by the FHS team for users in adoption of healthy lifestyle habits that reflected not only in the prevention of cancers, such as in a range of chronic diseases.

One issue that should also be discussed within the FHS, through guidance offered to the population, obesity is because of its impact on health and the increasing incidence of obesity in Brazil and in the world.¹⁹

Also in this context, it is worth noting the influence of smoking on the onset of neoplastic tumors, including breast. Substances present in cigarette still lead to pulmonary and cardiovascular diseases.²⁰

Given the above, the educational actions appear as successful strategy because they allow the dissemination of knowledge through discussion of a proposed topic. Moreover, it favors the creation of a space for reflection and effective exchanges so that participants can answer your questions, share learning's and adopting new measures against the addressed health issues.²¹ Nevertheless, an educational intervention is essential to public health programs, they can help control chronic diseases of high incidence in Brazil.²⁰

Breastfeeding is found inserted in the primary prevention of breast cancer by providing protection to women in pre-and postmenopausal women.¹⁸ The high percentage in relation to breastfeeding showed a good frequency of respondents with this practice, a factor considered protective for the disease in question.

Currently, the Consensus Control of Breast Cancer does not mention the breast self-examination (BSE) as a means of early detection, indicating only mammography and clinical examination; while ultrasonography (USG) is the method of choice for imaging evaluation of palpable lesions in women younger than 35 years old ²². However, one study found that women who exercise AEM can more easily detect changes in the breast compared them with those who do not develop such practice.²³

From this perspective, it was observed that research participants in a representative quantitative never performed breast self-examination among those used to do it most did not do it correctly. In line, access to information and a well-structured health system can function as a quality indicator for the encouragement methods of early diagnosis of diseases.²⁴

Considering the need for early detection of breast tumor, clinical breast examination (CBE) is understood as part of comprehensive women's health care, should be conducted annually in all queries, regardless of age.²² In view of that, the nurse in your health care practice units is facing a promising field in implementing the CBE. Thus, you can cover the

Bushatsky M, Barros MBSC, Cabral LR, et al.

health care coverage ahead of breast cancer population, a fact which can be explained by this profession to be part of the family health teams and have a closer relationship with patients.²⁵ These data showed grace in making the CBE, allowing identifying inequities of access to the service in the City of Sirinhaém.

In clinical practice, the use of objective ultrasound diagnosis of early changes in the breast, however, must be respected their proper indications. The mammary gland is characterized by presenting fabrics with different sonographic patterns, which are influenced by age, hormonal level and individual characteristics, this being the reason why there are differences in directing the patient to ultrasound and/or mammography. The survey data expressing a low percentage of women who have underwent this examination, which connotes a lack of care offered to young methods of detecting breast cancer population.²⁶

Mammography is considered an effective means for cancer screening, is a safe intervention for early detection, so that the primary goal is the reduction of mortality rates. ²⁷ There was, in general, that the City has not studied the mammography available in public for examination, having only one in private service. Moreover, the offer of referral by FHUs proved deficient. This situation reflects aspects that can affect the quality of care provided by the service and at an advanced stage at diagnosis. ²⁸

The proper conduct of referrals of breast exams has changed the paradigm of the current situation, showing positive results in early cancer detection. From the interest and awareness among health professionals of the FHS's you can start planning projects to assist in the control of breast cancer in order to ensure higher rates of women screened.²⁹

There are many challenges to be overcome and faced by managers of health policies in the implementation of strategies to reorient services at the prospect of getting quality comprehensive health care for women, especially those most in need of information, and with special focus on the more vulnerable to low coverage of preventive practices.³⁰

Finally, for cases diagnosed positive for cancer, it is considered that the effect carries various behavioral conflicts on women and their families. Therefore, it is of fundamental importance to develop actions that focus on tertiary prevention, along with the involvement of a multidisciplinary team within the APS to minimize complications and disability that requires treatment. The support team of family health function is to intervene in psychobiological, spiritual, social and palliative care issues.

CONCLUSION

The findings of this study indicate lack of practices to prevent breast cancer, offered from the Family Health Strategy, for the female population of the municipality in question, at all stages established by Leavell and Clark. This fact explains the low access of users to the promotion and protection of health, early diagnosis of breast cancer services.

Bushatsky M, Barros MBSC, Cabral LR, et al.

Breast cancer: prevention...

Therefore, the results reinforce the need to implement measures to contribute to the improvement of care delivered within the health sector Sirinhaém - PE as a way to reduce exposure to extrinsic factors causing breast cancer and other chronic diseases as well as increase the quality of life of women living in the city.

Becomes evident the importance of empowering health professionals , and work with a multidisciplinary team in order to face the challenges of public health in addition to humanize and improve care for women .

Nursing turn, especially in USF's, is capable of during their consultations, transmit appropriate stimulus for a healthy nutrition, physical activity information, exclusive breastfeeding until 6 months of self-examination for knowledge of body of clinical examination with frequency and ultrasound and mammography examinations where these are deemed necessary.

Finally, it is clear that the team of family health and municipal management, according to local governance and the fact they are able to provide preventive actions depending on the performance capacity of the family health strategy for coping with breast cancer resulting in the construction of an efficient support network for early diagnosis.

REFERENCES

- 1. Ministério da Saúde (Brasil). Instituto Nacional de Câncer José Alencar Gomes da Silva (INCA). Estimativa 2012: incidência de câncer no Brasil. Rio de Janeiro: Ministério da Saúde, 2011.
- 2. Ministério da Saúde (Brasil). Instituto Nacional de Câncer José Alencar Gomes da Silva (INCA), Divisão de Apoio à Rede de Atenção Oncológica. Programa Nacional de Controle do Câncer de Mama. Rio de Janeiro: Ministério da Saúde, 2011.
- 3. Ministério da Saúde (Brasil). Instituto Nacional de Câncer José Alencar Gomes da Silva (INCA), Instituto Ronald McDonald. Diagnóstico precoce do câncer na criança e no adolescente. Rio de Janeiro: Ministério da Saúde, 2011.
- 4. Rosa P. [homepage na Internet]. Brasília: Portal da Saúde, 2012 [atualizada em 16 mar 2013; acesso em 23 mai 2013]. Disponível em:http://portalsaude.saude.gov.br/portalsaude/noticia/4511/162/saude-da-familia-ganha-mais-de-800-profissionais.html.
- 5. Bushatsky M, Barros MBSC, Interaminense INCS, Rosendo PG, Beltrão Neto JE, Figueira Filho ASS. Câncer de mama masculino: estudo de caso em dois serviços especializados da cidade do Recife, Brasil. Rev enferm UFPE on line [Internet]. 2011 jun [acesso em 19 fev 2013];5(4):951-6.Disponível em:http://www.revista.ufpe.br/revistaenfermagem/index.php/revista/article/view/1415/pdf_518.

Bushatsky M, Barros MBSC, Cabral LR, et al.

Breast cancer: prevention...

- 6. Saldanha MS, Gomes JAN, Santos IM, Pinheiro DN. A importância da prática educativa com mulheres ribeirinhas da ilha de Cotijuba, Belém-Pará 2010. Rev pesqui cui fundam Online [Internet]. 2010 out/dez [acesso em 2013 fev 19]; 2(Ed. Supl.):717-9.Disponível em:http://www.seer.unirio.br/index.php/cuidadofundamental/article/view/1104/pdf_266.
- 7. Leavell S, Clark EG. Medicina preventiva. São Paulo: McGraw-Hill; 1976.
- 8. Cortez EA, Miranda GMS, Sant'Anna MC, Rafael RMR. Formação profissional do enfermeiro para prevenção da neoplasia mamária. Rev pesqui cui fundam Online [Internet]. 2010 out/dez [acesso em 2013 fev 20];2(4):1264-74. Disponível em:http://www.seer.unirio.br/index.php/cuidadofundamental/article/view/728/pdf_84.
- 9. Silva ARS, Alves ERP, Barros MBSC, Bushatsky M, Souto CMMR, Filho ASSF. Educação em saúde para detecção precoce do câncer de mama. Rev RENE [Internet]. 2011 [acesso em 2013 fev 19];12(n. esp.):952-9.Disponível em:http://www.revistarene.ufc.br/revista/index.php/revista/article/view/319/pdf.
- 10. Ministério da Saúde (Brasil). Instituto Nacional de Câncer José Alencar Gomes da Silva (INCA). Estimativa 2010: incidência de câncer no Brasil. Rio de Janeiro: Ministério da Saúde, 2009.
- 11. Ministério da Saúde (Brasil). Instituto Nacional de Câncer José Alencar Gomes da Silva (INCA). Parâmetros para o rastreamento do câncer de mama: recomendações para gestores estaduais e municipais. Rio de Janeiro: Ministério da Saúde, 2009.
- 12. Oliveira AM, Pozer MZ, Silva TA, Parreira BDM, Silva SR. Ações extensionistas voltadas para a prevenção e o tratamento do câncer ginecológico e de mama: relato de experiência. Rev esc enferm USP [Internet]. 2012 fev [citado em 19 fev 2013];46(1):240-5.Disponível em:http://www.scielo.br/pdf/reeusp/v46n1/v46n1a32.pdf.
- 13. Medronho RA, Bloch KV, Werneck GL. Epidemiologia. 2ª ed. São Paulo (SP): Atheneu; 2009. 685p.
- 14. Gil AC. Como elaborar projetos de pesquisa. 4ª ed. São Paulo (SP): Atlas; 2002.
- 15. Schmidt MI, Duncan BB, Silva GA, Menezes AM, Monteiro CA, Barreto SM, et al. Doenças crônicas não transmissíveis no Brasil: carga e desafios atuais. The Lancet: Sáude no Brasil [Internet]. 2011 [citado em 19 fev 2013];4:61-74.Disponível em: http://www2.saude.ba.gov.br/divep/arquivos/COAGRAVOS/GT%20%C3%93bito%20Infantil/R evista%20Lancet%20-%20S%C3%A9rie%20Brasil/brazilpor4.pdf.
- 16. Pinheiro APB, Silva MM, Stipp MAC, Firmino F, Moreira MC. Uma reflexão sobre o cuidado de enfermagem na emergência oncológica. Rev pesqui cuid fundam online [Internet]. 2011 jan/mar [citado em 12 mai 2013];3(1):1747- 52.Disponível em:http://www.seer.unirio.br/index.php/cuidadofundamental/article/view/1292/pdf_373.
- 17. Cardoso FS, Ferreira EL. Um olhar sobre o câncer de mama: a atividade física e seu significado para mulheres participantes de grupo de apoio. RUA [Internet]. 2010 jun [citado em 22 mai 2013];1(16):193-219.Disponível em:http://www.labeurb.unicamp.br/rua/pages/pdf/16-1/9-16-1.pdf.
- 18. World Cancer Research Fund (US). American Institute for Cancer Research. Food, Nutrition, Physical Activity, and the Prevention of Cancer: a Global Perspective. Washington DC: World Cancer Research Fund, 2007.

19. Pinho VFS, Coutinho ESF. Variáveis associadas ao câncer de mama em usuárias de unidades básicas de saúde. Cad saúde pública [Internet]. 2007 mai [citado em 06 mar 2013];23(5):1061-9.Disponível em:http://www.scielo.br/pdf/csp/v23n5/08.pdf.

- 20. Pirhardt CR, Mercês NNA. Fatores de risco para câncer de mama: nível de conhecimento dos acadêmicos de uma universidade. Rev enferm UERJ [Internet]. 2009 jan/mar [citado em 05 mar 2013];17(1):102-6.Disponível em:http://www.facenf.uerj.br/v17n1/v17n1a19.pdf.
- 21. Kim DD, Araujo ALL, Tsai AIA, Kojima FH, Takashima JSI, Junior LFO, et al. Saber é prevenir: uma nova abordagem no combate ao câncer de mama. Ciênc saúde coletiva [Internet]. 2010 jun [citado em 05 maio 2013]; 15(suppl.1):1377-81.Disponível em:http://www.scielosp.org/scielo.php?script=sci_arttext&pid=S1413-81232010000700047&lng=pt..
- 22. Ministério da Saúde (Brasil). Instituto Nacional do Câncer José de Alencar Gomes da Silva (INCA). Controle do câncer de mama: documento de consenso. Rev bras cancerol 2004; 50(2):77-90.
- 23. Davim RMB, Torres GV, Cabral MLN, Lima VM, Souza MA. Autoexame de mama: conhecimento de usuárias atendidas no ambulatório de uma maternidade escola. Rev latino am enferm [Internet]. 2003 jan/fev [citado em 25 maio 2013];11(1):21-7.Disponível em:http://www.scielo.br/pdf/rlae/v11n1/16555.pdf.
- 24. Hernández OO, Cabrera MFF, Vicente SP, Arias CD, Hernández JE, Serrano NO. Supervivencia en cáncer de mama tras 10 años de seguimientoen las provincias de Granada y Almería. Rev esp salud pública [Internet]. 2010 nov/dez [citado em 25 maio 2013];849(6):705-15.Disponível em:http://www.redalyc.org/articulo.oa?id=17015456003
- 25. Cestari MEW, Zago MMF. A atuação da enfermagem na prevenção do câncer na mulher: questões culturais e de gênero. Ciênc cuid saúde [Internet]. 2012 [citado em 22 maio 2013];11(suplem.):176-82.Disponível em:http://www.periodicos.uem.br/ojs/index.php/CiencCuidSaude/article/.../17073/pdf
- 26. Vasconcelos RG, Uemura G, Schirmbeck T, Vieira KM. Ultrassonografia mamária Aspectos contemporâneos. Comun ciênc saúde [Internet]. 2011 [citado em 18 jul 2013];22(Sup 1):129-40. Disponível em:http://bvsms.saude.gov.br/bvs/artigos/ultrassonografia_mamaria.pdf.
- 27. Wagner I, Shigueoka DC, Torloni MR, Velloni FG, Ajzen SA, Atallah AN, et al. Comparative evaluation of digital mammography and film mammography: systematic review and meta-analysis. São paulo med j [Internet]. 2011 [citado em 22 maio 2013];129(4):250-60.Disponível em:http://www.scielo.br/scielo.php?pid=S1516-31802011000400009&script=sci_arttext.
- Zapponi ALB, Melo ECP. A regionalização da assistência à saúde e a mortalidade por câncer de mama no estado do Rio de Janeiro. Rev pesqui cuid fundam online [Internet]. 2010 out/dez [citado em 22 maio 2013];2(Supl.):235-9.Disponível em:http://seer.unirio.br/index.php/cuidadofundamental/article/view/886/pdf_124.
- 29. Sala M, Salas D, Zubizarreta R, Ascunce N, Rué M, Castells X. Situación de la investigación en el cribado de cáncer de mama en España: implicaciones para la prevención. Gac sanit. 2012; 26(6):574-581.

30. Amorim VMSL, Barros MBA, César CLG, Carandina L, Goldbaum M. Fatores associados a não realização da mamografia e do exame clínico das mamas: um estudo de base populacional em Campinas, São Paulo, Brasil. Cad saúde pública [Internet]. 2008 nov [citado em em 27 fev 2013];24(11):2623-32.Disponível em:http://www.scielo.br/scielo.php?pid=S0102-311X2008001100017&script=sci_arttext

Received on: 13/11/2013 Required for review: No Approved on: 06/01/2013 Published on: 01/04/2014

Contact of the corresponding author:

Magaly Bushatsky
Rua Arnóbio Marques, n° 310, Santo Amaro, Recife, PE, 50100130.

Email: magab@hotlink.com.br